RESPONSE TO COMMENTS

REMINGTON ARMS COMPANY, LLC.
PERMIT #1272-AR-8
AFIN: 43-00024

On February 15, 2012, the Director of the Arkansas Department of Environmental Quality issued a draft permit for the above referenced facility. Written comments on the draft permit were submitted by ECCI on behalf of the facility. The Department's response to these issues follows.

Note: The following page numbers and condition numbers refer to the draft permit. These references may have changed in the final permit based on changes made during the comment period.

Comment #1: Specific Conditions (SC) #1 and #2, the size of the source SN-57 should be listed as 160 HP.

Response to Comment #1: Agreed. Specific Conditions #1 and #2 have been revised to show 160 hp for SN-57.

Comment #2: Under the Insignificant Activities list, the WWTP item should be deleted.

Response to Comment #2: Per the e-mail from Sammy Bates dated 3/27/2012, the WWTP will remain on the Insignificant Activities List.

Comment #3: Please consider removing the stack testing requirements under SC #12, as we believe this is an expensive and unnecessary cost. The scrubber was installed for opacity control and the controlled (or uncontrolled) NO_x emissions are not critical to permitting thresholds nor dispersion modeling. Also, please note the uncontrolled emissions for this source have been previously tested.

Response to Comment #3: Permitted NO_x emissions for SN-34 in the active permit (R7) are 10.8 lb/hr and 47.2 tpy. Per communications from the permittee, these emissions do not reflect any reduction in NO_x emissions due to the packed-bed wet scrubber. In March 2011, the permittee submitted test results from 2002 (prior to scrubber installation) which indicates an uncontrolled NO_x rate of 45.1 lb/hr. An EPA document, *Air Pollution Control Technology Fact Sheet: Packed-Bed/Packed-Tower Wet Scrubber*, was also submitted, and this document states that 95-99% emission reductions are achievable for inorganic gases. Remington has taken 95% as a reduction efficiency and applied it to the uncontrolled NO_x rate of 45.1 lb/hr. This results in a new permitted rate of 2.3 lb/hr and 9.9 tons/yr.

The claimed 95% reduction in NO_x emissions is substantial and represents a 37.3 tpy reduction in NO_x emissions. No post-scrubber test data has been submitted, and while the EPA document gives a 95-99% range of pollutant reduction, this cannot be confirmed without a test. Absent

some requirement for additional periodic testing, ADEQ typically requires a one-time performance test to determine actual emission rates. Given that this unit has been in service many years and given that no initial performance test data has been submitted, ADEQ will require this one-time test to determine actual post-control emissions. Specific Condition #12 will remain in the permit.

Comment #4: Please consider removing the stack testing requirements under SC #13, as we believe this is an expensive and unnecessary cost. These sources are very minor in emission rate and do not significantly affect dispersion modeling. Additionally, other similar sources have been previously tested.

Response to Comment #4: The decision to require Lead testing for SN-06, SN-35, and SN-36 was made after considering several factors. First, the initial modeling failed the Lead NAAQS, and the final passing model results were close to the NAAQS. Also, lead rates for the R8 permit are substantially lower than the rates in the active permit, R7. R8 Lead rates are 46% below those in R7. In examining the individual sources, it can be seen—in the table below—that SN-06, SN-35, and SN-36 each show a reduction in lead rate of at least 90% in R8 as compared to R7. So, these three sources, while small components of the Lead in R8, accounted for 49.7% of the Lead in R7. They are small in R8, only because of the substantial reductions from R7 to R8. While similar sources may have been tested in the past, my understanding is that this testing took place many years ago. Given the above, ADEQ believes it is necessary to accurately assess Lead rates for these sources, so the testing requirement will remain.

Remington Lead Rates R7 vs R8

Lead Rates, pounds/hour

12/5/2011

Source Number	R7 PPH	R8 PPH	R8-R7	% Change	% of R7 Emissions	% of R8 Emissions
1	0.001	0.001	0	0.00	0.26	0.48
2	0.001	0.013	0.012	1200.00	0.26	6.24
5	0.031	0.031	0	0.00	8.03	14.88
6	0.06	0.00017	-0.05983	-99.72	15.54	0.08
11	0.031	0.031	0	0.00	8.03	14.88
12	0.001	0.00017	-0.00083	-83.00	0.26	0.08
17	0.005	0.005	0	0.00	1.30	2.40
18	0.005	0.005	0	0.00	1.30	2.40
19	0.005	0.005	0	0.00	1.30	2.40
20	0.035	0.035	0	0.00	9.07	16.80
22	0.001	0.001	0	0.00	0.26	0.48
23	0.008	0.008	0	0.00	2.07	3.84
24	0.001	0.001	0	0.00	0.26	0.48
25	0.006	0.006	0	0.00	1.55	2.88
26	0.003	0.003	0	0.00	0.78	1.44
27	0.002	0.002	0	0.00	0.52	0.96
28	0.002	0.002	0	0.00	0.52	0.96
29	0.002	0.002	0	0.00	0.52	0.96
30	0.034	0.034	0	0.00	8.81	16.32
31	0.02	0.012	-0.008	-40.00	5.18	5.76
35	0.072	0.005	-0.067	-93.06	18.65	2.40
36	0.06	0.006	-0.054	-90.00	15.54	2.88
Total	0.386	0.20834	-0.17766	-46.03	100.00	100.00

Comment #5: Please remove SC #15 limitations on hours of operation of several sources. These limitations were originally required to satisfy NAAQS through dispersion modeling. Further

refinement of the dispersion model indicated these limitations are not required to ensure the compliance with the NAAQS for lead. This includes a higher proposed stack height change. (please see attached modeling discussion [below] and files);

The original dispersion modeling, to show compliance with lead NAAQS, indicated the stack for SN-11 would need to be raised to 44 feet above grade. Additionally, limitations on the hours of operation of various sources were accepted to show compliance (see SC #15). To avoid these operation limitations, further refined modeling was performed to show compliance with NAAQS. The major changes to the dispersion modeling were:

- No hours of operation limits;
- Increase the stack height of SN-11 to 60 feet; and
- Additional Remington property was added to the model in the south, east, and northeast of the property. However, only the inclusion of the sliver of land between the front gate and the parking lot appears to be beneficial to modeling results. We believe these changes are justified because this additional land is a mixture of fenced and gated area, including some additional property that is patrolled regularly by Remington security personnel. The model purposely excludes additional Remington property for conservativeness;

Results

Incorporating the changes above, dispersion modeling indicated the highest 1st high, 3 month rolling average for lead was 0.139 $\mu g/m^3$in July 2008. This is in compliance with the lead NAAQS.

Response to Comment #5: AERMOD modeling was performed with SN-11's stack increased to 60 feet. After discussion with the permittee and consultant, the "additional property" added in the original consultant-submitted model was removed for ADEQ modeling, and the actual fence line (with intermediate receptors) was used for the model. The "additional property" was removed from the model because it did not include actual fence. The modeling was performed with hours of operation constraints (present in the original draft permit model) removed. The Lead (highest rolling three-month average) result was 0.1492 $\mu g/m^3$, which is below the NAAQS value of 15 $\mu g/m^3$. Arsenic modeling was also performed, and the 2nd high 24-hr value was 0.00817 $\mu g/m^3$, which is below the PAIL of 0.1 $\mu g/m^3$.

As a result, the conditions addressing hours of operation in the draft permit, Specific Condition #15, and its record-keeping requirement, Specific Condition #16, have been removed from the final permit.

Comment #6: Please change SC #14 to read "...a minimum of 60 feet."

Response to Comment #6: Agreed, based on the passing Lead model with SN-11's stack height of 60, ft, Specific Condition #14 has been revised to read:

14. "The facility shall increase the stack height on the Rimfire Bullet Tumbler, SN-11 to a minimum of 60 feet. Construction shall commence according to the requirements of General

Condition #4, and notifications shall take place according to the requirements of General Condition #3. [Regulation 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]"

Comment #7: The facility requests, in the attached discussion, [below] that 60 Subpart DDDD is not applicable to SN-30. Also in the discussion, the facility respectfully requests ADEQ make a final determination. After the determination is made, SC #20 should be deleted or reworded, and if needed, make reference in the permit that the source is not affected.

Permit Condition "20" states in relevant part:

> The Burning Plant Furnace, SN-30, may be subject to the requirements of 40 CFR 60, Subpart DDDD, *Emissions Guidelines and Compliance times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or Before November 30, 1999.* The permittee shall submit a permit application which specifies how Remington shall comply with the requirements of Subpart DDDD no later than six months prior to the current Subpart DDDD compliance date of March 21, 2016. Alternately, the permittee may submit EPA documentation which states that the source is not subject to Subpart DDDD no later than six months before the compliance date. [Regulation 19 § 19.304 and 40 CFR Part 60 Subpart DDDD].

Remington Arms Company, LLC ("Remington") objects to Permit "Condition 20" and respectfully requests that it be deleted from the final permit. The rationale for our objection is two-fold. First, Remington submits that the Arkansas Department of Environmental Quality ("ADEQ") has been delegated the Title V Operating Permit Program and therefore should make the determination as to whether or not 40 CFR 60, Subpart DDDD, Emissions Guidelines and Compliance times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or Before November 30, 1999 ("Subpart DDDD") is applicable to the facility. Second, Subpart DDDD is not applicable to any equipment currently utilized by this Remington facility.

The remainder of this comment will explain the basis of both objections.

1. ADEQ (not EPA) should determine whether Subpart DDDD is applicable to the Remington facility.

ADEQ has successfully operated the Title V Operating Permit Program for many years. The state agency obtained the ability to operate the program through a delegation agreement with the federal Environmental Protection Agency ("EPA"). The primary purpose of the Title V Operating Permit Program is to consolidate applicable Clean Air Act requirements into a comprehensive air permit.

As a delegated state, ADEQ has both the authority and the responsibility to make determinations as to which of the various Clean Air Act's requirements and/or programs apply to a particular stationary source. In other words, EPA approval of a

Part 70 Title V Operating Permit Program confers the responsibility to implement and enforce all "applicable requirements" for sources subject to the Part 70 program.

Stated differently, a Title V permit is required to "assure compliance" with the applicable requirements Once ADEQ's Title V Operating Permit Program was approved it received the authority to make determinations as to whether or not a particular stationary source would assure compliance with any applicable requirements.

As the federal Environmental Protection Agency ("EPA") has previously stated, in order to obtain approval of a Part 70 Operating Permit Program, the State is obligated to incorporate all applicable requirements and permits and assume the primary responsibility for enforcing these requirements. Further, states may issue permits to assure compliance with certain standards without first taking delegation of those standards from EPA. In summary, a State that has an approved Part 70 Operating Permit Program "stands in for EPA" by assuring compliance with the applicable standards through the permit as required by Part 70.

Remington respectfully submits that ADEQ's delegated Title V permitting responsibilities include the interpretation of which of the Clean Air Act standards or programs are applicable to a particular Arkansas stationary source. We believe ADEQ has both the authority and the obligation to make the determination whether or not Subpart DDDD is applicable to the Remington facility. ADEQ assumed this responsibility when it obtained delegation of the Title V Operating Permit Program.

Remington also submits that an ADEQ request asking EPA to undertake such a regulatory interpretation is not good policy. In receiving delegation of the Title V Operating Permit Program, EPA has by definition determined that ADEQ has the resources, staff and expertise to make such determinations. Remington and other members of the regulated community have for years supported ADEQ in its efforts to obtain delegation of various federal programs such as the Title V Operating Permit Program. This support has included agreeing to various types of fees and other assessments in order to provide ADEQ the resources it needs to operate these delegated programs.

Remington and the regulated community have always believed that communication will be easier and quicker with ADEQ than EPA. Consequently, Remington and the regulated community have significant concerns about ADEQ's asking EPA to address an issue that the State agency clearly has the authority to interpret. The company believes that ADEQ has both the expertise and the authority to address this question and the regulated community has provided it with the resources to do so. Therefore, if ADEQ believes an interpretation is necessary the agency itself should undertake any necessary review.

2. 40 CFR 60, Subpart DDDD is not applicable to Remington's Burning Plant Rotary Furnace.

Permit Condition 20 states that Remington's Burning Plant Rotary Furnace ("furnace" or "rotary furnace") "may be subject to the requirements of 40 CFR 60, Subpart DDDD, Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or Before November 30, 1999." For the reasons outlined below, Remington does not believe that Subpart DDDD is applicable to this furnace. However, Remington, as previously noted, believes ADEQ should make this determination if it believes such an analysis is necessary. Therefore, the remainder of this comment provides the rationale for Remington's belief that Subpart DDDD does not apply to the furnace.

(a) The rotary furnace is not combusting a solid waste.

Subpart DDDD is only applicable to a facility or unit if it is combusting solid waste. Under Section 129 of the Clean Air Act, the term "solid waste incineration unit" is defined in pertinent part, to mean "a distinct operating unit of any facility which combust any solid waste material from commercial or industrial establishments ... 42 U.S.C. § 7429(g) (1). (Emphasis added) Further, EPA has stated that the Resource Conservation and Recovery Act ("RCRA") definition of solid waste is used in defining the Subpart DDDD category. See 76 Fed. Reg. 80456 (December 23, 2011).

The rotary furnaces sole purpose is to deprime primed empty brass shells. The empty refers to shells that are not loaded with a projectile (bullet) or propellant powder (gunpowder). The brass shells are processed (i.e., sorted from good shells) prior to depriming. Specifically, Remington initially produces brass cups from brass strip metal or purchases brass cups. Then by multiple draw operations the shells are drawn to the desired length and diameter for the ammunition being produced. These brass shells are subsequently sent to priming to install the primers. In the priming operation, dented, damaged or otherwise inferior brass shells are sorted from the undamaged shells. The sorted off specification brass shells could at this point be sold as a commodity. However, Remington has chosen to sell the shells in a deprimed condition. The shells are then deprimed in the rotary furnace. The deprimed brass shells are currently sold for approximately $2.00 a pound

The material inserted into the Remington rotary furnace is not a RCRA solid waste. Empty brass shells ("shells") are moved through the rotary furnace. These shells fit within the scope of the term "processed scrap metal" as defined by the RCRA regulations. The basis for this conclusion is as follows.

Scrap metal is defined in the RCRA regulations as:

> ..... bit and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which worn or superfluous could be recycled.

40 C.F.R. 261.1 (c)(6).

The empty Remington brass shell moving into the furnace clearly constitute metal pieces or parts and are therefore scrap metal. Further, various EPA guidance has clarified that metal fragments from fired munitions as well as metal from unused munitions can be classified as "scrap metal". Since the shells are a product that is made of metal that is recycled to recover the metal content, they clearly come within the definition of scrap metal.

At least 4 billion pounds (2 million tons) of brass or copper alloys are recycled every year in the United States. Brass and bronze are among the oldest and most valuable metal alloys known. Brass is a mixture of copper and zinc. Scrap metal is traded in both national and international markets. For example, in the United States, copper is listed daily in the American Metal Market reporting on the metal industry, and copper brass mills is sold at prices related to virgin copper. Brass products (copper and zinc alloy) made from scrap are chemically and metallurgically equivalent to products manufactured from virgin copper and zinc.

The Remington brass shells fall within the RCRA term "scrap metal". However the brass shells also fit within the scope of the RCRA term "processed scrap metal". Processed scrap metal is defined in the RCRA regulations as:

> .... scrap metal which has been manually or physically altered to either separate into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to, scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted) ....

40 C.F.R. 261.4 (c)(10)

Processed scrap metal is not a RCRA solid waste. Therefore, processed scrap metal is not just exempt from regulation as hazardous waste, but it is also not a solid waste.

The RCRA regulations do not define the term "processing". Therefore, any action that "adds value" to scrap metal, e.g., segregation of items would constitute "processing". Thus, Remington's process in which it segregates off-spec brass shells from others would clearly constitute sorting and therefore processing.

The EPA determined in a 1997 rulemaking that processed scrap metal being recycled is distinct from other secondary materials defined as a solid waste. In particular, it is important to note that EPA identified chopping, crushing, flattening, cutting and sorting as processes typically used in the processing of scrap metal for recycling. EPA has determined that these activities are encompassed within the definition of "processed scrap metal".

Stated differently, it is clear that EPA recognizes that separation of metals and/or products constitute sorting which falls within the definition of "processed scrap metal". Sorting involves identifying and segregating the scrap metal into different categories or grades. As EPA has noted, processing includes but is not limited to baling, shredding and shearing operations. Sorting also includes manual or other separation of unprocessed or partially processed scrap metal into separate categories to enhance the economic value of the material. As a result,

Remington's sorting the brass shell for purposes of sale of the commodity clearly constitutes processing.

An example of a discussion of munitions in the context of the term "processed scrap metal" was found in a June, 1999 report prepared for the U.S. Army Environmental Center and the United States Army Corps of Engineers titled *Range Scrap (Firing Point) Study — Data Review and Inventory Report (Task Order 059).* The report addressed whether metallic range residues meet the definition of excluded "processed scrap metals". The report concluded that they did as long as documentation of the "processing" activities had been conducted.

The report noted that it was to the Department of Defense's benefit to document all the processing activities required to render the munitions safe, regardless of whether they are done by Department of Defense personnel or qualified contractors, since these activities directly support the regulatory exclusion for "processed scrap metal". Of particular interest, the practices were stated to include, but not be limited to sorting and segregating the munitions and other field items by metal type and caliber. This activity would clearly be similar to Remington's diversion, transfer and sale of off-spec brass shells.

In summary, EPA clearly has determined that processed scrap metal, such as brass shells which has been diverted or removed for recycling, is sufficiently commodity-like that regulation is not necessary. In making a determination regarding process scrap metal, the agency cited five factors it considered in determining whether to exclude processed scrap metal from the definition of solid waste. These five factors can be applied to the Remington brass shells:

(i) the degree of processing the material has undergone and the degree of further processing is required. The Remington brass shells have been sorted and can meet strict industrial specifications for metal content in order to be sold as commodity.

(ii) the value of the material after it has been reclaimed. As previously acknowledged by EPA, scrap metal is traded both nationally and internationally. In the United States, copper and brass as listed daily in the American Metal Market reporting the metal industry, and copper brass mills are sold at prices related to virgin copper. Remington has for many years sold the brass shells to Sol Alman and Company in Little Rock at market prices.

(iii) the degree to which the reclaimed material is like an analogous raw material. The brass shells are chemically and metallurgically equivalent to raw materials manufactured from virgin copper and zinc.

(iv) the extent to which an in market for the reclaimed materials is guaranteed. As previously indicated, Remington has sold for many years the brass shells due to their desirability as a marketable commodity.

(v) the extent to which material is managed to minimize loss. Brass shells are managed in a form in which loss is minimal because they are a valuable commodity. They are produced in an inert form that is contained in a designated area with minimal handling and movement until sold for reuse.

Besides processed scrap metal, the RCRA regulations also exempt "prompt scrap metal" from the scope of the term solid waste. Specifically,

Response to Comment #7: In response to Remington's assertion that the Arkansas Department of Environmental Quality ("ADEQ") has been delegated the Title V Operating Permit Program and therefore should make the determination as to whether or not 40 CFR 60, Subpart DDDD is applicable to the facility, ADEQ concurs and will determine (as explained below) the applicability of the Burning Plant Furnace, SN-30 to the requirements of 40 CFR 60, Subpart DDDD, *Emissions Guidelines and Compliance times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or Before November 30, 1999.*

Remington additionally asserts that 60 Subpart DDDD is not applicable to SN-30."

40 CFR 60, Subpart DDDD establishes emission guidelines and compliance schedules for the control of emissions from commercial and industrial solid waste generators (CISWI) units.

Per Subpart DDDD, a "CISWI unit means any distinct operating unit of any commercial or industrial facility that combusts, or has combusted in the preceding 6 months, any solid waste as that term is defined in 40 CFR part 241." As well, Subpart DDDD states that "*Incinerator* means any furnace used in the process of combusting solid waste (as the term is defined by the Administrator under RCRA in 40 CFR 240) for the purpose of reducing the volume of the waste by removing combustible matter."

40 CFR 241.2 defines *solid waste* to be "solid waste as defined in 40 CFR 258.2." 40 CFR 258.2 defines *solid waste* as "any garbage, or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities...."

It further defines *Industrial Solid Waste* as meaning "solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under subtitle C of RCRA. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste."

ADEQ believes the primed shell casings meet the definition of a solid waste and further meet the definition of an industrial solid waste. These primed shell casings are processed at SN-30 to render them more amendable to ultimate recycling. They are not recycled at the facility, but are an industrial waste rendered amenable to recycling by the processing which takes place at the Rotary Furnace (SN-30).

The facility submitted photographs of the Rotary Furnace on May 7, 2012 and submitted a drawing of the unit on May 9, 2012. These photographs and the drawing show construction details of the unit. From these, it can be seen that shell casings enter one end of the rotating steel drum. They flow through the drum and discharge at the opposite end, falling into containers.

