LANE REGIONAL AIR PROTECTION AGENCY

TITLE 44 (Moved from Title 37)

HAZARDOUS AIR POLLUTANT PROGRAM

General Provisions for Stationary Sources

Definitions of words and terms used in Title 44 can be found in Title 12, Definitions.

Section 44-010 Policy and Purpose

The Lane Regional Air Protection Agency finds that certain air contaminants for which there are no ambient air quality standards may cause or contribute to an identifiable and significant increase in mortality or to an increase in serious irreversible or incapacitating reversible illness or to irreversible ecological damage, and are therefore considered to be hazardous air pollutants. It shall be the policy of LRAPA that no person may cause, allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration, or duration determined by LRAPA to be injurious to public health or the environment. The purpose of this Title is to establish emissions limitations on sources of these air contaminants. In order to reduce the release of these hazardous air pollutants and protect public health and the environment, it is the intent of LRAPA to adopt by rule within this Title the source category-specific requirements that are promulgated by the EPA. Furthermore, it is hereby declared the policy of LRAPA that the standards contained in this Title are considered minimum standards, and as technology advances, protection of public health and the environment warrants, more stringent standards may be adopted and applied.

Section 44-015 Definitions

The definitions in Title 12, OAR 340-218-0030 and this rule apply to this Title. If the same term is defined in this rule and Title 12 or 340-218-0030, the definition in this rule applies to this title.

1. "Accidental Release" means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.
2. "Act" and "FCAA" mean the Federal Clean Air Act, Public Law 88-206 as last amended by Public Law 101-549.
3. Actual Emissions" means the mass emissions of a pollutant from an emissions source during a specified time period.
    A. Actual emissions shall equal the average rate at which the source actually emitted the pollutant and which is representative of normal source operation. Actual emissions shall be directly measured with a continuous monitoring system or calculated using a material balance or verified emission factor in combination with the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the specified time period;
    B. For any source which had not yet begun normal operation in the specified time period, actual emissions shall equal the potential to emit of the source;

C. For purposes of Section 44-040 through 44-120 actual emissions shall equal the actual rate of emissions of a pollutant, but does not include excess emissions from a malfunction, or startups and shutdowns associated with a malfunction.

4. "Area Source" means any stationary source which has the potential to emit hazardous air pollutants but is not a major source of hazardous air pollutants.

5. "Artificially or Substantially Greater Emissions" means abnormally high emissions such as could be caused by equipment malfunctions, accidents, unusually high production or operating rates compared to historical rates, or other unusual circumstances.

6. "Base Year Emissions" for purposes of Early Reductions only (Section 44-040), means actual emissions in the calendar year 1987 or later.

7. "CFR" means Code of Federal Regulations and, unless otherwise expressly identified, refers to the July 1, ~~2008~~ 2010 edition.

8. "Commission" means the Oregon Environmental Quality Commission

9. "Construct a major Source" means to fabricate, erect, or install at any greenfield site a stationary source or group of stationary sources which is located within a contiguous area and under common control and which emits or has the potential to emit 10 tons per year of any HAPs or 25 tons per year of any combination of HAP, or to fabricate, erect, or install at any developed site a new process or production unit which in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, unless the process or production unit satisfies criteria A through F of this paragraph:

A. All HAP emitted by the process or production unit that would otherwise be controlled under the requirements of this subpart will be controlled by emission control equipment which was previously installed at the same site as the process or production unit;

B.

1) The permitting authority has determined within a period of 5 years prior to the fabrication, erection, or installation of the process or production unit that the existing emission control equipment represented the best available control technology (BACT), lowest achievable emission rate (LAER) under 40 CFR part 51 or 52, toxics-best available control technology (T-BACT) or MACT abased on State air toxic rules for the category of pollutants which includes those HAP to be emitted by the process or production unit; or

2) The permitting authority determines that the control of HAP emissions provided by the existing equipment will be equivalent to that level of control currently achieved by other well-controlled similar sources (i.e., equivalent to the level of control that would be provided by a current BACT, LAER, T-BACT, or State air toxic rule MACT determination).