"prompt scrap" is defined as scrap that is generated by iron and steel product producers, including scrap metal generated by metal working/fabrication industries. Prompt scrap may include turnings, cuttings, punchings, and borings.

40 C.F.R. 261.1(c)(12)

The Remington process would logically seem to fit within the scope of a metal working/fabrication process and therefore brass shells could also be deemed "prompt scrap".

In summary, Remington rotary furnace does not utilize solid waste and therefore is not subject to Section 129 of the Clean Air Act.

(b) The rotary furnace is not an incinerator.

The rotary furnace's sole purpose is to deprime or "pop" primed empty brass shells. No reduction in volume of the inserted product is either desired and/or obtained. Heat from the furnace is provided by multiple propane fired forced air burners located beneath the rotating steel drum and inside the steel shell. The furnace operates in the 1,200 degree Fahrenheit range.

Remington respectfully submits that the rotary furnace is not an incinerator since its sole purpose is to deprime the shells as opposed to combusting solid waste to obtain a reduction in volume. Regardless, the rotary furnace operates for the primary purpose of metal recovery and therefore would not trigger incinerator status. The Remington rotary furnace clearly falls within the spirit and purpose of the metal recovery exemption.

There are clear differences between Remington's rotary furnace and an incinerator. An incinerator burns waste and the rotary furnace does not. An incinerator is used to destroy refuse materials by burning them to decrease their volume. The materials charged to incinerators are typically capable of burning on their own once ignited. The Remington rotary furnace clearly could not sustain such a process.

As previously stated, the purpose of the Remington rotary furnace is to simply deprime the shells which do not contain material that can burn on their own. In contrast, the Remington rotary furnace is used to deprime valuable brass shells as opposed to destroying waste materials through combustion to reduce their volume.

The rotary furnace is an integral component of the finishing operation because the feed stock (brass shells) is generated on-site by the Remington facility. The brass shells could be marketed and sold as either processed scrap metal that has not been deprimed or deprimed brass shells (processed scrap metal). The rotary furnace is simply the end step in the finishing process for deprimed brass shells. It is finishing a usable product (processed scrap brass) and is not used to destroy a waste by incinerating organic compounds.

The drum has perforations. Below the drum, perforated steel plates exist. Natural gas fired burners are located below the steel plates. The two layers of perforated plates essentially isolate the primed defective brass from direct contact with the flame.

ADEQ believes that the Rotary Furnace (SN-30) is not combusting solid waste for the purpose of reducing the volume of the waste by removing combustible matter. As such, the process at SN-30 is not incineration. The process is simply transforming primed defective shell casings into shell casings more fit for recycling. In addition, the design of the Rotary Furnace, with no direct contact between the solid waste and the flame leads to the conclusion that the Rotary Furnace is not a CISWI, and is not subject to 40 CFR 60, Subpart DDDD. Draft Permit Specific Condition #20 has been removed from the final permit.

ADEQ

A R K A N S A S
Department of Environmental Quality

June 22, 2012

Sammy Bates
Environmental Coordinator
Remington Arms Company, LLC.
PO Box 400
Lonoke, AR 72086-0400

Dear Mr. Bates:

The enclosed Permit No. 1272-AR-8 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 11/2/2009.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 1272-AR-8 for the construction, operation and maintenance of an air pollution control system for Remington Arms Company, LLC. to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,

Mike Bates
Chief, Air Division

Enclosure

ADEQ
MINOR SOURCE
AIR PERMIT

Permit No. : 1272-AR-8

IS ISSUED TO:

Remington Arms Company, LLC.
2592 Arkansas Highway 15 North
Lonoke, AR 72086
Lonoke County
AFIN: 43-00024

THIS PERMIT IS THE ABOVE REFERENCED PERMITTEE'S AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 *ET SEQ.*) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates
Chief, Air Division

June 22, 2012
Date

Remington Arms Company, LLC.
Permit #: 1272-AR-8
AFIN: 43-00024

Table of Contents

List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
No.	Number
NO_x	Nitrogen Oxide
PM	Particulate Matter
PM_{10}	Particulate Matter Smaller Than Ten Microns
SO_2	Sulfur Dioxide
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Section I: FACILITY INFORMATION

PERMITTEE:	Remington Arms Company, LLC.
AFIN:	43-00024
PERMIT NUMBER:	1272-AR-8
FACILITY ADDRESS:	2592 Arkansas Highway 15 North Lonoke, AR 72086
MAILING ADDRESS:	PO Box 400 Lonoke, AR 72086-0400
COUNTY:	Lonoke County
CONTACT NAME:	Sammy Bates
CONTACT POSITION:	Environmental Coordinator
TELEPHONE NUMBER:	501-676-4185
REVIEWING ENGINEER:	Travis Porter
UTM North South (Y):	Zone 15: 3851272.59 m
UTM East West (X):	Zone 15: 591628.50 m

Section II: INTRODUCTION

Summary of Permit Activity

Remington proposed to modify the operating procedure for the Centerfire Packaging Label Printing Process, SN-47 which will increase ketone ink and methyl ethyl ketone (MEK) usage (total for both) from 25 gallons/month to 120 gallons/month. In addition, a number of emergency engines (generators and fire water pumps), previously listed as Insignificant Activities, have been listed as individual sources, since they must comply with requirements of NESHAP ZZZZ. Two plating sources, SN-58 and SN-59 are now listed with this permit. A new process has been added at SN-02. Emissions on SN-45 and SN-46 were adjusted to reflect updated AP-42 factors. NO_x emissions at SN-34 have been reduced to reflect a reduction from the existing scrubber, which was not previously claimed. Lead emission rates were examined for all lead sources and updated. At the facility's request, the date for updating records has been changed from the fifth day to the 15th day of the month following the month to which the records pertain. As well, the process description has been updated. These changes affect permitted emissions as follows: PM and PM_{10} increased by 3.2 tpy each; SO_2 increased by 3.9 tpy; VOC increased by 4.0 tpy; CO increased by 17.3 tpy; NO_x decreased by 27.1 tpy; Arsenic decreased by 0.002784 tpy; Antimony decreased by 0.065344 tpy; Lead decreased by 0.56054 tpy; Methyl Ethyl Ketone decreased by 0.97 tpy; Acetone increased by 0.4 tpy; Cyanide increased by 0.00017 tpy; Nickel increased by 0.00042 tpy; and Methylene Chloride increased by 0.08 tpy.

Process Description

Remington manufactures centerfire and rimfire cartridges, shotshells and primers according to the processes described below.

Centerfire Process

BULLET - Lead bars (pigs) are conveyor fed into a melting pot. Air emissions from this source are primarily lead and uncontrolled. The melting pot is a natural gas fired furnace with a hood vented to the atmosphere (SN-01). The molten lead from the melting pot is cast into billets that are fed through an extruder to form a lead "wire rope" from which slugs are formed. All scrap lead (slugs, wire) is sent to the remelt pot (SN-02). The slugs are tumbled in a media of ground corn cobs with safety solvent (SN-05), then tumbled in graphite. Bullets are then formed by swagging and are grooved (SN-06) and are lubricated with a mixture of hot wax and Perchloroethylene (SN-03 and SN-04). The Perchloroethylene tank located on the dock outside of Building 100 has been removed from service.

Bullets are inspected visually (SN-36) and with a Class II laser. Finished bullets are then tumbled using a tumbling media and a safety solvent (SN-05). Certain bullets are copper electroplated (SN-59). Particulate emissions from the tumbling operations (SN-05) are controlled by a Rotoclone. Emissions from the inspection process (SN-36) are uncontrolled.

BULLET JACKET- A blank cup is pressed from a copper metal strip. It is then annealed on a gas-fired furnace, acid pickled (sulfuric acid), washed (soap), rinsed (water), and drawn to length. The copper jacket is then again annealed, pickled, washed and rinsed. The jacket is now completed and assembled on the lead bullet. The assembled jacket bullet goes through a final wash (soap), rinse (water) and dry operation.

SHELL - A blank cup is pressed from a brass strip. It is then annealed, acid pickled (sulfuric acid), washed (soap) and rinsed (water). The cup is now ready for the first draw. This entire process is repeated for a second time and final draw. After the final draw, the shell goes through a 3-cone soap/wash process consisting of a slightly alkaline rinse, soaper then another rinse. Next, the shells are cut to length, head stamped, and head turned. The body of the shell is annealed once more, lubricated (vegetable oil), and trimmed. The mouth of the shell is also annealed again. Shells are now ready for the final wash. This final wash consists of an alkali rinse, followed by an acid rinse, and then a corrosion inhibitor rinse. Certain shells are nickel electroplated (SN-58) before the final wash. The finished shells are now ready to be primed.

PRIMED SHELL - Assembled primers are trucked to the centerfire area from the primer manufacturing area. Primers are mechanically seated and, in some instances, waterproofed (lacquer based compound) on the same machine.

LOADING - Certain metal case rounds used in law enforcement are water-proofed where the bullet is seated in the shell (SN-07 and SN-08). "Proof" loads are identified with a coat of Rhodamine powder, lacquer and heptane mixture on the base of the shell.

In the loading operation, gunpowder is placed into the primed shell and the bullet is then seated. This is an automated operation for most rounds, with both operations completed on the same machine.

PACKING - Loaded rounds are transferred to the Packing Area. Here they receive a final cleaning by tumbling in a tumbling media and tripropylene methyl ether (TPM) followed by tumbling in a tumbling media alone (SN-09 and SN-10). Cartridges are then boxed, cased, and loaded on pallets for shipment.

Rimfire Process

LEAD BULLET - This operation takes place in the centerfire lead bullet area and is identical to the point the slug is formed. After the slugs are formed, they are tumbled (SN-11). After the bullets are tumbled, they go to two parallel shakers (SN-12). Subsequently, they are sent through a lube and drying operation (SN-44).

SHELL - Cups are pressed from brass strips. They are then washed in an alkaline solution and annealed. The cups are then pickled, rinsed, and sent to the shell maker area. On the shell maker machines, the cups are drawn, cut off, trimmed and the head is formed. Next, the shells are relief annealed, acid pickled, rinsed, and sent to the head gauge operation. After gauging, the shells are ready to be primed.

PRIMING - Rimfire priming mixture is trucked from the primer manufacturing area to the priming area. The priming mixture is manually placed into plates that are then put on the priming machines. The machines push mixture from the plates into the "rim" of the rimfire shell. Primed shells are then automatically inspected.

LOADING - Automatic loading machines place gunpowder into primed shells and the form and seat the bullet.

PACKAGING - Loaded rounds are automatically lubricated with a wax/water mixture and packed. The packs are manually cased.

Shotshell Process

HEADS - Caps are pressed from pre-plated steel or brass strips. They are then sent through a slightly alkaline wash before going to the half-head for the final forming. The finished head is then rinsed with a corrosion inhibitor (SN-13 and SN-14).

BODIES - Plastic slugs are formed by extrusion of polyethylene beads and color concentrate (SN-15). Bodies are formed from these slugs by one of two methods: rotary cam machines form the body and then heat set or the slug is oriented and cut off to size. It is proposed that the shell will now be flame treated (SN-53).

ASSEMBLE, HEAD, and PRIME - Finished heads are transferred to the assemble, head, and prime area. Component primers are trucked to the area from the primer manufacturing area. The heads are assembled on the bodies and the primer is seated into the head, all on the same machine. Base wads are also assembled on this machine. Primed shot shells are now ready to be loaded.

LEAD SHOT - Lead shot is formed by melting pigs in an electrically heated pot (SN-20), then dropping the molten lead through sizing screens, twelve (12) stories, into a water bath (SN-17). The shot is then dried (SN-35), polished with graphite, graded for roundness, and sized by tumbling screens. Emissions from the lead melting pot and drop tube are vented through stacks. All other operations are open to room ventilation.

LOADING - Gunpowder, shot wad, power piston, and lead shot are mechanically loaded into the primed shot shell in one operation. The shells are also crimped and printed on the same machine. Buckshot is formed on a machine in the centerfire area. Alcohol vapors are emitted at SN-38.

PACKAGING - Loading shot shells are packed into boxes, cased, and placed on pallets for shipment.

Burn Plant

The burn plant consists of two (2) burning unit emission sources: scrap cartridge destruction (primer and centerfire cartridges) and a rotary furnace. The scrap cartridge destruction unit (SN-31) consists of two propane fired melting pots that share a common stack. This stack is controlled by a baghouse.

Live rounds are hand fed onto a conveyor that feeds the units. Primed .22 caliber shells and centerfire shells are fed into the rotary furnace (SN-30) by hand. Brass is recovered from the unit. The rotary furnace is equipped with a propane fired burner. The small amount of ash generated by this unit consists mainly of ground glass, which is disposed of offsite.

Each stack has been tested for lead emissions. Stack testing results are provided with the calculations. Lead is assumed to contain 55% antimony from the rotary furnace exhaust and 5.2% antimony and 1.2% arsenic from the scrap cartridge destruction unit exhaust.

Ballistics

The Ballistics Area is used for test firing live ammunition rounds and testing primers. The shooting ranges (20 yd. - SN-26, 50 yd. - SN-27, 100 yd. - SN-28, and 200 yd. - SN-29) each have a stack with a Rotoclone at the end of the range. Each range has a duct from the booths where firing occurs. These ducts lead to a common stack (SN-25). The function and casualty (F&C) range has two stacks, one in the booth and one for the range (SN-23 and SN-24, respectively). The primer drop test area has one stack (SN-22).

Except as noted above, there are no air pollution control devices on these stacks. SN-23 through SN-29 exhaust stacks have been tested for lead emissions. Stack testing results are provided with the corresponding calculations. Lead is assumed to contain 5.2% antimony and 1.2% arsenic from all stacks.

The F&C booth exhaust stack test results were used for emission rates from the drop test exhaust (SN-22).

Trinitroresorcinol Manufacture

Water, resorcinol, sodium nitrite, and nitric acid are combined in the primary nitration step which is temperature controlled. Additional nitric acid is added during secondary nitration. The product is filtered, washed, and then stored in 1,000 pound magazines. The stack opacity is controlled by a wet counterflow scrubber utilizing a sodium hydroxide and sulfide based liquor. Nitrous oxide emissions are based on mass balance and the scrubber efficiencies published by the USEPA. Nitrous oxide permitted hourly and annual allowable emissions are 2.3 lb/hr and 9.9 TPY, respectively.

Power House

Remington operates two (2) boilers at its facility. The natural gas fired boilers No. 1 (SN-45) and No. 2 (SN-46) are both rated at 750 boiler horsepower. Also located in the power house area are two (2) firewater pump diesel engines (SN-48 and SN-49), an emergency generator (SN-50), and three (3) fuel storage tanks (SN-51, SN-52, and SN-53).

The fuel storage tanks store No. 2 fuel oil to burn in the two boilers in the event of a curtailment. No. 2 fuel oil has not been burned in the boilers for the last three (3) years.

Miscellaneous Emission Sources

Near the power house are three (3) storage tanks with gasoline and diesel fuel for mobile operations within the plant. There are two (2) gasoline storage tanks (SN-54 and SN-55) and one diesel storage tank (SN-56). There is also a 160 horsepower emergency generator (SN-57) located in the plant waste water treatment area.

Miscellaneous parts cleaning and maintenance activities exist at the facility and are also permitted. Solvents used in the maintenance areas include kerosene, safety solvent, isopropyl alcohol and Pensolv 945L.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective July 18, 2009
40 CFR 63, Subpart T, *National Emission Standards for Halogenated Solvent Cleaning.*
40 CFR 63, Subpart ZZZZ - *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*
40 CFR 63, Subpart WWWWW - *National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations*

Total Allowable Emissions

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	6.6	7.1
PM_{10}	6.6	7.1
SO_2	10.6	4.0
VOC	57.5	76.5
CO	18.9	25.5
NO_x	76.1	61.4
Lead	0.208332	0.92616
Acetone	0.1	0.4
Antimony	0.025278	0.109506
Arsenic	0.001264	0.005656
Cyanide	0.000039	0.00017
Methylene Chloride	0.02	0.08
Nickel	0.0000957	0.00042
Perchloroethylene	10.1	9.9

Section III: PERMIT HISTORY

Permit #0050-I was issued on August 18, 1970.

Permit #1272-A was issued on July 10, 1992.

Permit #1272-AR-1 was issued on March 2, 1993. It increased the allowable hours of operation for the rotary furnace burning plant, the scrap primer/centerfire cartridge burning plant, and the primed shotshell forced air burning plant.

Permit #1272-AR-2 was issued on June 16, 1994, to further increase the allowable hours of operation for the rotary furnace burning plant and the scrap powder burn unit. This permit also removed the primed shotshell forced air burning unit from service.

Permit #1272-AR-3 was issued on January 20, 1995, and it allowed the elimination of 1,1,1-trichloroethane and methylene chloride usage at the facility and increased emissions of volatile organic compounds (VOC) by 31.6 tons per year.

Permit #1272-AR-4 was issued on August 5, 1997. This permit allowed the removal of the Dip Lube Dryer Exhaust (SN-03) and the Dip Lube Tank Exhaust (SN-04), as well as the scrap powder burn unit (SN-33). It also allowed for the installation of two hammer mills (SN-31) whose emissions are controlled by an inline cyclone and baghouse, shotshell body flame treat units (SN-39 through SN-44), and the recognition of boiler #1 (SN-45) and boiler #2 (SN-46) which were installed in 1969 and previously unpermitted.

Permit #1272-AR-5 was issued on November 20, 1998. This modification corrected a typographical error on a previously submitted emission rate table for the burning plant rotary furnace (SN-30). In the previous submittal the stated values were reported in "pieces," and Remington wanted this to be changed to read "pounds." The facility added the Dip Lube Dryer Exhaust and the Dip Lube Tank Exhaust back to the permit with a bubble of 9.9 tpy of Perchloroethylene (a HAP) emissions.

Permit #1272-AR-6 was issued on March 29, 2000. It added to the permitted sources a dust collector on the Burning Plant Rotary Furnace (SN-30) and changed the method used for emission rate calculations at this source. It also added two VOC/HAP compounds to the facility paint and ink usage. They are Ketone Ink and Methyl Ethyl Ketone. These compounds will be used in a label printer located in the centerfire packaging department. This addition increased permitted VOC and HAP emissions by 0.97 tpy. Other emissions were due to changes in the method used for calculations at SN-30.

Permit #1272-AR-7 was issued on August 21, 2003. This permit modification added a wet counter flow exhaust scrubber at the Nitration Building, designated as SN-34. This installation controls opacity produced from the emission of oxides of nitrogen during the manufacture of Trinitroresorcinol outlined in the process description.

Section IV: EMISSION UNIT INFORMATION

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 19 §19.501 et seq., and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Lead Kettle & Lead Kettle combustion Chamber	PM_{10} SO_2 VOC CO NO_x Lead	0.1 0.1 0.1 0.1 0.3 0.001	0.2 0.1 0.1 0.2 1.0 0.0044
02	Centerfire Remelt Lead, Comb Chamber, BS Tumbling, Bonded Bullets	PM_{10} SO_2 VOC CO NOx Lead	0.1 0.1 0.1 0.1 0.2 0.013	0.1 0.1 0.1 0.2 0.7 0.056
05	Bullet Tumbler Exhaust	PM_{10} VOC Lead	0.1 7.0 0.031	0.1 5.5 0.14
06	Bullet Groover and Shaker	PM_{10} Lead	0.1 0.00017	0.1 0.00075
07	Varnish Table Exhaust	VOC	8.0	7.0
08	Varnish Room Exhaust	Source Deleted		
09	Cartridge Tumbler	Source Deleted		
10	Cartridge Tumbler	VOC	3.2	8.6
11	Rimfire Bullet Tumbler	PM_{10} Lead	0.1 0.031	0.2 0.14
12	Peen Plating and Bullet Shakers (3)	PM_{10} Lead	0.1 0.000162	0.1 0.00071

SN	Description	Pollutant	lb/hr	tpy
13	Burnish/Lube #558	VOC	0.1	0.1
14	Burnish/Lube #416	VOC	0.1	0.1
15	Shotshell Extruder Exhaust	VOC	0.1	0.1
17	Shot Tower Drop Tube	PM_{10} Lead	0.1 0.005	0.1 0.0219
18	11th Floor Shot Tower	PM_{10} Lead	0.1 0.005	0.1 0.0219
19	12th Floor Shot Tower	PM_{10} Lead	0.1 0.005	0.1 0.0219
20	Shot Kettle Exhaust	PM_{10} Lead	0.1 0.035	0.1 0.16
21	Maintenance Paint Booth Exhaust	VOC Acetone	0.2 0.1	0.6 0.4
22	Primer Drop Test Exhaust	PM_{10} Lead	0.1 0.001	0.1 0.0044
23	Ballistic Function Range	PM_{10} Lead	0.1 0.008	0.1 0.035
24	Ballistics Function Booth	PM_{10} Lead	0.1 0.001	0.1 0.0044
25	Ballistics Firing Bay	PM_{10} Lead	0.1 0.006	0.1 0.0263
26	Ballistic 20 yd. Range	PM_{10} Lead	0.1 0.003	0.1 0.0131
27	Ballistic 50 yd. Range	PM_{10} Lead	0.1 0.002	0.1 0.0088
28	Ballistic 100 yd. Range	PM_{10} Lead	0.1 0.002	0.1 0.0088

SN	Description	Pollutant	lb/hr	tpy
29	Ballistic 200 yd. Range	PM_{10} Lead	0.1 0.002	0.1 0.0088
30	Burning Plant Rotary Furnace	PM_{10} SO_2 VOC CO NO_x Lead	0.1 0.1 0.1 0.2 0.9 0.034	0.4 0.1 0.1 0.7 3.7 0.15
31	Burning Plant-Scrap Primer and Centerfire Cartridge and Hammer mills	PM_{10} SO_2 VOC CO NO_x Lead	0.1 0.1 0.1 0.1 0.3 0.012	0.1 0.1 0.1 0.4 1.4 0.05
34	Nitration Building Exhaust-Trinitroresorcinol Manufacturing-Scrubber	NO_x	2.3	9.9
35	Shot Tower Dryer Exhaust (8th Floor)	PM_{10} Lead	0.1 0.005	0.1 0.022
36	Centerfire Bullet Inspection	PM_{10} Lead	0.1 0.006	0.1 0.027
38	Centerfire Buckshot Forming	VOC	9.0	6.5
39	Centerfire 10 Cone Gas Dryer	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.1 0.2	0.1 0.1 0.1 0.2 0.9

SN	Description	Pollutant	lb/hr	tpy
40	Centerfire Jacket Dryer	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.1 0.2	0.1 0.1 0.1 0.2 0.9
41	Centerfire Body Annealing	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.2 0.6	0.3 0.1 0.2 0.5 2.4
42	Centerfire Mouth Annealing	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.2 0.6	0.3 0.1 0.2 0.5 2.4
43	Centerfire 7 Cone Gas Dryer	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.1 0.2	0.1 0.1 0.1 0.2 0.9
44	Rimfire Gas dryer	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.1 0.4	0.2 0.1 0.1 0.3 1.8
45	Boiler #1	PM_{10} SO_2 VOC CO NO_x	0.2 0.1 0.2 2.1 2.6	0.9 0.1 0.7 9.3 11.0
46	Boiler #2	PM_{10} SO_2 VOC CO NO_x	0.2 0.1 0.2 2.1 2.6	0.9 0.1 0.7 9.3 11
47	Centerfire Packaging Label Printing	VOC	1.2	5.0

SN	Description	Pollutant	lb/hr	tpy
XX	Parts Cleaning and Maintenance	VOC	11.0	36.0
48	Firewater Pump #1 Diesel Engine, 380 HP	PM_{10} SO_2 VOC CO NO_x	0.9 0.8 5.7 2.6 11.8	0.3 0.2 1.5 0.7 3.0
49	Firewater Pump #2 Diesel Engine, 380 HP	PM_{10} SO_2 VOC CO NO_x	0.9 0.8 5.7 2.6 11.8	0.3 0.2 1.5 0.7 3.0
50	Emergency Generator #1--Diesel Engine 830 HP	PM_{10} SO_2 VOC CO NO_x	0.6 6.8 0.6 4.6 20.0	0.2 1.7 0.2 1.2 5.0
51	Maintenance Shop Emergency Generator 16 HP, NG Fueled	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.3 2.3	0.1 0.1 0.1 0.1 0.2
52	Shot Tower Emergency Generator 8 HP, NG fueled	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.2 1.2	0.1 0.1 0.1 0.1 0.1
53	CF 2nd Floor Lead Area Emergency Generator 40 HP, NG fueled	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.2 0.7 5.4	0.1 0.1 0.1 0.1 0.3

SN	Description	Pollutant	lb/hr	tpy
54	Garage Emergency Generator 8 HP, Gasoline Fueled	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 1.1 0.4 0.6	0.1 0.1 0.1 0.1 0.1
55	Gate House Emergency Generator 8 HP, Propane Fueled	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.2 1.2	0.1 0.1 0.1 0.1 0.1
56	Effluent Discharge Emergency Generator 40 HP, Propane Fueled	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.2 0.7 5.4	0.1 0.1 0.1 0.1 0.3
57	Emergency Generator #2--Diesel Engine 160 HP	PM_{10} SO_2 VOC CO NO_x	0.4 0.4 2.4 1.1 5.0	0.1 0.1 0.6 0.3 1.3

2. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Centerfire Lead Kettle	PM Antimony	0.1 0.00001	0.2 0.00005
02	Centerfire Remelt Lead	PM Antimony	0.1 0.00013	0.1 0.00056
03	Dip Lube Dryer Exhaust	Perchloroethylene	2.0	9.9
04	Dip Lube Tank Exhaust	Perchloroethylene	8.1	

SN	Description	Pollutant	lb/hr	tpy
05	Bullet Tumbler Exhaust	PM Antimony	0.1 0.0003	0.1 0.0014
06	Bullet Groover and Shaker	PM Antimony	0.1 0.000002	0.1 0.000008
11	Rimfire Bullet Tumbler	PM Antimony	0.1 0.0003	0.2 0.0014
12	Peen Plating and Bullet Shakers	PM Antimony	0.1 0.000002	0.1 0.000008
17	Shot Tower Drop Tube	PM Antimony Arsenic	0.1 0.0003 0.0001	0.1 0.0013 0.0004
18	Shot Tower Room Exhaust	PM Antimony Arsenic	0.1 0.0003 0.0001	0.1 0.0013 0.0004
19	Shot Tower Room Vent	PM Antimony Arsenic	0.1 0.0003 0.0001	0.1 0.0013 0.0004
20	Shot Tower-Kettle Exhaust	PM Antimony Arsenic	0.1 0.002 0.0004	0.1 0.008 0.002
21	Maintenance Paint booth Exhaust	Methylene Chloride	0.02	0.08

SN	Description	Pollutant	lb/hr	tpy
22	Primer Drop Test Exhaust	PM Antimony Arsenic	0.1 0.000052 0.000012	0.1 0.00023 0.000053
23	Ballistic Function Range	PM Antimony Arsenic	0.1 0.00042 0.0001	0.1 0.0018 0.00042
24	Ballistics Function Booth	PM Antimony Arsenic	0.1 0.000052 0.000012	0.1 0.00023 0.000053
25	Ballistics Firing Bay	PM Antimony Arsenic	0.1 0.00032 0.000072	0.1 0.0014 0.00032
26	Ballistic 20 yd. Range	PM Antimony Arsenic	0.1 0.00016 0.000036	0.1 0.00068 0.00016
27	Ballistic 50 yd. Range	PM Antimony Arsenic	0.1 0.00011 0.000024	0.1 0.00046 0.00011
28	Ballistic 100 yd. Range	PM Antimony Arsenic	0.1 0.00011 0.000024	0.1 0.00046 0.00011
29	Ballistic 200 yd. Range	PM Antimony Arsenic	0.1 0.00011 0.000024	0.1 0.00046 0.00011
30	Burning Plant Rotary Furnace	PM Antimony	0.1 0.019	0.4 0.084
31	Burning Plant-ScrapPrimer and Centerfire Cartridge and Hammer mills	PM Antimony Arsenic	0.1 0.00085 0.0002	0.1 0.0035 0.00085

SN	Description	Pollutant	lb/hr	tpy
35	Shot Tower Dryer Exhaust (8th Floor)	PM Antimony Arsenic	0.1 0.00026 0.00006	0.1 0.00012 0.00027
36	Centerfire Bullet Inspection	PM Antimony	0.1 0.00032	0.1 0.0014
39	Centerfire 10 Cone Gas Dryer	PM	0.1	0.1
40	Centerfire Jacket Dryer	PM	0.1	0.1
41	Centerfire Body Annealing	PM	0.1	0.3
42	Centerfire Mouth Annealing	PM	0.1	0.3
43	Centerfire 7 Cone Gas Dryer	PM	0.1	0.1
44	Rimfire Gas Dryer	PM	0.1	0.2
45	Boiler #1	PM	0.2	0.9
46	Boiler #2	PM	0.2	0.9
48	Firewater Pump #1 Diesel Engine	PM	0.9	0.3
49	Firewater Pump #2 Diesel Engine	PM	0.9	0.3
50	Emergency Generator #1--830 HP Diesel	PM	0.6	0.2
51	Maintenance Shop Emergency Generator 16 HP	PM	0.1	0.1
52	Shot Tower Emergency Generator 8 HP	PM	0.1	0.1
53	CF 2nd Floor Lead Area Emergency Generator 40 HP	PM	0.1	0.1
54	Garage Emergency Generator 8 HP	PM	0.1	0.1
55	Gate House Emergency Generator 8 HP	PM	0.1	0.1
56	Effluent Discharge Emergency Generator 40 HP	PM	0.1	0.1
57	Emergency Generator #1--160 HP Diesel	PM	0.4	0.1
58	Nickel Electroplating	Nickel	0.0000957	0.00042

SN	Description	Pollutant	lb/hr	tpy
59	Copper Electroplating	Cyanide	0.000039	0.00017

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
1, 2,3/4, 5, 6, 7, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 51, 52, 53, 54, 55, 56, 58, & 59	5%	[Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
30, 34, 48, 49, 50, & 57	20%	[Regulation No. 19 §19.503 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

4. The permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

5. The permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [Regulation 18 §18.901 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. The amount primed centerfire and rimfire shells or loaded rimfire cartridges mixed with rimfire shells processed at SN-30 (Burning Plant-Rotary Furnace) shall not exceed 3000 tons per rolling twelve month period. The permittee shall maintain monthly records of pounds of primed centerfire and rimfire shells or loaded rimfire cartridges mixed with rimfire shells processed at this source. These records shall be updated no later than the 15th day of the month following the month to which the records pertain, kept on site, and made available to Department personnel upon request. [Regulation 19 §19.705, Regulation 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311].

7. The amount of loaded pistol, rifle, rimfire, and shotshell rounds processed at SN-31 (Burning Plant-Scrap Primer and Centerfire Cartridges and Hammer mills) shall not exceed 2200 tons per rolling twelve month period. The permittee shall maintain monthly records of the pounds of loaded shotshells, pistol, rifle, rimfire, and shotshell rounds

processed at the facility. These records shall be updated no later than the 15th day of the month following the month to which the records pertain, kept on site, and made available to Department personnel upon request. [Regulation 19 §19.705, Regulation No. 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311].

8. Volatile organic compounds (VOC) emissions shall not exceed 63.9 tons per rolling 12-month period from sources SN-07, SN-10, SN-13, SN-14, SN-21, SN-38, SN-47, and SN-XX, combined. Compliance with VOC emission limits shall be determined by material balance. The permittee shall maintain monthly records of material usage based on material issuance from plant inventory. These records must be sufficient to determine VOC emissions. These records shall be updated no later than the 15th day of the month following the month to which the records pertain, kept on site, and made available to Department personnel upon request. Regulation 19 §19.501 et seq., and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

9. Perchloroethylene usage at this facility shall not exceed 1,450 gallons per rolling twelve month period. The permittee shall maintain monthly records of the amount of Perchloroethylene used at the facility. These records shall be updated no later than the 15th day of the month following the month to which the records pertain, kept on site, and made available to Department personnel upon request. [Regulation No. 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

10. The permittee shall demonstrate that the degree of accuracy of the calculations used to determine emissions is sufficient to prove that the major source thresholds have not been exceeded if actual emissions are calculated at or above 95% of the major source thresholds, i.e., >9.5 tpy of a single HAP, >23.75 tpy of any combination of HAPs, and/or 95 tpy of a criteria pollutant (PM_{10}, SO_2, VOC, CO, and NO_x. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-3]

11. Emissions of oxides of nitrogen (NO_x), at SN-34, shall not exceed the emission rate set forth in specific condition #1(9.9 tpy). Compliance with NO_x emission limits shall be determined by controlling pH of the scrubber liquor. The permittee shall maintain the scrubber liquor pH at 10 or above. The permittee shall use sodium hydroxide, sodium bisulfide, and BionoxSolver solution either alone or in combination to maintain the pH above 10. The permittee shall maintain monthly records, of scrubber liquor pH. These records must be sufficient to determine that NO_x emissions are maintained below the designated opacity limit as set forth in specific condition #3 for SN-34. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.705, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31]

12. The permittee shall conduct tests for NO_X on SN-34 in accordance with General Condition #7 using EPA Reference Method 7E. The tests shall be conducted within 180 days of the issuance of this permit, and the results shall be reported to the Department. [Regulation 19, §19.702 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31]

13. The permittee shall conduct tests for Lead on SN-06, SN-35, and SN-36 in accordance with General Condition #7 using EPA Reference Method 12. The tests shall be conducted within 180 days of issuance of this permit, and the results shall be reported to the Department. [Regulation 19, §19.702, Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31]

14. The facility shall increase the stack height on the Rimfire Bullet Tumbler, SN-11 to a minimum of 60 feet. Construction shall commence according to the requirements of General Condition #4, and notifications shall take place according to the requirements of General Condition #3. [Regulation 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

NESHAP Conditions

15. The Dip Lube Tank (SN-03 & 04) is considered an immersion cold batch cleaning machine and is subject, but not limited to, the following requirements. [40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311

    a. The permittee shall employ a tight fitting cover that shall be closed at all times except during parts entry and removal and a freeboard ratio of 0.75 or greater. [40 CFR 63, Subpart T §63.462(a)(2)]

    b. The permittee shall comply with the work and operational practice requirements listed below. [40 CFR 63, Subpart T §63.462(c)]

        i. All waste solvent shall be collected and stored in closed containers. The closed container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.

        ii. If a flexible hose or flushing device is used, flushing shall be performed only within the freeboard area of the solvent cleaning machine.

        iii. Solvent cleaned parts shall be drained for 15 seconds or until dripping has stopped, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while draining.

        iv. The solvent level shall not exceed the fill line.

        v. Spills during solvent transfer shall be wiped up immediately. The wipe rags shall be stored in covered containers meeting the requirements of paragraph 1.

        vi. When an air- or pump-agitated solvent bath is used, the permittee shall ensure that agitator is operated to produce a rolling motion of the solvent but not observable splashing against tank walls or parts being cleaned.

vii. The permittee shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute) as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip.

viii. Sponges, fabric, wood, and paper products shall not be cleaned.

16. The following Sources are subject to 40 CFR Part 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. They are: SN-48, SN-49, SN-50, SN-51, SN-52, SN-53, SN-54, SN-55, SN-56, and SN-57. The permittee shall comply with all applicable requirements under 40 CFR Part 63, Subpart ZZZZ no later than May 3, 2013. These requirements include, but are not limited to the following: [Regulation No. 19 §19.304 and 40 CFR 63, Subpart ZZZZ]

a. Except during periods of startup, the permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6602, Table 2d]
b. Except during periods of startup, the permittee shall inspect the air cleaner every 1000 hours of operation or annually, whichever comes first. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6602, Table 2d]
c. Except during periods of startup, the permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6602, Table 2d]
d. During periods of startup, the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading not to exceed 30 minutes. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6602, Table 2d]
e. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6625(e)]
f. The permittee must install a non-resettable hour meter if one is not already installed. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6625(f)]
g. The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan and the requirements of 16 (a), 16 (b), 16 (c), and 16 (d) above. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6655 (e)]
h. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to the subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to the subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water

content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil before continuing to use the engine. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6655 (i)]

i. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6640 (f) (1)]
j. The permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6640 (f) (3)]
k. The permittee may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6640 (f) (4)]
l. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6655 (f)]
m. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [Regulation No. 19 §19.304 and 40 CFR 63 §63.6660 (b)]
n. The permittee must submit compliance reports as specified in 40 CFR 63 §63.6650 and according to General Provision #7 of this Permit. [Regulation No. 19 §19.304 and 40 CFR 63 §63.6650]

17. The Nickel Electroplating Line, SN-58, is subject to 40 CFR Part 63, Subpart WWWWWW, *National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations.* The permittee shall comply with all applicable requirements under 40 CFR Part 63, Subpart WWWWWW no later than July 1, 2010. These requirements include, but are not limited to the following: [Regulation No. 19 §19.304 and 40 CFR 63, Subpart WWWWWW]

    a. The permittee must use a wetting agent/fume suppressant in the bath of the affected tank. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (a)(1)]

    b. The permittee must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (a)(1) (i)]

    c. The permittee must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (a)(1) (ii)]

    d. If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (a)(1) (iii)]

    e. The permittee must minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(1)]

    f. The permittee must maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(2)]

    g. Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(3)]

    h. Use tank covers, if already owned and available at the facility, whenever practicable. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(4)]

    i. Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality). [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(5)]

    j. Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(6)]

k. Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(7)]

l. Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(8)]

m. Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(9)]

n. Minimize spills and overflow of tanks, as practicable. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(10)]

o. Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(11)]

p. Perform regular inspections to identify leaks and other opportunities for pollution prevention. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11507 (g)(12)]

q. The permittee must submit an Initial Notification no later than 120 calendar days after July 1, 2008. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11509 (a)(3)]

r. The Initial Notification must include the information specified in §63.9(b)(2)(i) through (iv) and must include a description of the compliance method. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11509 (a)(2) and §63.9(b)(2)(i) through (iv)]

s. The permittee must submit a Notification of Compliance Status no later than COB on July 1, 2010. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11509 (b)(1) and 40 CFR 63, §63.11506]

t. The Notification of Compliance Status must include the list of affected sources and the plating metal HAP used in, or emitted by those sources; the methods used to comply with the applicable management practices and equipment standards; a description of capture and emission control systems used to comply with applicable equipment standards; and a statement by the owner or operator that includes the following: (1) that the wetting agent/fume suppressant has been added to the bath according to the manufacturer's specifications and instructions, (2) that the applicable management practices have been implemented and (3) whether the source is in compliance with the applicable standards or other requirements. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11509 (b)(2) (i) through (iv) and 40 CFR 63, §63.11508 (c) (1) (ii), (iv)]

u. The permittee must prepare an annual certification of compliance report. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11509 (c)]

v. The permittee must state in the annual compliance certification that the permittee has added the wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11509 (c)(1)]

w. The permittee must keep the following records: (1) a copy of the Initial Notification and Notification of Compliance Status and all documentation supporting those notifications, (2) the records specified in §63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of this part, and (3) the records required to show continuous compliance with each management practice and equipment standard that applies to you. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11509 (e)(1), (2),(3), and §63.10(b)(2)(i) through (iii) and (xiv)]

x. The permittee must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1) of the General Provisions to part 63. The permittee may keep the records offsite for the remaining 3 years. [Regulation No. 19 §19.304 and 40 CFR 63, §63.11509 (f)]

Section V: INSIGNIFICANT ACTIVITIES

The Department deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated September 21, 2001.

Description	Category
Shotshell body flame treat units (2.3 MMBtu/hr)	A-1
Shotshell body printers (〈1 tpy)	A-13
Closed containers (5 gallons or less)	A-8
6,000 gallon Sodium Hydroxide tank	A-14
Laboratory hood vents (3)	A-5
Shotshell body crimp waterproofing process (〈1 tpy)	A-13
Wastewater treatment sludge dewatering filter press, filter media exhaust	A-13
Pistol and revolver label printer and centerfire pistol and revolver label printer (〈1 tpy)	A-13

Section VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.

2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated under the Act. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

3. The permittee shall notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [Regulation 19 §19.704 and/or A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [Regulation 19 §19.410(B) and/or Regulation 18 §18.309(B) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

5. The permittee must keep records for five years to enable the Department to determine compliance with the terms of this permit such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [Regulation 19 §19.705 and/or Regulation 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [Regulation 19 §19.705 and/or Regulation 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

   Arkansas Department of Environmental Quality
   Air Division
   ATTN: Compliance Inspector Supervisor

5301 Northshore Drive
North Little Rock, AR 72118-5317

7. The permittee shall test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial startup of the permitted source or (2) existing equipment already operating according to the time frames set forth by the Department. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee must submit compliance test results to the Department within thirty (30) calendar days after the completion of testing. [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

8. The permittee shall provide: [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

   a. Sampling ports adequate for applicable test methods;
   b. Safe sampling platforms;
   c. Safe access to sampling platforms; and
   d. Utilities for sampling and testing equipment

9. The permittee shall operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee shall maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [Regulation 19 §19.303 and/or Regulation 18 §18.1104 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [Regulation 19 §19.601 and/or Regulation 18 §18.1101 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

    a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.
    b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
    c. The permittee must submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and

nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, the information need not be submitted again.