C. The permitting authority determines that the percent control efficiency for emission of HAP from all sources to be controlled by the existing control equipment will be equivalent to the percent control efficiency provided by the control equipment prior to the inclusion of the new process or production unit;

D. The permitting authority has provided notice and an opportunity for public comment concerning its determination hat criteria in paragraphs A, B, and C of this definition apply and concerning the continued adequacy of any prior LAER, BACT, T-BACT, or State air toxic rule MACT determination;

E. If any commenter has asserted that a prior LAER, BACT, T-BACT, or State air toxic rule MACT determination is no longer adequate, the permitting authority has determined that the level of control required by that prior determination remains adequate; and

F. Any emission limitations, work practice requirements, or other terms and conditions upon which the above determinations by the permitting authority are predicated will be construed by the permitting authority as applicable requirements under section 504(a) and either have been incorporated into any existing title V permit for the affected facility or will be incorporated into such permit upon issuance

10. "Department" means the Department of Environmental Quality.
11. "Director" means the Director of the Department or LRAPA, and authorized deputies or officers.
12. "Early Reductions Unit" means a single emission point or group of emissions points defined as a unit for purposes of an alternative emissions limit issued under Section 44-040 through 44-120.
13. "Emission" means a release into the atmosphere of any regulated pollutant or air contaminant.
14. "Emissions Limitation" and "Emissions Standard" mean a requirement adopted by the Department or Regional Agency, or proposed or promulgated by the Administrator of the EPA, which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.
15. "Emissions Unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant.
    A. A part of a stationary source is any machine, equipment, raw material, product, or by-product that produces or emits air pollutants. An activity is any process, operation, action, or reaction (e.g., chemical) at a stationary source that emits air pollutants. Except as described in subsection (d) of this section, parts and activities may be grouped for purposes of defining an emissions unit provided the following conditions are met:
        1) The group used to define the emissions unit may not include discrete parts or activities to which a distinct emissions standard applies or for which different compliance demonstration requirements apply; and
        2) The emissions from the emissions unit are quantifiable.
    B. Emissions units may be defined on a pollutant by pollutant basis where applicable;
    C. The term "emissions unit" is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA;
    D. Parts and activities shall not be grouped for purposes of determining emissions increases from an emissions unit under Section 38-0050 through 38-0070, or Title 34, or for purposes of determining the applicability of a New Source Performance Standard (NSPS).
16. "EPA" means the Administrator of the United States Environmental Protection Agency or the Administrator's designee.

17. "EPA Conditional Method" means any method of sampling and analyzing for air pollutants which has been validated by the EPA but which has not been published as an EPA reference method.
18. "EPA Reference Method" means any method of sampling and analyzing for an air pollutant as described in 40 CFR Part 60, 61, or 63.
19. "Equipment leaks" means leaks from pumps, compressors, pressure relief devices, sampling connection systems, open ended valves or lines, valves, connectors, agitators, accumulator vessels, and instrumentation systems in hazardous air pollutant service.
20. "Existing Source" means any source, the construction of which commenced prior to proposal of an applicable standard under sections 112 or 129 of the FCAA.
21. "Facility" means all or part of any public or private building, structure, installation, equipment, or vehicle or vessel, including but not limited to ships.
22. "Fugitive Emissions" means emissions of any air contaminant that escape to the atmosphere from any point or area that is not identifiable as a stack, vent, duct or equivalent opening.
23. "Generally Available Control Technology (GACT)" means an alternative emission standard promulgated by EPA for non-major sources of hazardous air pollutants which provides for the use of control technology or management practices which are generally available.
24. "Hazardous Air Pollutant" (HAP) means an air pollutant listed by the EPA pursuant to section 112(b) of the FCAA or determined by the Commission to cause, or reasonably be anticipated to cause, adverse effects to human health or the environment.
25. "High-Risk Pollutant" means any air pollutant listed in Table 2 of 44-080 for which exposure to small quantities may cause a high risk of adverse public health effects.
26. "Major Source" means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. The EPA may establish a lesser quantity, or in the case of radionuclides different criteria, for a major source on the basis of the potency of the air pollutant, persistence, potential for bioaccumulation, other characteristics of the air pollutant, or other relevant factors.
27. "Maximum Achievable Control Technology (MACT)" means an emission standard applicable to major sources of hazardous air pollutants that requires the maximum degree of reduction in emissions deemed achievable for either new or existing sources.
28. "New Source" means a stationary source, the construction of which is commenced after proposal of a federal MACT or January 3, 1993 of this Title, whichever is earlier.
29. "Not Feasible to Prescribe or Enforce a Numerical Emission Limit" means a situation in which LRAPA determines that a pollutant or stream of pollutants listed in Section 44-020 cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any state or federal law or regulation; or the application of measurement technology to a particular source is not practicable due to technological or economic limitations.
30. "Person" means the United States Government and agencies thereof, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatsoever.
31. "Potential to Emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation

on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the EPA. This section does not alter or affect the use of this section for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder. Secondary emissions shall not be considered in determining the potential to emit of a source.

32. "Reconstruct a Major Source" means the replacement of components at an existing process or production unit that in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, whenever: the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable process or production unit; and it is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under 40 CFR Part 63 Subpart B.
33. "Regional Agency" or “Agency” means Lane Regional Air Protection Agency.
34. "Regulated Air Pollutant" as used in this Title means:
    A. Any pollutant listed under OAR 340-200-0400 or Section 44-160; or
    B. Any pollutant that is subject to a standard promulgated pursuant to Section 129 of the Act.
35. "Secondary Emissions" means emissions from new or existing sources which occur as a result of the construction and/or operation of a source or modification, but do not come from the source itself. Secondary emissions shall be specific, well defined, and quantifiable, and impact the same general area as the source associated with the secondary emissions. Secondary emissions may include but are not limited to:
    A. Emissions from ships and trains coming to or from a facility;
    B. Emissions from offsite support facilities which would be constructed or would otherwise increase emissions as a result of the construction of a source or modification.
36. "Section 111" means that section of the FCAA that includes standards of performance for new stationary sources.
37. "Section 112(b)" means that subsection of the FCAA that includes the list of hazardous air pollutants to be regulated.
38. "Section 112(d)" means that subsection of the FCAA that directs the EPA to establish emission standards for sources of hazardous air pollutants. This section also defines the criteria to be used by EPA when establishing the emission standards.
39. "Section 112(e)" means that subsection of the FCAA that directs the EPA to establish and promulgate emissions standards for categories and subcategories of sources that emit hazardous air pollutants.
40. "Section 112(n)" means that subsection of the FCAA that includes requirements for the EPA to conduct studies on the hazards to public health prior to developing emissions standards for specified categories of hazardous air pollutant emission sources.
41. "Section 112(r)" means that subsection of the FCAA that includes requirements for the EPA promulgate regulations for the prevention, detection and correction of accidental releases.
42. "Section 129" means that section of the FCAA that requires EPA to promulgate regulations for solid waste combustion.

43. "Solid Waste Incineration Unit" as used in this Title shall have the same meaning as given in Section 129(g) of the FCAA.
44. "Stationary Source":
    A. As used in Title 44 means any building, structure, facility, or installation which emits or may emit any regulated air pollutant;
    B. As used in Section 44-160 means any buildings, structures, equipment, installations, or substance emitting stationary activities:
        1) That belong to the same industrial group;
        2) That are located on one or more contiguous properties;
        3) That are under the control of the same person (or persons under common control); and
        4) From which an accidental release may occur.