11. The permittee shall allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

    a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;
    b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act;
    c. To inspect any monitoring equipment or monitoring method required in this permit;
    d. To sample any emission of pollutants; and
    e. To perform an operation and maintenance inspection of the permitted source.

12. The Department issued this permit in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [Regulation 19 §19.410(A) and/or Regulation 18 §18.309(A) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. The Department may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [Regulation 19 §19.407(B) and/or Regulation 18 §18.307(B) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

15. This permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

16. This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

17. This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

18. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [A.C.A §8-1-105(c)]

19. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:

    a. Such an extension does not violate a federal requirement;
    b. The permittee demonstrates the need for the extension; and
    c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

    [Regulation 18 §18.314(A), Regulation 19 §19.416(A), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

20. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facilities total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:

    a. Such a request does not violate a federal requirement;
    b. Such a request is temporary in nature;
    c. Such a request will not result in a condition of air pollution;
    d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
    e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
    f. The permittee maintains records of the dates and results of such temporary emissions/testing.

    [Regulation 18 §18.314(B), Regulation 19 §19.416(B), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

21. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:
    a. The request does not violate a federal requirement;
    b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
    c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

    [Regulation 18 §18.314(C), Regulation 19 §19.416(C), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

Appendix A

40 CFR 63, Subpart T, *National Emission Standards for Halogenated Solvent Cleaning*

Code of Federal Regulations

Title 40 - Protection of Environment

Volume: 9
Date: 2010-07-01
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Title: Subpart T - National Emission Standards for Halogenated Solvent Cleaning
Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER C - AIR PROGRAMS (CONTINUED). PART 63 - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES.

Subpart T—National Emission Standards for Halogenated Solvent Cleaning

Source: 59 FR 61805, Dec. 2, 1994, unless otherwise noted.

§ 63.460 Applicability and designation of source.

(a) The provisions of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. The concentration of these solvents may be determined using EPA test method 18, material safety data sheets, or engineering calculations. Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent are not covered under the provisions of this subpart.

(b) Except as noted in appendix C (General Provisions Applicability to subpart T) of this subpart, the provisions of subpart A of this part (General Provisions) apply to owners or operators of any solvent cleaning machine meeting the applicability criteria of paragraph (a) of this section.

(c) Except as provided in paragraph (g) of this section, each solvent cleaning machine subject to this subpart that commenced construction or reconstruction after November 29, 1993 shall achieve compliance with the provisions of this subpart, except for § 63.471, immediately upon start-up or by December 2, 1994, whichever is later.

(d) Except as provided in paragraph (g) of this section, each solvent cleaning machine subject to this subpart that commenced construction or reconstruction on or before November 29, 1993 shall achieve compliance with the provisions of this subpart, except for § 63.471, no later than December 2, 1997.

(e) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authority contained in paragraph (f) of this section shall be retained by the Administrator and not transferred to a State.

(f) [Reserved]

(g) Each continuous web cleaning machine subject to this subpart shall achieve compliance with the provisions of this subpart, except for § 63.471, no later than December 2, 1999.

(h) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(i) The compliance date for the requirements in § 63.471 depends on the date that construction or reconstruction of the affected facility commences. For purposes of this paragraph, affected facility means all solvent cleaning machines, except solvent cleaning machines used in the manufacture and maintenance of aerospace products, solvent cleaning machines used in the manufacture of narrow tubing, and continuous web cleaning machines, located at a major source that are subject to the facility-wide limits in table 1 of § 63.471(b)(2), and for area sources, affected facility means all solvent cleaning machines, except cold batch cleaning machines, located at an area source that are subject to the facility-wide limits in table 1 of § 63.471(b)(2).

(1) Each affected facility that was constructed or reconstructed on or before August 17, 2006, shall be in compliance with the provisions of this subpart no later than May 3, 2010.

(2) Each affected facility that was constructed or reconstructed on or after August 17, 2006, shall be in compliance with the provisions of this subpart on May 3, 2007 or immediately upon startup, whichever is later.

[59 FR 61805, Dec. 2, 1994; 59 FR 67750, Dec. 30, 1994, as amended at 60 FR 29485, June 5, 1995; 63 FR 68400, Dec. 11, 1998; 68 FR 37349, June 23, 2003; 70 FR 75345, Dec. 19, 2005; 72 FR 25157, May 3, 2007]

§ 63.46 efinitions.

Unless defined below, all terms used in this subpart are used as defined in the 1990 Clean Air Act, or in subpart A of 40 CFR part 63:

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., State that has been delegated the authority to implement the provisions of this part.)

Air blanket means the layer of air inside the solvent cleaning machine freeboard located above the solvent/air interface. The centerline of the air blanket is equidistant between the sides of the machine.

Air knife system means a device that directs forced air at high pressure, high volume, or a combination of high pressure and high volume, through a small opening directly at the surface of a continuous web part. The purpose of this system is to remove the solvent film from the surfaces of the continuous web part.

Automated parts handling system means a mechanical device that carries all parts and parts baskets at a controlled speed from the initial loading of soiled or wet parts through the removal of the cleaned or dried parts. Automated parts handling systems include, but are not limited to, hoists and conveyors.

Batch cleaning machine means a solvent cleaning machine in which individual parts or a set of parts move through the entire cleaning cycle before new parts are introduced into the solvent cleaning machine. An open-top vapor cleaning machine is a type of batch cleaning machine. A solvent cleaning machine, such as a ferris wheel or a cross-rod degreaser, that clean multiple batch loads simultaneously and are manually loaded are batch cleaning machines.

Carbon adsorber means a bed of activated carbon into which an air-solvent gas-vapor stream is routed and which adsorbs the solvent on the carbon.

Clean liquid solvent means fresh unused solvent, recycled solvent, or used solvent that has been cleaned of soils (e.g., skimmed of oils or sludge and strained of metal chips).

Cleaning capacity means, for a cleaning machine without a solvent/air interface, the maximum volume of parts that can be cleaned at one time. In most cases, the cleaning capacity is equal to the volume (length times width times height) of the cleaning chamber.

Cold cleaning machine means any device or piece of equipment that contains and/or uses liquid solvent, into which parts are placed to remove soils from the surfaces of the parts or to dry the parts. Cleaning machines that contain and use heated, nonboiling solvent to clean the parts are classified as cold cleaning machines.

Combined squeegee and air-knife system means a system consisting of a combination of a squeegee system and an air-knife system within a single enclosure.

Consumption means the amount of halogenated hazardous air pollutant solvent added to the solvent cleaning machine.

Continuous web cleaning machine means a solvent cleaning machine in which parts such as film, coils, wire, and metal strips are cleaned at speeds typically in excess of 11 feet per minute. Parts are generally uncoiled, cleaned such that the same part is simultaneously entering and exiting the solvent application area of the solvent cleaning machine, and then recoiled or cut. For the purposes of this subpart, all continuous web cleaning machines are considered to be a subset of in-line solvent cleaning machines.

Cover means a lid, top, or portal cover that shields the solvent cleaning machine openings from air disturbances when in place and is designed to be easily opened and closed without disturbing the vapor zone. Air disturbances include, but are not limited to, lip exhausts, ventilation fans, and general room drafts. Types of covers include, but are not limited to, sliding, biparting, and rolltop covers.

Cross-rod solvent cleaning machine means a batch solvent cleaning machine in which parts

cleaning machine, parts are loaded semi-continuously, and enter and exit the machine from a single portal.

Downtime mode means the time period when a solvent cleaning machine is not cleaning parts and the sump heating coils, if present, are turned off.

Dwell means the technique of holding parts within the freeboard area but above the vapor zone of the solvent cleaning machine. Dwell occurs after cleaning to allow solvent to drain from the parts or parts baskets back into the solvent cleaning machine.

Dwell time means the required minimum length of time that a part must dwell, as determined by § 63.465(d).

Emissions means halogenated hazardous air pollutant solvent consumed (i.e., halogenated hazardous air pollutant solvent added to the machine) minus the liquid halogenated hazardous air pollutant solvent removed from the machine and the halogenated hazardous air pollutant solvent removed from the machine in the solid waste.

Existing means any solvent cleaning machine the construction or reconstruction of which was commenced on or before November 29, 1993. A machine, the construction or reconstruction of which was commenced on or before November 29, 1993, but that did not meet the definition of a solvent cleaning machine on December 2, 1994, because it did not use halogenated HAP solvent liquid or vapor covered under this subpart to remove soils, becomes an existing source when it commences to use such liquid or vapor. A solvent cleaning machine moved within a contiguous facility or to another facility under the same ownership, constitutes an existing machine.

Freeboard area means; for a batch cleaning machine, the area within the solvent cleaning machine that extends from the solvent/air interface to the top of the solvent cleaning machine; for an in-line cleaning machine, it is the area within the solvent cleaning machine that extends from the solvent/air interface to the bottom of the entrance or exit opening, whichever is lower.

Freeboard height means; for a batch cleaning machine, the distance from the solvent/air interface, as measured during the idling mode, to the top of the cleaning machine; for an in-line cleaning machine, it is the distance from the solvent/air interface to the bottom of the entrance or exit opening, whichever is lower, as measured during the idling mode.

Freeboard ratio means the ratio of the solvent cleaning machine freeboard height to the smaller interior dimension (length, width, or diameter) of the solvent cleaning machine.

Freeboard refrigeration device (also called a chiller) means a set of secondary coils mounted in the freeboard area that carries a refrigerant or other chilled substance to provide a chilled air blanket above the solvent vapor. A primary condenser capable of meeting the requirements of § 63.463(e)(2)(i) is defined as both a freeboard refrigeration device and a primary condenser for the purposes of these standards.

Halogenated hazardous air pollutant solvent or halogenated HAP solvent means methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5), and chloroform (CAS No. 67-66-3).

Hoist means a mechanical device that carries the parts basket and the parts to be cleaned from the loading area into the solvent cleaning machine and to the unloading area at a controlled speed. A hoist may be operated by controls or may be programmed to cycle parts through the cleaning cycle automatically.

Idling mode means the time period when a solvent cleaning machine is not actively cleaning parts and the sump heating coils, if present, are turned on.

Idling-mode cover means any cover or solvent cleaning machine design that allows the cover to shield the cleaning machine openings during the idling mode. A cover that meets this definition can also be used as a working-mode cover if that definition is also met.

Immersion cold cleaning machine means a cold cleaning machine in which the parts are

immersed in the solvent when being cleaned. A remote reservoir cold cleaning machine that is also an immersion cold cleaning machine is considered an immersion cold cleaning machine for purposes of this subpart.

In-line cleaning machine or continuous cleaning machine means a solvent cleaning machine that uses an automated parts handling system, typically a conveyor, to automatically provide a continuous supply of parts to be cleaned. These units are fully enclosed except for the conveyor inlet and exit portals. In-line cleaning machines can be either cold or vapor cleaning machines.

Leak-proof coupling means a threaded or other type of coupling that prevents solvents from leaking while filling or draining solvent to and from the solvent cleaning machine.

Lip exhaust means a device installed at the top of the opening of a solvent cleaning machine that draws in air and solvent vapor from the freeboard area and ducts the air and vapor away from the solvent cleaning area.

Monthly reporting period means any calendar month in which the owner or operator of a solvent cleaning machine is required to calculate and report the solvent emissions from each solvent cleaning machine.

New means any solvent cleaning machine the construction or reconstruction of which is commenced after November 29, 1993.

Open-top vapor cleaning machine means a batch solvent cleaning machine that has its upper surface open to the air and boils solvent to create solvent vapor used to clean and/or dry parts.

Part means any object that is cleaned in a solvent cleaning machine. Parts include, but are not limited to, discrete parts, assemblies, sets of parts, and parts cleaned in a continuous web cleaning machine (i.e., continuous sheets of metal, film).

Primary condenser means a series of circumferential cooling coils on a vapor cleaning machine through which a chilled substance is circulated or recirculated to provide continuous condensation of rising solvent vapors and, thereby, create a concentrated solvent vapor zone.

Reduced room draft means decreasing the flow or movement of air across the top of the freeboard area of the solvent cleaning machine to meet the specifications of § 63.463(e)(2)(ii). Methods of achieving a reduced room draft include, but are not limited to, redirecting fans and/or air vents to not blow across the cleaning machine, moving the cleaning machine to a corner where there is less room draft, and constructing a partial or complete enclosure around the cleaning machine.

Remote reservoir cold cleaning machine means any device in which liquid solvent is pumped to a sink-like work area that drains solvent back into an enclosed container while parts are being cleaned, allowing no solvent to pool in the work area.

Remote reservoir continuous web cleaning machine means a continuous web cleaning machine in which there is no exposed solvent sump. In these units, the solvent is pumped from an enclosed chamber and is typically applied to the continuous web part through a nozzle or series of nozzles. The solvent then drains from the part and is collected and recycled through the machine, allowing no solvent to pool in the work or cleaning area.

Soils means contaminants that are removed from the parts being cleaned. Soils include, but are not limited to, grease, oils, waxes, metal chips, carbon deposits, fluxes, and tars.

Solvent/air interface means, for a vapor cleaning machine, the location of contact between the concentrated solvent vapor layer and the air. This location of contact is defined as the mid-line height of the primary condenser coils. For a cold cleaning machine, it is the location of contact between the liquid solvent and the air.

Solvent/air interface area means; for a vapor cleaning machine, the surface area of the solvent vapor zone that is exposed to the air; for an in-line cleaning machine, it is the total surface area of all the sumps; for a cold cleaning machine, it is the surface area of the liquid solvent that is exposed to the air.

solvent liquid or vapor to remove soils from the surfaces of materials. Types of solvent cleaning machines include, but are not limited to, batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machines. Buckets, pails, and beakers with capacities of 7.6 liters (2 gallons) or less are not considered solvent cleaning machines.

Solvent vapor zone means; for a vapor cleaning machine, the area that extends from the liquid solvent surface to the level that solvent vapor is condensed. This condensation level is defined as the midline height of the primary condenser coils.

Squeegee system means a system that uses a series of pliable surfaces to remove the solvent film from the surfaces of the continuous web part. These pliable surfaces, called squeegees, are typically made of rubber or plastic media, and need to be periodically replaced to ensure continued proper function.

Sump means the part of a solvent cleaning machine where the liquid solvent is located.

Sump heater coils means the heating system on a cleaning machine that uses steam, electricity, or hot water to heat or boil the liquid solvent.

Superheated part technology means a system that is part of the continuous web process that heats the continuous web part either directly or indirectly to a temperature above the boiling point of the cleaning solvent. This could include a process step, such as a tooling die that heats the part as it is processed, as long as the part remains superheated through the cleaning machine.

Superheated vapor system means a system that heats the solvent vapor, either passively or actively, to a temperature above the solvent's boiling point. Parts are held in the superheated vapor before exiting the machine to evaporate the liquid solvent on them. Hot vapor recycle is an example of a superheated vapor system.

Vapor cleaning machine means a batch or in-line solvent cleaning machine that boils liquid solvent generating solvent vapor that is used as a part of the cleaning or drying cycle.

Water layer means a layer of water that floats above the denser solvent and provides control of solvent emissions. In many cases, the solvent used in batch cold cleaning machines is sold containing the appropriate amount of water to create a water cover.

Working mode means the time period when the solvent cleaning machine is actively cleaning parts.

Working-mode cover means any cover or solvent cleaning machine design that allows the cover to shield the cleaning machine openings from outside air disturbances while parts are being cleaned in the cleaning machine. A cover that is used during the working mode is opened only during parts entry and removal. A cover that meets this definition can also be used as an idling-mode cover if that definition is also met.

[59 FR 61805, Dec. 2, 1994; 60 FR 29485, June 5, 1995, as amended at 63 FR 24751, May 5, 1998; 64 FR 67798, Dec. 3, 1999]

§ 63.46 atc cold cleaning mac ine standards.

(a) Each owner or operator of an immersion batch cold solvent cleaning machine shall comply with the requirements specified in paragraph (a)(1) or (a)(2) of this section.

(1) Employ a tightly fitting cover that shall be closed at all times except during parts entry and removal, and a water layer at a minimum thickness of 2.5 centimeters (1.0 inch) on the surface of the solvent within the cleaning machine, or

(2) Employ a tightly fitting cover that shall be closed at all times except during parts entry and removal and a freeboard ratio of 0.75 or greater.

(b) Each owner or operator of a remote-reservoir batch cold solvent cleaning machine shall employ a tightly fitting cover over the solvent sump that shall be closed at all times except during the cleaning of parts.

(c) Each owner or operator of a batch cold solvent cleaning machine complying with paragraph (a)(2) or (b) of this section shall comply with the work and operational practice requirements specified in paragraphs (c)(1) through (c)(9) of this section as applicable.

(1) All waste solvent shall be collected and stored in closed containers. The closed container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.

(2) If a flexible hose or flushing device is used, flushing shall be performed only within the freeboard area of the solvent cleaning machine.

(3) The owner or operator shall drain solvent cleaned parts for 15 seconds or until dripping has stopped, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while draining.

(4) The owner or operator shall ensure that the solvent level does not exceed the fill line.

(5) Spills during solvent transfer shall be wiped up immediately. The wipe rags shall be stored in covered containers meeting the requirements of paragraph (c)(1) of this section.

(6) When an air- or pump-agitated solvent bath is used, the owner or operator shall ensure that the agitator is operated to produce a rolling motion of the solvent but not observable splashing against tank walls or parts being cleaned.

(7) The owner or operator shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip.

(8) Except as provided in paragraph (c)(9) of this section, sponges, fabric, wood, and paper products shall not be cleaned.

(9) The prohibition in paragraph (c)(8) of this section does not apply to the cleaning of porous materials that are part of polychlorinated biphenyl (PCB) laden transformers if those transformers are handled throughout the cleaning process and disposed of in compliance with an approved PCB disposal permit issued in accordance with the Toxic Substances Control Act.

(d) Each owner or operator of a batch cold cleaning machine shall submit an initial notification report as described in § 63.468 (a) and (b) and a compliance report as described in § 63.468(c).

(e) Each owner or operator subject to the requirements of paragraph (c)(1) through (8) of this section may request to use measures other than those described in these paragraphs. The owner or operator must demonstrate to the Administrator (or delegated State, local, or Tribal authority) that the alternative measures will result in equivalent or better emissions control compared to the measures described in paragraphs (c)(1) through (8) of this section. For example, storing solvent and solvent-laden materials in an enclosed area that is ventilated to a solvent recovery or destruction device may be considered an acceptable alternative.

[59 FR 61805, Dec. 2, 1994; 60 FR 29485, June 5, 1995, as amended at 64 FR 67799, Dec. 3, 1999; 68 FR 37340, June 23, 2003]

§ 63.463 atc vapor and in-line cleaning mac ine standards.

(a) Except as provided in § 63.464 for all cleaning machines, each owner or operator of a solvent cleaning machine subject to the provisions of this subpart shall ensure that each existing or new batch vapor or in-line solvent cleaning machine subject to the provisions of this subpart conforms to the design requirements specified in paragraphs (a)(1) through (7) of this section. The owner or operator of a continuous web cleaning machine shall comply with the requirements of paragraph (g) or (h) of this section, as appropriate, in lieu of complying with this paragraph.

(1) Each cleaning machine shall be designed or operated to meet the control equipment or technique requirements in paragraph (a)(1)(i) or (a)(1)(ii) of this section.

(i) An idling and downtime mode cover, as described in § 63.463(d)(1)(i), that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, and other defects.

(ii) A reduced room draft as described in § 63.463(e)(2)(ii).

(2) Each cleaning machine shall have a freeboard ratio of 0.75 or greater.

(3) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.

(4) Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils. This requirement does not apply to a vapor cleaning machine that uses steam to heat the solvent.

(5) Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.

(6) Each vapor cleaning machine shall have a primary condenser.

(7) Each cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of paragraph (e)(2)(vii) of this section.

(b) Except as provided in § 63.464, each owner or operator of an existing or new batch vapor cleaning machine shall comply with either paragraph (b)(1) or (b)(2) of this section.

(1) Each owner or operator of a batch vapor cleaning machine with a solvent/air interface area of 1.21 square meters (13 square feet) or less shall comply with the requirements specified in either paragraph (b)(1)(i) or (b)(1)(ii) of this section.

(i) Employ one of the control combinations listed in table 1 of this subpart or other equivalent methods of control as determined using the procedure in § 63.469, equivalent methods of control.

Table 1—Control Combinations for Batch Vapor Solvent Cleaning Machines With a Solvent/Air Interface Area of 1.21 Square Meters (13 Square Feet) or Less

ption	Control combinations
1	Working-mode cover, freeboard ratio of 1.0, superheated vapor.
2	Freeboard refrigeration device, superheated vapor.
3	Working-mode cover, freeboard refrigeration device.
4	Reduced room draft, freeboard ratio of 1.0, superheated vapor.
5	Freeboard refrigeration device, reduced room draft.
6	Freeboard refrigeration device, freeboard ratio of 1.0.
7	Freeboard refrigeration device, dwell.