Section 44-020 List of Hazardous Air Pollutants

For purposes of this Title LRAPA adopts by reference the pollutants, including groups of substances and mixtures, listed in **Section 112(b) of FCAA**, as Hazardous Air Pollutants (Table 1).

Section 44-030 Amending the List of Hazardous Air Pollutants

1. Any person may file a petition with LRAPA to amend the HAP List. The petition must include at least the following information:

    A. Name and chemical abstract service number of the substance;

    B. Quantity of the substance used and released in Lane County;

    C. Sources or source categories emitting the substance;

    D. Potential adverse effects of the substance on public health and the environment;

    E. Potential exposure pathways; and

    F. Uncertainties in the data provided.

2. LRAPA shall present this information, or other information that LRAPA may develop, to the Department, consistent with OAR 240-244-0050(1), for presentation to the Commission which will consider it along with the best available scientific information developed by the EPA, the Oregon Health Division, other states, other scientific organizations, or by any person.

3. The Commission shall amend the HAP list if:

    A. It finds there is a scientifically defensible need to add a substance not on the EPA list to protect the public health or environment;

    B. A chemical is added to the list by the EPA;

C. A substance is deleted from the list by the EPA and the Commission finds that the substance can be deleted without causing harm to public health or the environment; or

D. A substance has previously been added to the list by the Commission but not by the EPA, and the Commission finds that the substance can be deleted without causing harm to public health or the environment.

COMPLIANCE EXTENSIONS FOR EARLY REDUCTIONS

Section 44-040 Applicability

The requirements of 44-040 through 44-120 apply to an owner or operator of an existing source who wishes to obtain a compliance extension and an alternative emission limit from a standard issued under **Section 112(d) of the FCAA**. Any owner or operator of a facility who elects to comply with a compliance extension and alternative emission limit issued under this section must complete a permit application as prescribed in 44-050.

Section 44-050 Permit Application Procedures for Early Reductions

1. To apply for an alternative emission limitations under 44-040, an owner or operator of the source shall file a permit application with LRAPA.

2. Except as provided in subsection 3 of this rule, the permit application shall contain the information required in 44-080 and shall comply with additional permit application procedures as prescribed in **OAR 340 Division 218**.

3. Permit applications for Early Reductions shall be submitted no later than 120 days after proposal of an otherwise applicable standard issued under **Section 112(d) of the FCAA** provided that the reduction was achieved prior to the date of proposal of the standard.

4. The post-reduction emissions information required under 44-080-5.B, 5.C, and 5.E shall not be filed as part of the source's initial permit application but shall be filed later as a supplement to the application. This supplementary information shall be filed no earlier than one (1) year after the date early reduction had to be achieved according to 44-060-1.B and no later than thirteen (13) months after such date.

5. If a source test is the supporting basis for establishing post-reduction emissions for one or more emission points in the Early Reductions Unit, the test results shall be submitted by the applicable deadline for submittal of a permit application as specified in subsection 3 of this rule.

6. LRAPA shall review and decide on permit applications for early reductions according to the provisions of **OAR 340 Division 218**.

Section 44-060 General Provisions for Compliance Extensions

1. LRAPA shall by permit, issued in accordance with **OAR 340 Division 218**, allow an existing source to meet an alternative emission limitation for an Early Reductions Unit in lieu of an emission limitation promulgated under **Section 112(d) of the FCAA** for a period of six (6) years from the compliance date of the otherwise applicable standard provided the owner or operator demonstrates:

   A. According to the requirements of 44-080 that the Early Reductions Unit has achieved a reduction of at least 90 percent (95 percent or more in the case of HAP that are particulate) in emissions of:

      (1) Total HAP from the Early Reductions Unit; or

      (2) Total HAP from the Early Reductions Unit as adjusted for high-risk pollutant weighing factors (Table 2), if applicable.