8	Reduced room draft, dwell, freeboard ratio of 1.0.
9	Freeboard refrigeration device, carbon adsorber.
10	Freeboard ratio of 1.0, superheated vapor, carbon adsorber.

Note: Unlike most of the control techniques available for complying with this rule, carbon adsorbers are not considered to be a pollution prevention measure. Use of such units may impose additional cost and burden for a number of reasons. First, carbon adsorption units are generally more expensive than other controls listed in the options. Second, these units may present cross-media impacts such as effluent discharges if not properly operated and maintained, and spent carbon beds have to be disposed of as hazardous waste. When making decisions about what controls to install on halogenated solvent cleaning machines to meet the requirements of this rule, all of these factors should be weighed and pollution prevention measures are encouraged wherever possible.

(ii) Demonstrate that their solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kilograms per hour per square meter (0.045 pounds per hour per square foot) of solvent/air interface area as determined using the procedures in § 63.465(a) and appendix A to this part.

(2) Each owner or operator of a batch vapor cleaning machine with a solvent/air interface area greater than 1.21 square meters (13 square feet) shall comply with the requirements specified in either paragraph (b)(2)(i) or (b)(2)(ii) of this section.

(i) Employ one of the control combinations listed in table 2 of this subpart or other equivalent methods of control as determined using the procedure in § 63.469, equivalent methods of control.

Table 2—Control Combinations for Batch Vapor Solvent Cleaning Machines With a Solvent/Air Interface Area Greater than 1.21 Square Meters (13 Square Feet)

ption	Control combinations
1	Freeboard refrigeration device, freeboard ratio of 1.0, superheated vapor.
2	Dwell, freeboard refrigeration device, reduced room draft.
3	Working-mode cover, freeboard refrigeration device, superheated vapor.
4	Freeboard ratio of 1.0, reduced room draft, superheated vapor.
5	Freeboard refrigeration device, reduced room draft, superheated vapor.
6	Freeboard refrigeration device, reduced room draft, freeboard ratio of 1.0.
7	Freeboard refrigeration device, superheated vapor, carbon adsorber.

Note: Unlike most of the control techniques available for complying with this rule, carbon adsorbers are not considered to be a pollution prevention measure. Use of such units may impose additional cost and burden for a number of reasons. First, carbon adsorption units are generally more expensive than other controls listed in the options. Second, these units may present cross-media impacts such as effluent discharges if not properly operated and maintained, and spent carbon beds have to be disposed of as hazardous waste. When making decisions about what controls to install on halogenated solvent cleaning machines to meet the requirements of this rule, all of these factors should be weighed and pollution prevention measures are encouraged wherever possible.

(ii) Demonstrate that their solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kilograms per hour per square meter (0.045 pounds per hour per square foot) of solvent/air interface area as determined using the procedures in § 63.465(a) and appendix A of this part.

(c) Except as provided in § 63.464 for all cleaning machines, each owner or operator of an in-line cleaning machine shall comply with paragraph (c)(1) or (2) of this section as appropriate. The owner or operator of a continuous web cleaning machine shall comply with the requirements of paragraph (g) or (h) of this section, as appropriate, in lieu of complying with this paragraph.

(1) Each owner or operator of an existing in-line cleaning machine shall comply with the requirements specified in either paragraph (c)(1)(i) or (c)(1)(ii) of this section.

(i) Employ one of the control combinations listed in table 3 of this subpart or other equivalent

methods of control as determined using the procedure in § 63.469, equivalent methods of control.

Table 3—Control Combinations for Existing In-Line Solvent Cleaning Machines

ption	Control combinations
1	Superheated vapor, freeboard ratio of 1.0.
2	Freeboard refrigeration device, freeboard ratio of 1.0.
3	Dwell, freeboard refrigeration device.
4	Dwell, carbon adsorber.

Note: Unlike most of the control techniques available for complying with this rule, carbon adsorbers are not considered to be a pollution prevention measure. Use of such units may impose additional cost and burden for a number of reasons. First, carbon adsorption units are generally more expensive than other controls listed in the options. Second, these units may present cross-media impacts such as effluent discharges if not properly operated and maintained, and spent carbon beds have to be disposed of as hazardous waste. When making decisions about what controls to install on halogenated solvent cleaning machines to meet the requirements of this rule, all of these factors should be weighed and pollution prevention measures are encouraged wherever possible.

(ii) Demonstrate that their solvent cleaning machine can achieve and maintain an idling emission limit of 0.10 kilograms per hour per square meter (0.021 pounds per hour per square foot) of solvent/air interface area as determined using the procedures in § 63.465(a) and appendix A to this part.

(2) Each owner or operator of a new in-line cleaning machine shall comply with the requirements specified in either paragraph (c)(2)(i) or (c)(2)(ii) of this section.

(i) Employ one of the control combinations listed in table 4 of this subpart or other equivalent methods of control as determined using the procedure in § 63.469, equivalent methods of control section.

Table 4—Control Combinations for New In-Line Solvent Cleaning Machines

ption	Control combinations
1	Superheated vapor, freeboard refrigeration device.
2	Freeboard refrigeration device, carbon adsorber.
3	Superheated vapor, carbon adsorber.

Note: Unlike most of the control techniques available for complying with this rule, carbon adsorbers are not considered to be a pollution prevention measure. Use of such units may impose additional cost and burden for a number of reasons. First, carbon adsorption units are generally more expensive than other controls listed in the options. Second, these units may present cross-media impacts such as effluent discharges if not properly operated and maintained, and spent carbon beds have to be disposed of as hazardous waste. When making decisions about what controls to install on halogenated solvent cleaning machines to meet the requirements of this rule, all of these factors should be weighed and pollution prevention measures are encouraged wherever possible.

(ii) Demonstrate that their solvent cleaning machine can achieve and maintain an idling emission limit of 0.10 kilograms per hour per square meter (0.021 pounds per hour per square foot) of solvent/air interface area as determined using the procedures in § 63.465(a) and appendix A to this part.

(d) Except as provided in § 63.464 for all cleaning machines, each owner or operator of an existing or new batch vapor or in-line solvent cleaning machine shall meet all of the following required work and operational practices specified in paragraphs (d)(1) through (12) of this section as applicable. The owner or operator of a continuous web cleaning machine shall comply with the requirements of paragraph (g) or (h) of this section, as appropriate, in lieu of complying with this paragraph.

(1) Control air disturbances across the cleaning machine opening(s) by incorporating the control equipment or techniques in paragraph (d)(1)(i) or (d)(1)(ii) of this section.

(i) Cover(s) to each solvent cleaning machine shall be in place during the idling mode, and during

the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place.

(ii) A reduced room draft as described in § 63.463(e)(2)(ii).

(2) The parts baskets or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.

(3) Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).

(4) Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the Administrator.

(5) Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped.

(6) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.

(7) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

(8) When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.

(9) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.

(10) Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning procedures in appendix A to this part if requested during an inspection by the Administrator.

(11) Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.

(12) Sponges, fabric, wood, and paper products shall not be cleaned.

(e) Each owner or operator of a solvent cleaning machine complying with paragraph (b), (c), (g), or (h) of this section shall comply with the requirements specified in paragraphs (e)(1) through (4) of this section.

(1) Conduct monitoring of each control device used to comply with § 63.463 of this subpart as provided in § 63.466.

(2) Determine during each monitoring period whether each control device used to comply with these standards meets the requirements specified in paragraphs (e)(2)(i) through (xi) of this section.

(i) If a freeboard refrigeration device is used to comply with these standards, the owner or operator shall ensure that the chilled air blanket temperature (in °F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.

(ii) If a reduced room draft is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(ii)(A) and (e)(2)(ii)(B) of this section.

(A) Ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters

(B) Establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in § 63.466 (d).

(iii) If a working-mode cover is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iii)(A) and (e)(2)(iii)(B) of this section.

(A) Ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine openings when closed.

(B) Ensure that the working-mode cover is maintained free of cracks, holes, and other defects.

(iv) If an idling-mode cover is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iv)(A) and (e)(2)(iv)(B) of this section.

(A) Ensure that the cover is in place whenever parts are not in the solvent cleaning machine and completely covers the cleaning machine openings when in place.

(B) Ensure that the idling-mode cover is maintained free of cracks, holes, and other defects.

(v) If a dwell is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(v)(A) and (e)(2)(v)(B) of this section.

(A) Determine the appropriate dwell time for each type of part or parts basket, or determine the maximum dwell time using the most complex part type or parts basket, as described in § 63.465 (d).

(B) Ensure that, after cleaning, each part is held in the solvent cleaning machine freeboard area above the vapor zone for the dwell time determined for that particular part or parts basket, or for the maximum dwell time determined using the most complex part type or parts basket.

(vi) If a superheated vapor system is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(vi)(A) through (e)(2)(vi)(C) of this section.

(A) Ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10 °F above the solvent's boiling point.

(B) Ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed.

(C) Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time.

(vii) If a carbon adsorber in conjunction with a lip exhaust or other exhaust internal to the cleaning machine is used to comply with these standards, the owner or operator shall comply with the following requirements:

(A) Ensure that the concentration of organic solvent in the exhaust from this device does not exceed 100 parts per million of any halogenated HAP compound as measured using the procedure in § 63.466(e). If the halogenated HAP solvent concentration in the carbon adsorber exhaust exceeds 100 parts per million, the owner or operator shall adjust the desorption schedule or replace the disposable canister, if not a regenerative system, so that the exhaust concentration of halogenated HAP solvent is brought below 100 parts per million.

(B) Ensure that the carbon adsorber bed is not bypassed during desorption.

(C) Ensure that the lip exhaust is located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level.

(viii) If a superheated part system is used to comply with the standards for continuous web cleaning machines in paragraph (g) of this section, the owner or operator shall ensure that the

boiling point while the part is traveling through the cleaning machine.

(ix) If a squeegee system is used to comply with the continuous web cleaning requirements of paragraph (g)(3)(iii) or (h)(2)(i) of this section, the owner or operator shall comply with the following requirements.

(A) Determine the appropriate maximum product throughput for the squeegees used in the squeegee system, as described in § 63.465(f).

(B) Conduct the weekly monitoring required by § 63.466(a)(3). Record the results required by § 63.467(a)(6).

(C) Calculate the total amount of continuous web product processed since the squeegees were replaced and compare to the maximum product throughput for the squeegees.

(D) Ensure squeegees are replaced at or before the maximum product throughput is attained.

(E) Redetermine the maximum product throughput for the squeegees if any solvent film is visible on the continuous web part immediately after it exits the cleaning machine.

(x) If an air knife system is used to comply with the continuous web cleaning requirements of paragraph (g)(3)(iii) or (h)(2)(i) of this section, the owner or operator shall comply with the following requirements.

(A) Determine the air knife parameter and parameter value that demonstrate to the Administrator's satisfaction that the air knife is properly operating. An air knife is properly operating if no visible solvent film remains on the continuous web part after it exits the cleaning machine.

(B) Maintain the selected air knife parameter value at the level determined in paragraph (a) of this section.

(C) Conduct the weekly monitoring required by § 63.466(a)(3).

(D) Redetermine the proper air knife parameter value if any solvent film is visible on the continuous web part immediately after it exits the cleaning machine.

(xi) If a combination squeegee and air knife system is used to comply with the continuous web cleaning requirements of paragraph (g)(3)(iii) or (h)(2)(i) of this section, the owner or operator shall comply with the following requirements.

(A) Determine the system parameter and value that demonstrate to the Administrator's satisfaction that the system is properly operating.

(B) Maintain the selected parameter value at the level determined in paragraph (a) of this section.

(C) Conduct the weekly monitoring required by § 63.466(a)(3).

(D) Redetermine the proper parameter value if any solvent film is visible on the continuous web part immediately after it exits the cleaning machine.

(3) If any of the requirements of paragraph (e)(2) of this section are not met, determine whether an exceedance has occurred using the criteria in paragraphs (e)(3)(i) and (e)(3)(ii) of this section.

(i) An exceedance has occurred if the requirements of paragraphs (e)(2)(ii)(B), (e)(2)(iii)(A), (e)(2)(iv)(A), (e)(2)(v), (e)(2)(vi)(B), (e)(2)(vi)(C), (e)(2)(vii)(B), or (e)(2)(vii)(C) of this section have not been met.

(ii) An exceedance has occurred if the requirements of paragraphs (e)(2)(i), (e)(2)(ii)(A), (e)(2)(iii)(B), (e)(2)(iv)(B), (e)(2)(vi)(A), or (e)(2)(vii)(A) of this section have not been met and are not corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameter must be remeasured immediately upon adjustment or repair and demonstrated to be within required limits.

(4) The owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in § 63.468(h).

(f) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the idling emission limit standards in paragraphs (b)(1)(ii), (b)(2)(ii), (c)(1)(ii), or (c)(2)(ii) of this section shall comply with the requirements specified in paragraphs (f)(1) through (f)(5) of this section.

(1) Conduct an initial performance test to comply with the requirements specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this section.

(i) Demonstrate compliance with the applicable idling emission limit.

(ii) Establish parameters that will be monitored to demonstrate compliance. If a control device is used that is listed in paragraph (e)(2) of this section, then the requirements for that control device as listed in paragraph (e)(2) of this section shall be used unless the owner or operator can demonstrate to the Administrator's satisfaction that an alternative strategy is equally effective.

(2) Conduct the periodic monitoring of the parameters used to demonstrate compliance as described in § 63.466(f).

(3) Operate the solvent cleaning machine within parameters identified in the initial performance test.

(4) If any of the requirements in paragraphs (f)(1) through (f)(3) of this section are not met, determine whether an exceedance has occurred using the criteria in paragraphs (f)(4)(i) and (f)(4)(ii) of this section.

(i) If using a control listed in paragraph (e) of this section, the owner or operator shall comply with the appropriate parameter values in paragraph (e)(2) and the exceedance delineations in paragraphs (e)(3)(i) and (e)(3)(ii) of this section.

(ii) If using a control not listed in paragraph (e) of this section, the owner or operator shall indicate whether the exceedance of the parameters that are monitored to determine the proper functioning of this control would be classified as an immediate exceedance or whether a 15 day repair period would be allowed. This information must be submitted to the Administrator for approval.

(5) The owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in § 63.468(h).

(g) Except as provided in § 63.464 and in paragraph (h) of this section for remote reservoir continuous web cleaning machines, each owner or operator of a continuous web cleaning machine shall comply with paragraphs (g)(1) through (4) of this section for each continuous web cleaning machine.

(1) Except as provided in paragraph (g)(2) of this section, install, maintain, and operate one of the following control combinations on each continuous web cleaning machine.

(i) For each existing continuous web cleaning machine, the following control combinations are allowed:

(A) Superheated vapor or superheated part technology, and a freeboard ratio of 1.0 or greater.

(B) Freeboard refrigeration device and a freeboard ratio of 1.0 or greater.

(C) Carbon adsorption system meeting the requirements of paragraph (e)(2)(vii) of this section.

(ii) For each new continuous web cleaning machine, the following control combinations are allowed:

(A) Superheated vapor or superheated part technology, and a freeboard refrigeration device.

(B) A freeboard refrigeration device and a carbon adsorber meeting the requirements of paragraph (e)(2)(vii) of this section.

(C) Superheated vapor or superheated part technology, and a carbon adsorber meeting the requirements of paragraph (e)(2)(vii) of this section.

(2) If a carbon adsorber system can be demonstrated to the Administrator's satisfaction to have an overall solvent control efficiency (i.e., capture efficiency removal efficiency) of 70 percent or greater, this system is equivalent to the options in paragraph (g) of this section.

(3) In lieu of complying with the provisions of paragraph (a) of this section, the owner or operator of a continuous web cleaning machine shall comply with the following provisions:

(i) Each cleaning machine shall meet one of the following control equipment or technique requirements:

(A) An idling and downtime mode cover, as described in paragraph (d)(1)(i) of this section, that may be readily opened or closed; that completely covers the cleaning machine openings when in place; and is free of cracks, holes, and other defects. A continuous web part that completely occupies an entry or exit port when the machine is idle is considered to meet this requirement.

(B) A reduced room draft as described in paragraph (e)(2)(ii) of this section.

(C) Gasketed or leakproof doors that separate both the continuous web part feed reel and take-up reel from the room atmosphere if the doors are checked according to the requirements of paragraph (e)(2)(iii) of this section.

(D) A cleaning machine that is demonstrated to the Administrator's satisfaction to be under negative pressure during idling and downtime and is vented to a carbon adsorption system that meets the requirements of either paragraph (e)(2)(vii) of this section or paragraph (g)(2) of this section.

(ii) Each continuous web cleaning machine shall have a freeboard ratio of 0.75 or greater unless that cleaning machine is a remote reservoir continuous web cleaning machine.

(iii) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts, unless the cleaning machine is a continuous web cleaning machine that has a squeegee system or air knife system installed, maintained, and operated on the continuous web cleaning machine meeting the requirements of paragraph (e) of this section.

(iv) Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils. This requirement does not apply to a vapor cleaning machine that uses steam to heat the solvent.

(v) Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.

(vi) Each vapor cleaning machine shall have a primary condenser.

(vii) Each cleaning machine that uses a lip exhaust or any other exhaust within the solvent cleaning machine shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of either paragraph (e)(2)(vii) or (g)(2) of this section.

(4) In lieu of complying with the provisions of paragraph (d) of this section, the owner or operator of a continuous web cleaning machine shall comply with the following provisions:

(i) Control air disturbances across the cleaning machine opening(s) by incorporating one of the following control equipment or techniques:

(A) Cover(s) to each solvent cleaning machine shall be in place during the idling mode and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) in place. A continuous web part that completely occupies an entry or exit port when the machine is idle is considered to

meet this requirement.

(B) A reduced room draft as described in paragraph (e)(2)(ii) of this section.

(C) Gasketed or leakproof doors or covers that separate both the continuous web part feed reel and take-up reel from the room atmosphere if the doors are checked according to the requirements of paragraph (e)(2)(iii) of this section.

(D) A cleaning machine that is demonstrated to the Administrator's satisfaction to be under negative pressure during idling and downtime and is vented to a carbon adsorption system that meets either the requirements of paragraph (e)(2)(vii) of this section or paragraph (g)(2) of this section.

(ii) Any spraying operations shall be conducted in a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine) or within a machine having a door or cover that meets the requirements of paragraph (g)(4)(i)(C) of this section.

(iii) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.

(iv) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

(v) When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings, and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.

(vi) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.

(vii) Waste solvent, still bottoms, sump bottoms, and waste absorbent materials used in the cleaning process for continuous web cleaning machines shall be collected and stored in waste containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.

(viii) Except as provided in paragraph (g)(4)(ix) of this section, sponges, fabric, wood, and paper products shall not be cleaned.

(ix) The prohibition in paragraph (g)(4)(viii) of this section does not apply to absorbent materials that are used as part of the cleaning process of continuous web cleaning machines, including rollers and roller covers.

(h) Except as provided in § 63.464, each owner or operator of a remote reservoir continuous web cleaning machine shall comply with paragraphs (h)(1) through (4) of this section.

(1) Except as provided in paragraph (h)(2) of this section, install, maintain, and operate one of the following controls on each new remote reservoir continuous web cleaning machine.

(i) Superheated vapor or superheated part technology.

(ii) A carbon adsorber meeting the requirements of paragraph (e)(2)(vii) of this section.

(iii) If a carbon adsorber system can be demonstrated to the Administrator's satisfaction to have an overall solvent control efficiency (i.e., capture efficiency removal efficiency) of 70 percent or greater, this system is equivalent to the options in paragraphs (h)(1)(i) and (h)(1)(ii) of this section.

(2) In lieu of complying with the provisions of paragraph (a) of this section, the owner or operator of a remote reservoir continuous web cleaning machine shall comply with the following provisions:

(i) Each cleaning machine shall have an automated parts handling system capable of moving

initial loading of parts through removal of cleaned parts, unless the cleaning machine is a continuous web cleaning machine that has a squeegee system or air knife system installed, maintained, and operated on the continuous web cleaning machine meeting the requirements of paragraph (e) of this section.

(ii) Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.

(iii) Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.

(iv) Each vapor cleaning machine shall have a primary condenser.

(v) Each cleaning machine that uses a lip exhaust or any other exhaust within the solvent cleaning machine shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of either paragraph (e)(2)(vii) or (g)(2) of this section.

(3) In lieu of complying with the provisions of paragraph (d) of this section, the owner or operator of a remote reservoir continuous web cleaning machine shall comply with the following provisions:

(i) Any spraying operations shall be conducted in a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine) or within a machine having a door or cover that meets the requirements of paragraph (g)(4)(i)(C) of this section.

(ii) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.

(iii) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

(iv) When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings, and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.

(v) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.

(vi) Waste solvent, still bottoms, sump bottoms, and waste absorbent materials used in the cleaning process for continuous web cleaning machines shall be collected and stored in waste containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.

(vii) Except as provided in paragraph (h)(3)(viii) of this section, sponges, fabric, wood, and paper products shall not be cleaned.

(viii) The prohibition in paragraph (h)(3)(vii) of this section does not apply to absorbent materials that are used as part of the cleaning process of continuous web cleaning machines, including rollers and roller covers.

[59 FR 61805, Dec. 2, 1994; 60 FR 29485, June 5, 1995, as amended at 64 FR 67799, Dec. 3, 1999; 65 FR 54422, Sept. 8, 2000; 68 FR 37349, June 23, 2003]

§ 63.464 Alternative standards.

(a) As an alternative to meeting the requirements in § 63.463, each owner or operator of a batch vapor or in-line solvent cleaning machine can elect to comply with the requirements of § 63.464. An owner or operator of a solvent cleaning machine who elects to comply with § 63.464 shall comply with the requirements specified in either paragraph (a)(1) or (a)(2) of this section.

(1) If the cleaning machine has a solvent/air interface, as defined in § 63.461, the owner or operator shall comply with the requirements specified in paragraphs (a)(1)(i) and (a)(1)(ii) of this section.

(i) Maintain a log of solvent additions and deletions for each solvent cleaning machine.

(ii) Ensure that the emissions from each solvent cleaning machine are equal to or less than the applicable emission limit presented in table 5 of this subpart as determined using the procedures in § 63.465(b) and (c).

Table 5—Emission Limits for Batch Vapor and In-Line Solvent Cleaning Machines With a Solvent/Air Interface

Solvent cleaning mac ine	3-mont rolling average mont ly emission limit ilograms s uare meters mont
Batch vapor solvent cleaning machines	150
Existing in-line solvent cleaning machines	153
New in-line solvent cleaning machines	99

(2) If the cleaning machine is a batch vapor cleaning machine and does not have a solvent/air interface, the owner or operator shall comply with the requirements specified in paragraphs (a)(2)(i) and (a)(2)(ii) of this section.

(i) Maintain a log of solvent additions and deletions for each solvent cleaning machine.

(ii) Ensure that the emissions from each solvent cleaning machine are equal to or less than the appropriate limits as described in paragraphs (a)(2)(ii)(A) and (a)(2)(ii)(B) of this section.

(A) For cleaning machines with a cleaning capacity, as reported in § 63.468(d), that is less than or equal to 2.95 cubic meters, the emission limit shall be determined using table 6 or equation 1. If using table 6, and the cleaning capacity of the cleaning machine falls between two cleaning capacity sizes, then the lower of the two emission limits applies.

(B) For cleaning machines with a cleaning capacity as reported in § 63.468(d), that is greater than 2.95 cubic meters, the emission limit shall be determined using equation 1.

$$EL = 330 * (Vol)^{0.6} (1)$$

WHERE:

EL = THE 3-MONTH ROLLING AVERAGE MONTHLY EMISSION LIMIT (KILOGRAMS/MONTH).

Table 6—Emission Limits for Cleaning Machines Without a Solvent/Air Interface

Cleaning capacity cubic meters	3-mont rolling average mont ly emission limit ilograms mont
0.00	0
0.05	55
0.10	83
0.15	106

0.20	126
0.25	144
0.30	160
0.35	176
0.40	190
0.45	204
0.50	218
0.55	231
0.60	243
0.65	255
0.70	266
0.75	278
0.80	289
0.85	299
0.90	310
0.95	320
1.00	330
1.05	340
1.10	349
1.15	359
1.20	368
1.25	377
1.30	386
1.35	395
1.40	404
1.45	412
1.50	421
1.55	429
1.60	438
1.65	446
1.70	454
1.75	462
1.80	470
1.85	477
1.90	485
1.95	493
2.00	500
2.05	508

	515
2.15	522
2.20	530
2.25	537
2.30	544
2.35	551
2.40	558
2.45	565
2.50	572
2.55	579
2.60	585
2.65	592
2.70	599
2.75	605
2.80	612
2.85	619
2.90	625
2.95	632

VOL = THE CLEANING CAPACITY OF THE SOLVENT CLEANING MACHINE (CUBIC METERS).

(b) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with § 63.464(a) shall demonstrate compliance with the applicable 3-month rolling average monthly emission limit on a monthly basis as described in § 63.465(b) and (c).

(c) If the applicable 3-month rolling average emission limit is not met, an exceedance has occurred. All exceedances shall be reported as required in § 63.468(h).

(d) As an alternative to meeting the requirements in § 63.463, each owner or operator of a continuous web cleaning machine can demonstrate an overall cleaning system control efficiency of 70 percent or greater using the procedures in § 63.465(g). This demonstration can be made for either a single cleaning machine or for a solvent cleaning system that contains one or more cleaning machines and ancillary equipment, such as storage tanks and distillation units. If the demonstration is made for a cleaning system, the facility must identify any modifications required to the procedures in § 63.465(g) and they must be approved by the Administrator.

[59 FR 61805, Dec. 2, 1994, as amended at 64 FR 67801, Dec. 3, 1999; 65 FR 54423, Sept. 8, 2000]

§ 63.46 Test met ods.

(a) Except as provided in paragraphs (f) and (g) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with an idling emission limit standard in § 63.463(b)(1)(ii), (b)(2)(ii), (c)(1)(ii), or (c)(2)(ii) shall determine the idling emission rate of the solvent cleaning machine using Reference Method 307 in appendix A of this part.

(b) Except as provided in paragraph (g) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with § 63.464 shall, on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in paragraph (c) of this section. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

(c) Except as provided in paragraphs (f) and (g) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with § 63.464 shall, on the first operating day of the month, comply with the requirements specified in paragraphs (c)(1) through (3) of this section.

(1) Using the records of all solvent additions and deletions for the previous monthly reporting period required under § 63.464(a), determine solvent emissions (Ei) using equation 2 for cleaning machines with a solvent/air interface and equation 3 for cleaning machines without a solvent/air interface:

[Please see PDF for image: ER02DE94.000]

[Please see PDF for image: ER02DE94.001]

WHERE:

E_I=THE TOTAL HALOGENATED HAP SOLVENT EMISSIONS FROM THE SOLVENT CLEANING MACHINE DURING THE MOST RECENT MONTHLY REPORTING PERIOD I, (KILOGRAMS OF SOLVENT PER SQUARE METER OF SOLVENT/AIR INTERFACE AREA PER MONTH).

E_N=THE TOTAL HALOGENATED HAP SOLVENT EMISSIONS FROM THE SOLVENT CLEANING MACHINE DURING THE MOST RECENT MONTHLY REPORTING PERIOD I, (KILOGRAMS OF SOLVENT PER MONTH).

SA_I=THE TOTAL AMOUNT OF HALOGENATED HAP LIQUID SOLVENT ADDED TO THE SOLVENT CLEANING MACHINE DURING THE MOST RECENT MONTHLY REPORTING PERIOD I, (KILOGRAMS OF SOLVENT PER MONTH).

LSR_I=THE TOTAL AMOUNT OF HALOGENATED HAP LIQUID SOLVENT REMOVED FROM THE SOLVENT CLEANING MACHINE DURING THE MOST RECENT MONTHLY REPORTING PERIOD I, (KILOGRAMS OF SOLVENT PER MONTH).

SSR_I=THE TOTAL AMOUNT OF HALOGENATED HAP SOLVENT REMOVED FROM THE SOLVENT CLEANING MACHINE IN SOLID WASTE, OBTAINED AS DESCRIBED IN PARAGRAPH (C)(2) OF THIS SECTION, DURING THE MOST RECENT MONTHLY REPORTING PERIOD I, (KILOGRAMS OF SOLVENT PER MONTH).

$AREA_I$=THE SOLVENT/AIR INTERFACE AREA OF THE SOLVENT CLEANING MACHINE (SQUARE METERS).

(2) Determine SSR_i using the method specified in paragraph (c)(2)(i) or (c)(2)(ii) of this section.

(i) From tests conducted using EPA reference method 25d.

(ii) By engineering calculations included in the compliance report.

(3) Determine the monthly rolling average, EA, for the 3-month period ending with the most recent reporting period using equation 4 for cleaning machines with a solvent/air interface or equation 5 for cleaning machines without a solvent/air interface:

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[Please see PDF for image: ER02DE94.003]

WHERE:

EA_I=THE AVERAGE HALOGENATED HAP SOLVENT EMISSIONS OVER THE PRECEDING 3 MONTHLY REPORTING PERIODS, (KILOGRAMS OF SOLVENT PER SQUARE METER OF SOLVENT/AIR INTERFACE AREA PER MONTH).

EA_N=THE AVERAGE HALOGENATED HAP SOLVENT EMISSIONS OVER THE PRECEDING 3 MONTHLY REPORTING PERIODS (KILOGRAMS OF SOLVENT PER MONTH).

E_I=HALOGENATED HAP SOLVENT EMISSIONS FOR EACH MONTH (J) FOR THE MOST RECENT 3 MONTHLY REPORTING PERIODS (KILOGRAMS OF SOLVENT PER SQUARE METER OF SOLVENT/AIR INTERFACE AREA).

E_N=HALOGENATED HAP SOLVENT EMISSIONS FOR EACH MONTH (J) FOR THE MOST RECENT 3 MONTHLY REPORTING PERIODS (KILOGRAMS OF SOLVENT PER MONTH).

J=1 = THE MOST RECENT MONTHLY REPORTING PERIOD.

J=2 = THE MONTHLY REPORTING PERIOD IMMEDIATELY PRIOR TO J=1.

J=3 = THE MONTHLY REPORTING PERIOD IMMEDIATELY PRIOR TO J=2.

(d) Each owner or operator of a batch vapor or in-line solvent cleaning machine using a dwell to comply with § 63.463 shall determine the appropriate dwell time for each part or parts basket using the procedure specified in paragraphs (d)(1) and (d)(2) of this section.

(1) Determine the amount of time for the part or parts basket to cease dripping once placed in the vapor zone. The part or parts basket used for this determination must be at room temperature before being placed in the vapor zone.

(2) The proper dwell time for parts to remain in the freeboard area above the vapor zone is no less than 35 percent of the time determined in paragraph (d)(1) of this section.

(e) An owner or operator of a source shall determine their potential to emit from all solvent cleaning operations, using the procedures described in paragraphs (e)(1) through (e)(3) of this section. A facility's total potential to emit is the sum of the HAP emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility.

(1) Determine the potential to emit for each individual solvent cleaning using equation 6.

$$PTE_i=H_i \times W_i \times SAI_i \quad (6)$$

WHERE:

PTE_I=THE POTENTIAL TO EMIT FOR SOLVENT CLEANING MACHINE I (KILOGRAMS OF SOLVENT PER YEAR).

H_I=HOURS OF OPERATION FOR SOLVENT CLEANING MACHINE I (HOURS PER YEAR).

=8760 HOURS PER YEAR, UNLESS OTHERWISE RESTRICTED BY A FEDERALLY ENFORCEABLE REQUIREMENT.

W_I=THE WORKING MODE UNCONTROLLED EMISSION RATE (KILOGRAMS PER SQUARE METER PER HOUR).

=1.95 KILOGRAMS PER SQUARE METER PER HOUR FOR BATCH VAPOR AND COLD CLEANING MACHINES.

=1.12 KILOGRAMS PER SQUARE METER PER HOUR FOR IN-LINE CLEANING MACHINES.

SAI_I = SOLVENT/AIR INTERFACE AREA OF SOLVENT CLEANING MACHINE I (SQUARE METERS). SECTION 63.461 DEFINES THE SOLVENT/AIR INTERFACE AREA FOR THOSE MACHINES THAT HAVE A SOLVENT/AIR INTERFACE. CLEANING MACHINES THAT DO NOT HAVE A SOLVENT/AIR INTERFACE SHALL CALCULATE A SOLVENT/AIR INTERFACE AREA USING THE PROCEDURE IN PARAGRAPH (E)(2) OF THIS SECTION.

(2) Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using equation 7.

$$SAI=2.20 * (Vol)^{0.6} \quad (7)$$

SAI=THE SOLVENT/AIR INTERFACE AREA (SQUARE METERS).

VOL=THE CLEANING CAPACITY OF THE SOLVENT CLEANING MACHINE (CUBIC METERS).

(3) Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

(f) Each owner or operator of a continuous web cleaning machine using a squeegee system to comply with § 63.463(g)(3) shall determine the maximum product throughput using the method in this paragraph. The maximum product throughput for each squeegee type used at a facility must be determined prior to December 2, 1999, the compliance date for these units.

(1) Conduct daily visual inspections of the continuous web part. This monitoring shall be conducted at the point where the continuous web part exits the squeegee system. It is not necessary for the squeegees to be new at the time monitoring is begun if the following two conditions are met:

(i) The continuous web part leaving the squeegee system has no visible solvent film.

(ii) The amount of continuous web that has been processed through the squeegees since the last replacement is known.

(2) Continue daily monitoring until a visible solvent film is noted on the continuous web part.

(3) Determine the length of continuous web product that has been cleaned using the squeegee since it was installed.

(4) The maximum product throughput for the purposes of this rule is equal to the time it takes to clean 95 percent of the length of product determined in paragraph (f)(3) of this section. This time period, in days, may vary depending on the amount of continuous web product cleaned each day.

(g) Each owner or operator of a continuous web cleaning machine demonstrating compliance with the alternative standard of § 63.464(d) shall, on the first day of every month, ensure that the solvent cleaning machine contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soils. A fill-line must be indicated during the first month the measurements are made. The solvent level with the machine must be returned to the same fill-line each month, immediately prior to calculating overall cleaning system control efficiency emissions as specified in paragraph (h) in this section. The solvent cleaning machine does not need to be emptied and filled with fresh unused solvent prior to the calculation.

(h) Each owner or operator of a continuous web cleaning machines complying with § 63.464(d) shall, on the first operating day of the month, comply with the following requirements.

(1) Using the records of all solvent additions, solvent deletions, and solvent recovered from the carbon adsorption system for the previous monthly reporting period required under § 63.467(e), determine the overall cleaning system control efficiency (E_o) using Equation 8 of this section as follows:

[Please see PDF for image: ER08SE00.003]

WHERE:

E_O = OVERALL CLEANING SYSTEM CONTROL EFFICIENCY.

R_I = THE TOTAL AMOUNT OF HALOGENATED HAP LIQUID SOLVENT RECOVERED FROM THE CARBON ADSORPTION SYSTEM AND RECYCLED TO THE SOLVENT CLEANING SYSTEM DURING THE MOST RECENT MONTHLY REPORTING PERIOD, I, (KILOGRAMS OF SOLVENT PER MONTH).

SA_I = THE TOTAL AMOUNT OF HALOGENATED HAP LIQUID SOLVENT ADDED TO THE SOLVENT CLEANING SYSTEM DURING THE MOST RECENT MONTHLY REPORTING PERIOD, I, (KILOGRAMS OF SOLVENT PER MONTH).

SYSTEM IN SOLID WASTE, OBTAINED AS DESCRIBED IN PARAGRAPH (C)(2) OF THIS SECTION, DURING THE MOST RECENT MONTHLY REPORTING PERIOD, I, (KILOGRAMS OF SOLVENT PER MONTH).

[59 FR 61805, Dec. 2, 1994, as amended at 64 FR 67801, Dec. 3, 1999; 65 FR 54423, Sept. 8, 2000]

§ 63.466 Monitoring procedures.

(a) Except as provided in paragraph (g) of this section, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the equipment standards in § 63.463(b)(1)(i), (b)(2)(i), (c)(1)(i), (c)(2)(i), (g)(1), or (g)(2) shall conduct monitoring and record the results on a weekly basis for the control devices, as appropriate, specified in paragraphs (a)(1) through (5) of this section.

(1) If a freeboard refrigeration device is used to comply with these standards, the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.

(2) If a superheated vapor system is used to comply with these standards, the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode.

(3) If a squeegee system, air knife system, or combination squeegee and air knife system is used to comply with the requirements of § 63.463(g) or (h), the owner or operator shall visually inspect the continuous web part exiting the solvent cleaning machine to ensure that no solvent film is visible on the part.

(4) Except as provided in paragraph (a)(5) of this section, if a superheated part system is used to comply with the requirements of § 63.463(g) or (h), the owner or operator shall use a thermometer, thermocouple, or other temperature measurement device to measure the temperature of the continuous web part while it is in the solvent cleaning machine. This measurement can also be taken at the exit of the solvent cleaning machine.

(5) As an alternative to complying with paragraph (a)(4) of this section, the owner or operator can provide data, sufficient to satisfy the Administrator, that demonstrate that the part temperature remains above the boiling point of the solvent at all times that the part is within the continuous web solvent cleaning machine. This data could include design and operating conditions such as information supporting any exothermic reaction inherent in the processing.

(b) Except as provided in paragraph (g) of this section, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the equipment standards of § 63.463 (b)(1)(i), (b)(2)(i), (c)(1)(i), or (c)(2)(i) shall conduct monitoring and record the results on a monthly basis for the control devices, as appropriate, specified in paragraphs (b)(1) and (b)(2) of this section.

(1) If a cover (working-mode, downtime-mode, and/or idling-mode cover) is used to comply with these standards, the owner or operator shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects.

(2) If a dwell is used, the owner or operator shall determine the actual dwell time by measuring the period of time that parts are held within the freeboard area of the solvent cleaning machine after cleaning.

(c) Except as provided in paragraph (g) of this section, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the equipment or idling standards in § 63.463 shall monitor the hoist speed as described in paragraphs (c)(1) through (c)(4) of this section.

(1) The owner or operator shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).

(2) The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the owner or operator may begin monitoring the hoist speed quarterly.

(3) If an exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to monthly until another year of compliance without an exceedance is demonstrated.

(4) If an owner or operator can demonstrate to the Administrator's satisfaction in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per

minute), the required monitoring frequency is quarterly, including during the first year of compliance.

(d) Except as provided in paragraph (g) of this section, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the equipment standards in § 63.463 (b)(1)(i), (b)(2)(i), (c)(1)(i), or (c)(2)(i) using a reduced room draft shall conduct monitoring and record the results as specified in paragraph (d)(1) or (d)(2) of this section.

(1) If the reduced room draft is maintained by controlling room parameters (i.e., redirecting fans, closing doors and windows, etc.), the owner or operator shall conduct an initial monitoring test of the windspeed and of room parameters, quarterly monitoring of windspeed, and weekly monitoring of room parameters as specified in paragraphs (d)(1)(i) and (d)(1)(ii) of this section.

(i) Measure the windspeed within 6 inches above the top of the freeboard area of the solvent cleaning machine using the procedure specified in paragraphs (d)(1)(i)(A) through (d)(1)(i)(D) of this section.

(A) Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.

(B) Orient a velometer in the direction of the wind current at each of the four corners of the machine.

(C) Record the reading for each corner.

(D) Average the values obtained at each corner and record the average wind speed.

(ii) Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.

(2) If an enclosure (full or partial) is used to achieve a reduced room draft, the owner or operator shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified in paragraphs (d)(2)(i) and (d)(2)(ii) of this section and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects.

(i) Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located.

(ii) Record the maximum wind speed.

(e) Except as provided in paragraph (g) of this section, each owner or operator using a carbon adsorber to comply with this subpart shall measure and record the concentration of halogenated HAP solvent in the exhaust of the carbon adsorber weekly with a colorimetric detector tube. This test shall be conducted while the solvent cleaning machine is in the working mode and is venting to the carbon adsorber. The exhaust concentration shall be determined using the procedure specified in paragraphs (e)(1) through (e)(3) of this section.

(1) Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of solvent in air to an accuracy of ±25 parts per million by volume.

(2) Use the colorimetric detector tube according to the manufacturer's instructions.

(3) Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and 2 stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet or outlet.

(f) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the idling emission limit standards of § 63.463 (b)(1)(ii), (b)(2)(ii), (c)(1)(ii), or (c)(2)(ii) shall comply with the requirements specified in paragraphs (f)(1) and (f)(2) of this section.

(1) If using controls listed in paragraphs (a) through (e) of this section, the owner or operator shall comply with the monitoring frequency requirements in paragraphs (a) through (e) of this

section.

(2) If using controls not listed in paragraphs (a) through (e) of this section, the owner or operator shall establish the monitoring frequency for each control and submit it to the Administrator for approval in the initial test report.

(g) Each owner or operator using a control device listed in paragraphs (a) through (e) of this section can use alternative monitoring procedures approved by the Administrator.

[59 FR 61805, Dec. 2, 1994, as amended at 64 FR 67802, Dec. 3, 1999]

§ 63.46 Record keeping requirements.

(a) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of § 63.463 shall maintain records in written or electronic form specified in paragraphs (a)(1) through (7) of this section for the lifetime of the machine.

(1) Owner's manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment.

(2) The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.