   B. That such reduction was achieved before the otherwise applicable standard issued under **Section 112(d) of the FCAA** was first proposed.

2. A source granted an alternative emission limitation shall comply with an applicable standard issued under **Section 112(d) of the FCAA** immediately upon expiration of the six-year compliance extension period specified in subsection 1 of this rule.

3. For each facility issued a permit under subsection 1 of this rule, there shall be established as part of the permit an enforceable alternative emission limitation for HAP for each Early Reductions Unit reflecting the reduction that qualified the Early Reductions Unit for the alternative emission limitation.

4. Any source that has received an alternative emissions limit from EPA, either pursuant to **40 CFR 63.75 Enforceable Commitments, dated December 29, 1992**, or as a Title V specialty permit, shall have the alternative emission limit(s) incorporated as an applicable requirement in its operating permit pursuant to **OAR 340-218-0150** upon permit issuance or renewal.

5. If a source fails to submit a timely and complete application according to **OAR 340-218-0040**, or does not adequately demonstrate the required reductions in emissions pursuant to 44-080, LRAPA shall not approve the source's application for a compliance extension and alternative emission limit, and the source is required to comply with any applicable emission standard established pursuant to **Section 112(d) of the FCAA** by the compliance date prescribed in the applicable standard.

Section 44-070 Determination of Early Reductions Unit

An alternative emission limitation may be granted under this section to an existing Early Reductions Unit as defined below provided that a 90 percent (or 95 percent in the case of particulate emissions) reduction in base year HAP emissions is achieved. For the purposes of compliance extensions for early reductions only, an Early Reductions Unit includes any of the following:

1. A building, structure, facility, or installation identified as a source under any proposed or promulgated standard issued under **Section 112(d) of the FCAA**;

2. All portions of an entire contiguous plant site under common ownership or control that emit hazardous air pollutants;

3. Any portion of an entire contiguous plant site under common ownership or control that emits HAP and can be identified as a facility, building, structure, or installation for the purposes of establishing standards under **Section 112(d) of the FCAA**; or

4. Any individual emission point or combination of emission points within a contiguous plant site under common control, provided that the base year emissions of HAP from such point or aggregation of points is at least ten (10) tons per year where the total base year emissions of HAP from the entire contiguous plant site is greater than 25 tons, or at least five (5) tons per year where the total base year emissions of HAP from the entire contiguous plant site is equal to or less than 25 tons.

Section 44-080 Demonstration of Early Reduction

1. For purposes of determining emissions for Early Reductions, Actual emissions: means the actual rate of emissions of a pollutant, but does not include excess emissions from a malfunction, or startups and shutdowns associated with a malfunction. Actual emissions shall be calculated using the source's actual operating rates, and types of materials processed, stored, or combusted during the selected time period.

2. An owner or operator applying for an alternative emission limitation shall demonstrate achieving early reductions as required by 44-060-1 by following the procedures in this rule.

3. An owner or operator shall establish the Early Reductions Unit for the purposes of a compliance extension and alternative emission limit by documenting the following information:

   A. A description of the Early Reductions Unit including a site plan of the entire contiguous plant site under common control that contains the Early Reductions Unit, markings on the site plan locating the parts of the site that constitute the Early Reductions Unit, and the activity at the Early Reductions Unit that causes HAP emissions;

   B. A complete list of all emission points of HAP in the Early Reductions Unit, including identification numbers and short descriptive titles; and

   C. A statement showing that the Early Reductions Unit conforms to one of the allowable definition options from 37-070. For an Early Reductions Unit conforming to the option in 37-070-4, the total base year emissions from the Early Reductions Unit, as determined pursuant to this section, shall be demonstrated to be at least:

(1) Five (5) tons per year, for cases in which total HAP emissions from the entire contiguous plant site under common control are 25 tons per year or less as required under subsection 12 of this rule; or

(2) Ten (10) tons per year in all other cases.