(3) If a dwell is used to comply with these standards, records of the tests required in § 63.465(d) to determine an appropriate dwell time for each part or parts basket.

(4) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the idling emission limit standards of § 63.463(b)(1)(ii), (b)(2)(ii), (c)(1)(ii), or (c)(2)(ii) shall maintain records of the initial performance test, including the idling emission rate and values of the monitoring parameters measured during the test.

(5) Records of the halogenated HAP solvent content for each solvent used in a solvent cleaning machine subject to the provisions of this subpart.

(6) If a squeegee system is used to comply with these standards, records of the test required by § 63.466(f) to determine the maximum product throughput for the squeegees and records of both the weekly monitoring required by § 63.466(a)(3) for visual inspection and the length of continuous web product cleaned during the previous week.

(7) If an air knife system or a combination squeegee and air knife system is used to comply with these standards, records of the determination of the proper operating parameter and parameter value for the air knife system.

(b) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with § 63.463 shall maintain records specified in paragraphs (b)(1) through (b)(4) of this section either in electronic or written form for a period of 5 years.

(1) The results of control device monitoring required under § 63.466.

(2) Information on the actions taken to comply with § 63.463(e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.

(3) Estimates of annual solvent consumption for each solvent cleaning machine.

(4) If a carbon adsorber is used to comply with these standards, records of the date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust required in § 63.466(e).

(c) Except as provided in paragraph (e) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of § 63.464 shall maintain records specified in paragraphs (c)(1) through (3) of this section either in electronic or written form for a period of 5 years.

(1) The dates and amounts of solvent that are added to the solvent cleaning machine.

(2) The solvent composition of wastes removed from cleaning machines as determined using the procedure described in § 63.465(c)(2).

(3) Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.

(d) Each owner or operator of a solvent cleaning machine without a solvent/air interface

determine the cleaning capacity of the cleaning machine.

(e) Each owner or operator of a continuous web cleaning machine complying with the provisions of § 63.464(d) shall maintain the following records in either electronic or written form for a period of 5 years.

(1) The dates and amounts of solvent that are added to the solvent cleaning machine.

(2) The dates and amounts of solvent that are recovered from the desorption of the carbon adsorber system.

(3) The solvent composition of wastes removed from each cleaning machine as determined using the procedures in § 63.465(c)(2).

(4) Calculation sheets showing the calculation and results of determining the overall cleaning system control efficiency, as required by § 63.465.

[59 FR 61805, Dec. 2, 1994, as amended at 64 FR 67802, Dec. 3, 1999; 68 FR 37349, June 23, 2003]

inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

(i) An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the conditions in paragraphs (i)(1) through (i)(3) of this section are met.

(1) The source has demonstrated a full year of compliance without an exceedance.

(2) The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified subpart A (General Provisions) and in this subpart.

(3) The Administrator does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions).

(j) [Reserved]

(k) Each owner or operator of a solvent cleaning machine requesting an equivalency determination, as described in § 63.469 shall submit an equivalency request report to the Administrator. For existing sources, this report must be submitted to the Administrator no later than June 3, 1996. For new sources, this report must be submitted and approved by the Administrator prior to startup.

[59 FR 61805, Dec. 2, 1994; 60 FR 29485, June 5, 1995, as amended at 64 FR 69643, Dec. 14, 1999; 71 FR 75346, Dec. 19, 2005]

§ 63.46 E uivalent met ods of control.

Upon written application, the Administrator may approve the use of equipment or procedures after they have been satisfactorily demonstrated to be equivalent, in terms of reducing emissions of methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform to the atmosphere, to those prescribed for compliance within a specified paragraph of this subpart. The application must contain a complete description of the equipment or procedure and the proposed equivalency testing procedure and the date, time, and location scheduled for the equivalency demonstration.

§ 63.4 0 mplementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§ 63.460, 63.462(a) through (d), and 63.463 through 63.464 (except for the authorities in § 63.463(d)(9)). Use the procedures in § 63.469 to request the use of alternative equipment or procedures.

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f), as defined in § 63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under § 63.8(f), as defined in § 63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f), as defined in § 63.90, and as required in this subpart.

[68 FR 37349, June 23, 2003]

(5) An estimate of annual halogenated HAP solvent consumption for each solvent cleaning machine.

(g) Each owner or operator of an affected facility shall submit to the Administrator an initial statement of compliance on or before May 3, 2010. The statement shall include the information specified in paragraphs (g)(1) through (g)(3) of this section.

(1) The name and address of the owner or operator of the affected facility.

(2) The address (i.e., physical location) of each solvent cleaning machine that is part of an affected facility regulated by this section.

(3) The results of the first 12-month rolling total emissions calculation.

(h) Each owner or operator of an affected facility shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in paragraphs (h)(1) through (h)(3) of this section.

(1) The average monthly solvent consumption for the affected facility in kilograms per month.

(2) The 12-month rolling total solvent emission estimates calculated each month using the method as described in paragraph (c) of this section.

(3) This report can be combined with the annual report required in § 63.468(f) and (g) into a single report for each facility.

[72 FR 25158, May 3, 2007]

Pt. 63 Subpt. T App. A

Appendi A to Subpart T of Part 63—Test of Solvent Cleaning Procedures

eneral uestions

What is the maximum allowable speed for parts entry and removal

A. 8.5 meters per minute (28 feet per minute).

B. 3.4 meters per minute (11 feet per minute).

C. 11 meters per minute (36 feet per minute).

D. No limit.

How do you ensure that parts enter and exit the solvent cleaning machine at the speed required in the regulation

A. Program on computerized hoist monitors speed.

B. Can judge the speed by looking at it.

C. Measure the time it takes the parts to travel a measured distance.

Identify the sources of air disturbances

A. Fans

B. Open doors

C. Open windows

D. Ventilation vents

E. All of the above

What are the three operating modes

A. Idling, working and downtime

B. Precleaning, cleaning, and drying

C. Startup, shutdown, off

D. None of the above

When can parts or parts baskets be removed from the solvent cleaning machine

A. When they are clean

B. At any time

C. When dripping stops

D. Either A or C is correct

How must parts be oriented during cleaning

A. It does not matter as long as they fit in the parts basket.

B. So that the solvent pools in the cavities where the dirt is concentrated.

C. So that solvent drains from them freely.

During startup what must be turned on first the primary condenser or the sump heater

A. Primary condenser

B. Sump heater

C. Turn both on at same time

D. Either A or B is correct

During shutdown what must be turned off first the primary condenser or the sump heater

A. Primary condenser

B. Sump heater

C. Turn both off at same time

D. Either A or B is correct

In what manner must solvent be added to and removed from the solvent cleaning machine

A. With leak proof couplings

B. With the end of the pipe in the solvent sump below the liquid solvent surface.

C. So long as the solvent does not spill, the method does not matter.

D. A and B

What must be done with waste solvent and still and sump bottoms

A. Pour down the drain

B. Store in closed container

C. Store in a bucket

D. A or B

What types of materials are prohibited from being cleaned in solvent cleaning machines using halogenated HAP solvents

A. Sponges

B. Fabrics

C. Paper

D. All of the above

Control evice Specific uestions

Freeboard Refrigeration evice

What temperature must the FRD achieve

A. Below room temperature

B. 50 °F

C. Below the solvent boiling point

D. 30 percent below the solvent boiling point

or ing-Mode Cover

When can a cover be open

A. While parts are in the cleaning machine

B. During parts entry and removal

C. During maintenance

D. During measurements for compliance purposes

E. A and C

F. B, C, and D

Covers must be maintained in what condition

A. Free of holes

B. Free of cracks

C. So that they completely seal cleaner opening

D. All of the above

ell

Where must the parts be held for the appropriate dwell time

A. In the vapor zone

B. In the freeboard area above the vapor zone

C. Above the cleaning machine

D. In the immersion sump

Ans ers

eneral uestions

B

A or C

E

A

C

C

A

B

D

B

D

Control evice Specific uestions

D

F

D

B

[59 FR 61818, Dec. 2, 1994; 60 FR 29485, June 5, 1995]

Pt. 63 Subpt. T App.

Appendi to Subpart T of Part 63— eneral Provisions Applicability to Subpart T

Reference	Applies to subpart T		Comments
	CC		
63.1(a) (1)-(3)	Yes	Yes	
63.1(a)(4)	Yes	Yes	Subpart T (this appendix) specifies applicability of each paragraph in subpart A to subpart T.
63.1(a)(5)	No	No	
63.1(a) (6)-(8)	Yes	Yes	
63.1(a)(9)	No	No	
63.1(a)(10)	Yes	Yes	
63.1(a)(11)	No	No	Subpart T allows submittal of notifications and reports through the U.S. mail, fax, and courier. Subpart T requires that the postmark for notifications and reports submitted through the U.S. mail or other non-Governmental mail carriers be on or before deadline specified in an applicable requirement.
63.1(a) (12)-(14)	Yes	Yes	
63.1(b)(1)	No	No	Subpart T specifies applicability.
63.1(b)(2)	No	Yes	
63.1(b)(3)	No	No	Subpart T requires that a record of halogenated cleaning machine applicability determination be kept on site for 5 years, or until the cleaning machine changes its operations. The record shall be sufficiently detailed to allow the Administrator to make a

			finding about the source's applicability status with regard to subpart T.
63.1(c)(1)	Yes	Yes	
63.1(c)(2)	Yes	Yes	Subpart T, § 63.460(h) exempts area sources subject to this subpart from the obligation to obtain Title V operating permits.
63.1(c)(3)	No	No	
63.1(c)(4)	Yes	Yes	
63.1(c)(5)	Yes	Yes	Subpart T does not require continuous monitoring systems (CMS) or continuous opacity monitoring systems. Therefore, notifications and requirements for CMS and COMS specified in subpart A do not apply to subpart T.
63.1(d)	No	No	
63.1(e)	No	Yes	
63.2	Yes	Yes	Subpart T definitions (§ 63.461) for existing and new overlap with the definitions for existing source and new source in subpart A (§ 63.2). Both subpart A and T also define Administrator.
63.3(a)-(c)	Yes	Yes	
63.4(a) (1)-(3)	Yes	Yes	
63.4(a)(4)	No	No	
63.4(a)(5)	Yes	Yes	
63.4(b)-(c)	Yes	Yes	
63.5(a)(1)	Yes	Yes	
63.5(a)(2)	Yes	Yes	
63.5(b)(1)	Yes	Yes	
63.5(b)(2)	No	No	
63.5(b)(3)	No	No	Subpart T overrides the requirement for approval prior to constructing a new or reconstructing an existing major source.
63.5(b)(4)-(6)	Yes	Yes	
63.5(c)	No	No	
63.5 (d)-(f)	No	No	Subpart T overrides the requirement to submit an application for approval of construction or reconstruction of a halogenated solvent cleaning machine.
63.6(a)	Yes	Yes	
63.6(b) (1)-(5)	Yes	Yes	Subpart T, § 63.460, specifies compliance dates.
63.6(b)(6)	No	No	
63.6(b)(7)	No	No	Subpart T has the same requirements for affected halogenated HAP solvent cleaning machine subcategories that are located at area sources as it does for those located at major sources.
63.6(c)(1)-(2)	Yes	Yes	Subpart T allows 3 years from the date of promulgation for both area and major existing sources to comply.
63.6(c) (3)-(4)	No	No	
63.6(c)(5)	Yes	Yes	Subpart T has the same requirements for affected halogenated HAP solvent cleaning machine subcategories that are located at area sources as it does for those located at major sources.
			Subpart T allows 3 years from the date of promulgation for both area and major existing

			sources to comply.
63.6(d)	No	No	
63.6(e)(1)-(2)	Yes	Yes	
63.6(e)(3)	No	No	Subpart T overrides the requirement of a startup, shutdown, and malfunction plan. Subpart T specifies startup and shutdown procedures to be followed by an owner or operator for batch vapor and in-line cleaning machines.
63.6(f)-(g)	Yes	Yes	
63.6(h)	No	No	Subpart T does not require compliance with an opacity or visible emission standard.
63.6(i) (1)-(14)	Yes	Yes	
63.6(i)(15)	No	No	
63.6(i)(16)	Yes	Yes	
63.6(j)	Yes	Yes	
63.7(a)	No	Yes	Subpart T gives owners or operators the option to perform an idling emission performance test as a way of demonstrating compliance. Other options are also available that do not require a performance test.
63.7(b)	No	Yes	This is only required for those owners or operators that choose the idling emission standard as their compliance option.
63.7(c)(1)	No	Yes	This is only required for those owners or operators that choose the idling emission standard as their compliance option.
63.7(c) (2)-(3)	No	No	Subpart T does not require a site-specific test plan for the idling emission performance test.
63.7(c)(4)	No	No	Subpart T does not require a performance test that involves the retrieval of gas samples, and therefore this does not apply.
63.7(d)	No	No	Requirements do not apply to the idling emission performance test option.
63.7(e)	No	Yes	
63.7(f)	No	Yes	
63.7(g)	No	Yes	Subpart T specifies what is required to demonstrate idling emission standard compliance through the use of the Environmental Protection Agency test method 307 and control device monitoring. Reports and records of testing and monitoring are required for compliance verification. Three runs of the test are required for compliance, as specified in § 63.7(e) of subpart A.
63.7(h)	No	No	Subpart T does not require the use of a performance test to comply with the standard. The idling emission standard option (which requires an idling emission performance test) is an alternative option offered to owners or operators of batch vapor and in-line cleaning machines for compliance flexibility.
63.8 (a)-(b)	Yes	Yes	
63.8 (c)-(e)	No	No	Subpart T does not require the use of continuous monitoring systems to demonstrate compliance.
63.8(f)	Yes	Yes	
63.8(g)	No	No	Subpart T does not require continuous opacity monitoring systems and continuous monitoring systems data.
63.9(a) (1)-(4)	Yes	Yes	
63.9(b)(1)	Yes	Yes	
63.9(b)(2)	Yes	Yes	Subpart T includes all of those requirements stated in subpart A, except that subpart A also requires a statement as to whether the affected source is a major or an area source, and an identification of the relevant standard (including the source's compliance date).

			Subpart T also has some more specific information requirements specific to the affected source (see subpart T, §§ 63.468(a)-(b)).
63.9(b)(3)	Yes	Yes	The subpart A and subpart T initial notification reports differ (see above).
63.9(b)(4)	No	No	Subpart T does not require an application for approval of construction or reconstruction.
63.9(b)(5)	Yes	Yes	
63.9(c)	Yes	Yes	
63.9(d)	Yes	Yes	
63.9(e)	Yes	Yes	Under subpart T, this requirement only applies to owners or operators choosing to comply with the idling emissions standard.
63.9(f)	No	No	Subpart T does not require opacity or visible emission observations.
63.9(g)(1)	No	No	Subpart T does not require the use of continuous monitoring systems or continuous opacity monitoring systems.
63.9(h)	No	No	Section 63.468 of subpart T requires an initial statement of compliance for existing sources to be submitted to the Administrator no later than 150 days after the compliance date specified in § 63.460(d) of subpart T. For new sources, this report is to be submitted to the Administrator no later than 150 days from the date specified in § 63.460(c).
63.9(i)	Yes	Yes	
63.9(j)	Yes	Yes	
63.10(a)	Yes	Yes	
63.10(b)	No	No	Recordkeeping requirements are specified in subpart T.
63.10(c) (1)-(15)	No	No	Subpart T does not require continuous monitoring systems.
63.10(d)(1)	Yes	Yes	
63.10(d)(2)	No	No	Reporting requirements are specified in subpart T.
63.10(e) (l)-(2)	No	No	Subpart T does not require continuous emissions monitoring systems.
63.10(e)(3)	No	No	Subpart T does not require continuous monitoring systems.
63.10(e)(4)	No	No	Subpart T does not require continuous opacity monitoring systems.
63.10(f)	Yes	Yes	
63.11(a)	Yes	Yes	
63.11(b)	No	No	Flares are not a control option under subpart T.
63.12 (a)-(c)	Yes	Yes	
63.13 (a)-(c)	Yes	Yes	
63.14	No	No	Subpart T requirements do not require the use of the test methods incorporated by reference in subpart A.
63.15(a)-(b)	Yes	Yes	

BCC=Batch Cold Cleaning Machines.

BVI=Batch Vapor and In-line Cleaning Machines.

[59 FR 61818, Dec. 2, 1994; 60 FR 29485, June 5, 1995, as amended at 70 FR 75346, Dec. 19, 2005]

Appendix B:

40 CFR 63, Subpart ZZZZ - *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

Code of Federal Regulations

Title 40 - Protection of Environment

Volume: 13
Date: 2010-07-01
Original Date: 2010-07-01
Title: Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER C - AIR PROGRAMS (CONTINUED). PART 63 - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED).

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010]

§ 63.6595 When do I have to comply with this subpart?

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in § 63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010]

Emission and Operating Limitations

§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§ 63.6601 What emission limitations must I meet if I own or operate a 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§ 63.6602 What emission limitations must I meet if I own or operate an existing stationary CI RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary CI RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

[75 FR 9675, Mar. 3, 2010]

(a) If you own or operate an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

[75 FR 9675, Mar. 3, 2010]

§ 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

If you own or operate an existing non-emergency CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 9675, Mar. 3, 2010]

General Compliance Requirements

§ 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) 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 this standard have been achieved. Determination of whether such operation and maintenance procedures are being used 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.

[75 FR 9675, Mar. 3, 2010]

Testing and Initial Compliance Requirements

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to § 63.7 (a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008]

compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010]

§ 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§ 63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

[Please see PDF for Formula: ER15JN04.012]

WHERE:

C_I = CONCENTRATION OF CO OR FORMALDEHYDE AT THE CONTROL DEVICE INLET,

C_O = CONCENTRATION OF CO OR FORMALDEHYDE AT THE CONTROL DEVICE OUTLET, AND

R = PERCENT REDUCTION OF CO OR FORMALDEHYDE EMISSIONS.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

[Please see PDF for Formula: ER15JN04.013]

WHERE:

F_O = FUEL FACTOR BASED ON THE RATIO OF OXYGEN VOLUME TO THE ULTIMATE CO_2 VOLUME PRODUCED BY THE FUEL AT ZERO PERCENT EXCESS AIR.

0.209 = FRACTION OF AIR THAT IS OXYGEN, PERCENT/100.

F_D = RATIO OF THE VOLUME OF DRY EFFLUENT GAS TO THE GROSS CALORIFIC VALUE OF THE FUEL FROM METHOD 19, DSM^3/J ($DSCF/10^6$ BTU).

F_C = RATIO OF THE VOLUME OF CO_2 PRODUCED TO THE GROSS CALORIFIC VALUE OF THE FUEL FROM METHOD 19, DSM^3/J ($DSCF/10^6$ BTU).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

[Please see PDF for Formula: ER15JN04.014]

WHERE:

X_{CO2} = CO_2 CORRECTION FACTOR, PERCENT.

5.9 = 20.9 PERCENT O_2−15 PERCENT O_2, THE DEFINED O_2 CORRECTION VALUE, PERCENT.

(iii) Calculate the NO_X and SO_2 gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

[Please see PDF for Formula: ER15JN04.015]

WHERE:

$\%CO_2$ = MEASURED CO_2 CONCENTRATION MEASURED, DRY BASIS, PERCENT.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010]

§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6645.

Continuous Compliance Requirements

§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) [Reserved]

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the engine according to the conditions described in paragraphs (f)(1) through (4) of this section.

(1) For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(2) There is no time limit on the use of emergency stationary RICE in emergency situations.

(3) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(4) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(4), as long as the power provided by the financial arrangement is limited to emergency power.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010]

Notifications, Reports, and Records

§ 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary CI RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary CI RICE less than 100 HP, an existing stationary emergency CI RICE, or an existing stationary CI RICE that is not subject to any numerical emission standards.

(b) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with § 63.6590(b), your notification should include the information in § 63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010]

§ 63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in § 63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605 (b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

Other Requirements and Information

§ 63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§ 63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in § 63.6600 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in § 63.6610(b).

combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 1a

Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.1
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2	

1 Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 1b

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

[As stated in §§ 63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions]

For each...	You must meet the following operating limitation...
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR;or	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and using NSCR.	b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR;or	Comply with any operating limitations approved by the Administrator.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and not using NSCR.	

[73 FR 3607, Jan. 18, 2008]

Pt. 63, Subpt. ZZZZ, Table 2a

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; orb. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2 until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.1
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	

	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2

1 Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 2b

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP Located at a Major Source of HAP Emissions, Existing Non-Emergency Compression Ignition Stationary RICE >500 HP, and New and Reconstructed 4SLB Burn Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§ 63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and existing, new and reconstructed compression ignition stationary RICE:

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and
	b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.1
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitations approved by the Administrator.

1 Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

[75 FR 9680, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 2c

Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary Rice Located at Major Sources of HAP Emissions

As stated in §§ 63.6600 and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency CI and black start CI.1	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; 2b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.3	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.3
2. Non-Emergency,		

non-black start CI < 100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; 2
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.3
3. Non-Emergency, non-black start CI RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O_2.
4. Non-Emergency, non-black start CI 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O_2; or
	b. Reduce CO emissions by 70 percent or more.
5. Non-Emergency, non-black start CI>500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O_2; or
	b. Reduce CO emissions by 70 percent or more.

1 If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

2 Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.

3 Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9681, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 2d

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission and operating limitations for existing compression ignition stationary RICE:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI ≤ 300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;1	
	b. Inspect air cleaner every 1,000 hours of operation or annually,	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to

	whichever comes first;	exceed 30 minutes, after which time the non-startup emission limitations apply.
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary	
2. Non-Emergency, non-black start CI 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more	
3. Non-Emergency, non-black start CI > 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more	
4. Emergency CI and black start CI.2	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;1	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary	

1 Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

2 If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[75 FR 9681, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 3

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§ 63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. 2SLB and 4SLB stationary RICE with a brake horsepower >500 located at major sources and new or reconstructed CI stationary RICE with a brake horsepower >500 located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.1
2. 4SRB stationary RICE with a brake horsepower ≥5,000 located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.1
3. Stationary RICE with a brake horsepower >500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.1

4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are limited use stationary RICE		Conduct subsequent performance tests every 8,760 hrs or 5 years, whichever comes first.

1 After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 9682, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 4

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§ 63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE for existing sources:

For each . . .	Complying with therequirement to . . .	You must . .	Using . . .	According to the followingrequirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. Reduce CO emissions	i. Measure the O_2 at the inlet and outlet of the control device; and	(1) Portable CO and O_2 analyzer.	(a) Using ASTM D6522-00 (2005) a (incorporated by reference, *see* § 63.14). Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O_2 analyzer.	(a) Using ASTM D6522-00 (2005) a,b (incorporated by reference, *see* § 63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O_2, dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (2005)	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
			(1) Method 320 of 40 CFR part 63,	

		iv. Measure formaldehyde at the inlet and the outlet of the control device.	appendix A; or ASTM D6348-03 c, provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (2005)	(a) Measurements to determine O_2 concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348-03 c, provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. Measure CO at the exhaust of the stationary RICE.	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005) a, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03	(a) CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour longer runs.

a You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

b You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

c You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[75 FR 9682, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 5

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating Limitations

As stated in §§ 63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement	You have demonstrated initial compliance if . . .

	to . . .	
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at both the inlet and outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using § 63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
4. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
5. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.

6. Stationary RICE >500 HP located at a major source	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. Stationary RICE >500 HP located at a major source	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
8. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	a. Reduce CO or formaldehyde emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[75 FR 9684, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 6

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations and Operating Limitations

As stated in § 63.6640, you must continuously comply with the emissions and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved a; and
		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and

		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved a; and
		ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using a CEMS	i. Collecting the monitoring data according to § 63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to § 63.6620; and
		ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		ii. reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. 4SRB stationary RICE with a brake HP ≥5,000 located at a major source	Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved.a
7. Stationary RICE >500 HP located at a major	Limit the concentration of formaldehyde in the stationary RICE	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the

source	exhaust and using oxidation catalyst or NSCR	formaldehyde concentration limit a; and
		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. Stationary RICE >500 HP located at a major source	Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit a; and
		ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing stationary CI RICE not subject to any numerical emission limitations	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
		ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary RICE >500 HP that are not limited use stationary RICE, except 4SRB >500 HP located at major sources	a. Reduce CO or formaldehyde emissions; orb. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.
11. Existing limited use stationary RICE >500 HP that are limited use CI stationary RICE	a. Reduce CO or formaldehyde emissions; orb. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.

a After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 9685, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 7

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in § 63.6650, you must comply with the following requirements for reports:

You must submit a (n) . . .	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in § 63.6650(b)(1)-(5) for engines that are not limited use stationary CI RICE subject to numerical emission limitations; andii. Annually according to the requirements in § 63.6650(b)(6)-(9) for engines that are limited use stationary CI RICE subject to numerical emission limitations.
	b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in § 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), the information in § 63.6650(e); or	i. Semiannually according to the requirements in § 63.6650(b).
	c. If you had a malfunction during the reporting period, the information in § 63.6650(c)(4).	i. Semiannually according to the requirements in § 63.6650(b).
2. Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in § 63.6650.
	b. The operating limits provided in your Federally enforceable permit, and any deviations from these limits; and	i. *See* item 2.a.i.
	c. Any problems or errors suspected with the meters	i. *See* item 2.a.i.

[75 FR 9687, Mar. 3, 2010]

Pt. 63, Subpt. ZZZZ, Table 8

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in § 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.1	General applicability of the General Provisions	Yes.	
§ 63.2	Definitions	Yes	Additional terms defined in § 63.6675.
§ 63.3	Units and abbreviations	Yes.	
§ 63.4	Prohibited activities and circumvention	Yes.	
§ 63.5	Construction and reconstruction	Yes.	
§ 63.6(a)	Applicability	Yes.	
§ 63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§ 63.6(b)(5)	Notification	Yes.	
§ 63.6(b)(6)	[Reserved]		

§ 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§ 63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§ 63.6(c)(3)-(4)	[Reserved]		
§ 63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§ 63.6(d)	[Reserved]		
§ 63.6(e)	Operation and maintenance	No.	
§ 63.6(f)(1)	Applicability of standards	No.	
§ 63.6(f)(2)	Methods for determining compliance	Yes.	
§ 63.6(f)(3)	Finding of compliance	Yes.	
§ 63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§ 63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i)	Compliance extension procedures and criteria	Yes.	
§ 63.6(j)	Presidential compliance exemption	Yes.	
§ 63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§ 63.6610, 63.6611, and 63.6612.
§ 63.7(a)(3)	CAA section 114 authority	Yes.	
§ 63.7(b)(1)	Notification of performance test	Yes	Except that § 63.7(b)(1) only applies as specified in § 63.6645.
§ 63.7(b)(2)	Notification of rescheduling	Yes	Except that § 63.7(b)(2) only applies as specified in § 63.6645.
§ 63.7(c)	Quality assurance/test plan	Yes	Except that § 63.7(c) only applies as specified in § 63.6645.
§ 63.7(d)	Testing facilities	Yes.	
§ 63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at § 63.6620.
§ 63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at § 63.6620.
§ 63.7(e)(3)	Test run duration	Yes.	
§ 63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§ 63.7(f)	Alternative test method provisions	Yes.	
§ 63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§ 63.7(h)	Waiver of tests	Yes.	

§ 63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at § 63.6625.
§ 63.8(a)(2)	Performance specifications	Yes.	
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring for control devices	No.	
§ 63.8(b)(1)	Monitoring	Yes.	
§ 63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§ 63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§ 63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§ 63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§ 63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§ 63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§ 63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§ 63.8(d)	CMS quality control	Yes.	
§ 63.8(e)	CMS performance evaluation	Yes	Except for § 63.8(e)(5)(ii), which applies to COMS.
		Except that § 63.8 (e) only applies as specified in § 63.6645.	
§ 63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that § 63.8(f)(4) only applies as specified in § 63.6645.
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that § 63.8(f)(6) only applies as specified in § 63.6645.
§ 63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§ 63.6635 and 63.6640.
§ 63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§ 63.9(b)(1)-(5)	Initial notifications	Yes	Except that § 63.9(b)(3) is reserved.
		Except that § 63.9 (b) only applies as specified in § 63.6645.	
§ 63.9(c)	Request for compliance extension	Yes	Except that § 63.9(c) only applies as specified in § 63.6645.
	Notification of special		

§ 63.9(d)	compliance requirements for new sources	Yes	Except that § 63.9(d) only applies as specified in § 63.6645.
§ 63.9(e)	Notification of performance test	Yes	Except that § 63.9(e) only applies as specified in § 63.6645.
§ 63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(1)	Notification of performance evaluation	Yes	Except that § 63.9(g) only applies as specified in § 63.6645.
§ 63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that § 63.9 (g) only applies as specified in § 63.6645.	
§ 63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. § 63.9(h)(4) is reserved.
			Except that § 63.9(h) only applies as specified in § 63.6645.
§ 63.9(i)	Adjustment of submittal deadlines	Yes.	
§ 63.9(j)	Change in previous information	Yes.	
§ 63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§ 63.10(b)(1)	Record retention	Yes.	
§ 63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§ 63.10(b)(2)(vi)-(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§ 63.10(b)(3)	Records of applicability determination	Yes.	
§ 63.10(c)	Additional records for sources using CEMS	Yes	Except that § 63.10(c)(2)-(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.

§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§ 63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§ 63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that § 63.10(e)(3)(i) (C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010]

Appendix C:

40 CFR 63, Subpart WWWWWW - *National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations*

Code of Federal Regulations

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Subpart WWWWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

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Applicability and Compliance Dates

§ 63.11504 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) through (3) of this section.

(1) A plating and polishing facility is a plant site that is engaged in one or more of the processes listed in paragraphs (a)(1)(i) through (vi) of this section.

(i) Electroplating other than chromium electroplating (i.e., non-chromium electroplating).

(ii) Electroless or non-eletrolytic plating.

(iii) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

(iv) Dry mechanical polishing of finished metals and formed products after plating.

(v) Electroforming.

(vi) Electropolishing.

(2) An area source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.

(3) Your plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal HAP, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, as defined in § 63.11511, "What definitions apply to this subpart?" With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.

(b) [Reserved]

(5) Dry mechanical polishing conducted to restore the original finish to a surface to apply to restoring the original finish.

(6) Any plating or polishing process that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1 percent or more by weight, or that contains manganese in amounts of 1.0 percent or more by weight, as reported on the Material Safety Data Sheet for the material.

(e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, "Title V," provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

§ 63.11506 What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than July 1, 2010.

(b) If you own or operate a new affected source for which the initial startup date is on or before July 1, 2008, you must achieve compliance with the provisions of this subpart no later than July 1, 2008.

(c) If you own or operate a new affected source for which the initial startup date is after July 1, 2008, you must achieve compliance with the provisions of this subpart upon initial startup of your affected source.

Standards and Compliance Requirements

§ 63.11507 What are my standards and management practices?

(a) If you own or operate an affected new or existing non-cyanide electroplating, electroforming, or electropolishing tank (hereafter referred to as an "electrolytic" process tank, as defined in § 63.11511, "What definitions apply to this subpart?") that contains one or more of the plating and polishing metal HAP and operates at a pH of less than 12, you must comply with the requirements in paragraph (a)(1), (2), or (3) of this section, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must use a wetting agent/fume suppressant, as defined in § 63.11511, "What definitions apply to this subpart?", in the bath of the affected tank according to paragraphs (a)(1)(i) through (iii) of this section.

(i) You must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process.

(ii) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank.

(iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule.

(2) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to paragraphs (a)(2)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(ii) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) You must cover the tank surface according to paragraph (a)(3)(i) or (ii) of this section.

(i) For batch electrolytic process tanks, as defined in § 63.11511, "What definitions apply to this subpart?", you must use a tank cover, as defined in § 63.11511, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.

(ii) For continuous electrolytic process tanks, as defined in § 63.11511, "What definitions apply to this subpart?", you must cover at least 75 percent of the surface of the tank, as defined in § 63.11511, whenever the electrolytic process tank is in operation.

(b) If you own or operate an affected new or existing "flash" or short-term electroplating tank, as defined in § 63.11511, "What definitions apply to this subpart?", that uses or emits one or more of the plating and polishing metal HAP, you must comply with the requirements specified in paragraph (b)(1) or (b)(2), and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must limit short-term or "flash" electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(2) You must use a tank cover, as defined in § 63.11511, "What definitions apply to this subpart?", for at least 95 percent of the plating time.

(c) If you own or operate an affected new or existing process tank that is used both for short-term electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of short-term or flash electroplating) and contains one or more of the plating and polishing metal HAP, you must meet the requirements specified in paragraph (a) or (b) of this section, whichever apply to the process operation, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(d) If you own or operate an affected new or existing electroplating tank that uses cyanide in the plating bath, operates at pH greater than or equal to 12, and contains one or more of the plating

and polishing metal HAP, you must comply with the requirements in paragraphs (d)(1) and (2) of this section:

(1) You must measure and record the pH of the tank upon start-up. No additional pH measurements are required.

(2) You must implement the applicable management practices in paragraph (g) of this section, as practicable.

(e) If you own or operate an affected new or existing dry mechanical polishing equipment that emits one or more of the plating and polishing metal HAP, you must operate a capture system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter, according to paragraphs (e)(1) and (2) of this section.

(1) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(2) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(f) If you own or operate an affected thermal spraying operation that applies one or more of the plating and polishing metal HAP, you must meet the applicable requirements specified in paragraphs (f)(1) through (3) of this section, and the applicable management practices in paragraph (g) of this section.

(1) For existing permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a water curtain, fabric filter, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and instructions.

(ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(2) For new permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and instructions.

(ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) For temporary thermal spraying operations, as defined in § 63.11511 "What definitions apply to this subpart?", you must meet the applicable requirements specified in paragraphs (f)(3)(i) and (ii) of this section.

(i) You must document the amount of time the thermal spraying occurs each day, and where it is conducted.

(ii) You must implement the applicable management practices specified in paragraph (g) of this section, as practicable.

(g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.

(1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.

time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

(3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

(4) Use tank covers, if already owned and available at the facility, whenever practicable.

(5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

(6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

(7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

(8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.

(9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

(10) Minimize spills and overflow of tanks, as practicable.

(11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

(12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

§ 63.1150 What are my compliance requirements?

(a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with § 63.11509(b) of "What are my notification, reporting, and recordkeeping requirements?"

(b) You must be in compliance with the applicable management practices and equipment standards in this subpart at all times.

(c) To demonstrate initial compliance, you must satisfy the requirements specified in paragraphs (c)(1) through (11) of this section.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(1)(i) through (iv) of this section.

(i) You must add wetting agent/fume suppressant to the bath of each affected tank according to manufacturer's specifications and instructions.

(ii) You must state in your Notification of Compliance Status that you add wetting agent/fume suppressant to the bath according to manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(2) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a control system, as defined in § 63.11511, "What definitions apply to this subpart?", to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(2)(i) through (v) of this section.

(i) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.

(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(v) You must follow the manufacturer's specifications and operating instructions for the control systems at all times.

(3) If you own or operate an affected batch electrolytic process tank, as defined in § 63.11511, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and which is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a tank cover, as defined in § 63.11511, to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(3)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the

(iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(4) If you own or operate an affected continuous electrolytic process tank, as defined in § 63.11511, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you cover the tank surface to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(4)(i) through (iv) of this section.

(i) You must cover at least 75 percent of the surface area of the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the surface cover in place whenever the continuous electrolytic process is in operation.

(iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time of the affected tank, you must demonstrate initial compliance according to paragraphs (c)(5)(i) through (iii) of this section.

(i) You must state in your Notification of Compliance Status that you limit short-term or flash electroplating to no more than 1 cumulative hour per day, or 3 cumulative minutes per hour of plating time.

(ii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(6) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must demonstrate initial compliance according to paragraphs (c)(6)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the plating time.

(iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(7) If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in §

compliance according to paragraphs (c)(7)(i) through (iii) of this section.

(i) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at start-up, according to the requirements of § 63.11507(d)(1).

(ii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11490(g), "What are my standards and management practices?", as practicable.

(8) If you own or operate an affected dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(e), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(8)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the polishing operation and exhaust them to a cartridge, fabric, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(9) If you own or operate an existing affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f)(1), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(9)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a water curtain, fabric filter, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed and are operating the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(10) If you own or operate a new affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507 (f)(2), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(10)(i) through (iii) of this section.

(i) You must install and operate a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a fabric or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed and operate the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(11) If you own or operate an affected temporary thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f) (3), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(11)(i) and (ii) of this section.

(i) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(ii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and

(d) To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy the requirements specified in paragraphs (d)(1) through (8) of this section.

(1) You must always operate and maintain your affected source, including air pollution control equipment.

(2) You must prepare an annual compliance certification according to the requirements specified in § 63.11509(c), "Notification, Reporting, and Recordkeeping," and keep it in a readily-accessible location for inspector review.

(3) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(3)(i) through (iii) of this section.

(i) You must record that you have added the wetting agent/fume suppressant to the tank bath in the original make-up of the tank.

(ii) For tanks where the wetting agent/fume suppressant is a separate purchased ingredient from the other tank additives, you must demonstrate continuous compliance according to paragraphs (d)(3)(ii) (A) and (B) this section.

(A) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank.

(B) You must record each addition of wetting agent/fume suppressant to the tank bath.

(iii) You must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.

(4) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart; an affected dry mechanical polishing operation that is subject to § 63.11507(e); or an affected thermal spraying operation that is subject to § 63.11507(f)(1) or (2), you must demonstrate continuous compliance according to paragraphs (d)(4)(i) through (v) of this section.

(i) You must operate and maintain the control system according to the manufacturer's specifications and instructions.

(ii) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions.

(iii) You must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.

(iv) You must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.

(v) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time for the affected tank, you must demonstrate continuous compliance according to paragraphs (d)(5)(i) through (iii) of this section.

3 cumulative minutes per hour of plating time.

(ii) You must record the times that the affected tank is operated each day.

(iii) You must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements of § 63.11507(a), "What are my standards and management practices?", or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), and you comply by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(6)(i) through (iii) of this section.

(i) You must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(ii) You must record the times that the tank is operated and the times that the tank is covered on a daily basis.

(iii) You must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(7) If you own or operate an affected continuous electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you cover your tanks to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(7)(i) and (ii) of this section.

(i) You must operate the tank with at least 75 percent of the surface covered during all periods of electrolytic process operation.

(ii) You must state in your annual certification that you have operated the tank with 75 percent of the surface covered during all periods of electrolytic process operation.

(8) If you own or operate an affected tank or other operation that is subject to the management practices specified in § 63.11507(g), "What are my standards and management practices?", you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section.

(i) You must implement the applicable management practices during all times that the affected tank or process is in operation.

(ii) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

Other Requirements and Information

§ 63.11510 What eneral Provisions apply to this subpart?

If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 1 of this subpart.

Short-term plating means an electroplating process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or 1 hour cumulative per day.

Tank cover for batch process units means a solid structure made of an impervious material that is designed to cover the entire open surface of a tank or process unit that is used for plating or other metal coating processes.

Tank cover for continuous process units, means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.

Temporary thermal spraying means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

Thermal spraying (also referred to as metal spraying or flame spraying) is a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a metallic coating is applied by projecting molten or semi-molten metal particles onto a substrate. Commonly-used thermal spraying methods include high velocity oxy-fuel (HVOF) spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying.

Water curtain means a type of control device that draws the exhaust stream through a continuous curtain of moving water to scrub out suspended PM.

Wetting agent/fume suppressant means any chemical agent that reduces or suppresses fumes or mists from a plating and polishing tank by reducing the surface tension of the tank bath.

§ 63.1151 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g), of the General Provisions of this part.

(2) Approval of an alternative opacity emissions standard under § 63.6(h)(9), of the General Provisions of this part.

(3) Approval of a major change to test methods under § 63.7(e)(2)(ii) and (f), of the General Provisions of this part. A "major change to test method" is defined in § 63.90.

(4) Approval of a major change to monitoring under § 63.8(f), of the General Provisions of this part. A "major change to monitoring" is defined in § 63.90.

(5) Approval of a major change to recordkeeping and reporting under § 63.10(f), of the General Provisions of this part. A "major change to recordkeeping/reporting" is defined in § 63.90.

Pt. 63 Subpt. WWWWWW Table 1

Table 1 to Subpart WWWWWW of Part 63. Applicability of eneral Provisions to Plating and Polishing Area Sources

As required in § 63.11510, "What General Provisions apply to this subpart?", you must meet each requirement in the following table that applies to you.

Citation	Subject
63.1	Applicability.
63.2	Definitions.
63.3	Units and abbreviations.
63.4	Prohibited activities.
63.6(a), (b)(1)-(b)(5), (c)(1), (c)(2), (c)(5), (j)	Compliance with standards and maintenance requirements.
63.10(a), (b)(1), (b)(2)(i)-(iii),(xiv), (b)(3), (d)(1), (f)	Recordkeeping and reporting.
63.12	State authority and delegations.
63.13	Addresses of State air pollution control agencies and EPA regional offices.
63.14	Incorporation by reference.
63.15	Availability of information and confidentiality.

1 Section 63.11505(e), "What parts of my plant does this subpart cover?", exempts affected sources from the obligation to obtain title V operating permits.

CERTIFICATE OF SERVICE

I, Pam Owen, hereby certify that a copy of this permit has been mailed by first class mail to Remington Arms Company, LLC, PO Box 400, Lonoke, AR, 72086-0400, on this 22nd day of June 2012.

Pam Owen

Pam Owen, AAII, Air Division