4. An owner or operator shall establish base year emissions for the Early Reductions Unit by providing the following information:

A. The base year chosen, where the base year shall be 1987 or later;

B. The best available data accounting for actual emissions, during the base year, of all HAP from each emission point listed in the Early Reductions Unit in subsection 3.B of this rule;

C. The supporting basis for each emission number provided in subsection 4.B of this rule, including:

(1) For test results submitted as the supporting basis, a description of the test protocol followed, any problems encountered during the testing, a discussion of the validity of the method for measuring the subject emissions, and evidence that the testing was conducted in accordance with the Department's ***Source Sampling Manual*** **or** ***Continuous Monitoring Manual***; and

(2) For calculations based on emission factors, material balance, or engineering principles and submitted as the supporting basis, a step-by-step description of the calculations, including assumptions used and their bases, and a brief rationale for the validity of the calculation method used; and

D. Evidence that the emissions provided under subsection 4.B of this rule are not artificially or substantially greater than emissions in other years prior to implementation of emission reduction measures.

5. An owner or operator shall establish post-reduction emissions by providing the following information:

A. For the emission points listed in the Early Reductions Unit in subsection 3.B of this rule a description of all control measures employed to achieve the emission reduction required by 44-060-1.A;

B. The best available data accounting for actual emissions, during the year following the applicable emission reduction deadlines as specified in 44-060-1.B, of all HAP from each emission point in the Early Reductions Unit listed in subsection 3.B of this rule;

C. The supporting basis for each emission number provided in subsection 5.B of this rule, including:

(1) For test results submitted as the supporting basis, a description of the test protocol followed, any problems encountered during the testing, a discussion of the validity of the method for measuring the subject emissions, and evidence that the testing was conducted in accordance with the Department's ***Source Sampling Manual*** **or** ***Continuous Monitoring Manual***; and

(2) For calculations based on emission factors, material balance, or engineering principles and submitted as the supporting basis, a step-by-step description of the calculations, including assumptions used and their bases, and a brief rationale for the validity of the calculation method used; and

D. Evidence that there was no increase in radionuclide emissions from the source.

6. A. An owner or operator shall demonstrate that both total base year emissions and total base year emission adjusted for high-risk pollutants (*Table 2*), as applicable, have been reduced by at least 90 (ninety) percent for gaseous HAP emitted and 95 (ninety-five) percent for particulate HAP emitted by determining the following for gaseous and particulate emissions separately:

(1) Total base year emissions, calculated by summing all base year emission data from subsection 4.B of this rule;

(2) Total post-reduction emissions, calculated by summing all post-reduction emission data from subsection 5.B of this rule;

(3) Total base year emissions adjusted for high-risk pollutants, calculated by multiplying each emission number for a pollutant from subsection 4.B of this rule by the appropriate weighing factor for the pollutant from *Table 2* and then summing all weighted emission data; and

(4) Total post-reduction emissions adjusted for high-risk pollutants, calculated by multiplying each emission number for a pollutant from subsection 5.B of this rule by the appropriate weighing factor the pollutant from *Table 2* and then summing all weighted emission data;

(5) Percent reductions, calculated by dividing the difference between base year and post-reduction emissions by the base year emissions. Separate demonstrations are required for total gaseous and particulate emissions, and total gaseous and particulate emissions adjusted for high-risk pollutants.

B. If any points in the Early Reductions Unit emit both particulate and gaseous pollutants, as an alternative to the demonstration required in subsection 6.A of this rule, an owner or operator may demonstrate:

(1) A weighted average percent reduction for all points emitting both particulate and gaseous pollutants where the weighted average percent reduction is determined by [Formula not included. See ED. NOTE.]

(2) The reductions required in subsection 6.A of this rule for all other points in each Early Reductions Unit.

7. If lower rates or hours are used to achieve all or part of the emission reduction, any HAP emissions that occur from a compensating increase in rates of hours from the same activity elsewhere within the plant site that contains the Early Reductions Unit shall be counted in the post-reduction emissions from the Early Reductions Unit. If emission reductions are achieved by shutting down process equipment and the shutdown equipment is restarted or replaced anywhere within the plant site, any hazardous air pollutant emissions from the restarted or replacement equipment shall be counted in the post-reduction emissions for the Early Reductions Unit.

8. The best available data representing actual emissions for the purpose of establishing base year or post-reduction emissions under this rule shall consist of documented results from source tests using an EPA Reference Method, EPA Conditional Method, or the owner's or operator's source test method that has been validated pursuant to **Method 301** of **40 CFR Chapter 1 Part 63 Appendix A**, dated **June 1992**. However, if one of the following conditions exists, an owner or operator may submit, in lieu of results from source tests, calculations based on engineering principles, emission factors, or material balance data as actual emission data for establishing base year or post-reduction emissions:

A. No applicable EPA Reference Method, EPA Conditional Method, or other source test method exists;

B. It is not technologically or economically feasible to perform source tests;

C. It can be demonstrated to the satisfaction of LRAPA that the calculations will provide emission estimates of accuracy comparable to that of any applicable source test method;

D. For base year emission estimates, only, the base year conditions no longer exist at an emission point in the Early Reductions Unit, and emission data could not be produced for such an emission point by performing source tests under currently existing conditions, and converting the test results to reflect base year conditions, that is more accurate than an estimate produced by using engineering principles, emission factors, or a material balance; or

E. The emissions from one or a set of emission points in the Early Reductions Unit are small compared to total Early Reductions Unit emissions, and potential errors in establishing emissions from such points will not have a significant effect on the accuracy of total emissions established for the Early Reductions Unit.

9. For base year or post-reduction emissions established under this rule that are not supported by source test data, the source owner or operator shall include the reason source testing was not performed.

10. The EPA average emission factors for equipment leaks cannot be used under this subpart to establish base year emissions for equipment leak Early Reductions Units, unless the base year emission number calculated using the EPA average emission factors for equipment leaks also is used as the post-reduction emission number for equipment leaks from the Early Reductions Unit.

11. A source owner or operator shall not establish base year or post-reduction emissions that include any emissions from the Early Reductions Unit exceeding allowable emission levels specified in any applicable law, regulation, or permit condition.

12. For Early Reductions Units subject to Section 44-080-3.C.(1), an owner or operator shall document total base year emissions from an entire contiguous plant site under common control by providing the following information for all HAP from all emission points in the contiguous plant site under common control:

    A. A complete list of all emission points of HAP;

    B. The best available data accounting for all HAP emissions during the base year from each HAP emission point;

    C. Total base year emissions calculated by summing all base year emissions data from Section 44-080-12.B.

13. If a new pollutant is added to the list of HAP or high-risk pollutants, any source emitting such pollutant will not be required to revise an early reduction demonstration pursuant to this rule if alternative emission limits have previously been specified by permit for the Early Reductions Unit as provided for in 44-060.

Section 44-090 Review of Base Year Emissions

1. Pursuant to the procedures of this rule, LRAPA shall review and approve or disapprove base year emissions data submitted in a permit application from an applicant that wishes to participate in the early reduction program. A copy of the permit application shall also be submitted to the EPA Region 10 Office.

2. Within 30 (thirty) days of receipt of base year emission data, LRAPA shall advise the applicant that:

    A. The base year emission data are complete as submitted; or

    B. The base year emission data are not complete and include a list of deficiencies that must be corrected before review can proceed.

3. Within 60 (sixty) days of a determination that a base year emission data submission is complete, LRAPA shall evaluate the adequacy of the submission with respect to the requirements of 44-080-2 through 4 and either:

   A. Propose to approve the submission and publish a notice in a newspaper of general circulation in the area where the source is located or in a state publication designed to give general public notice, providing the aggregate base year emission data for the source and the rationale for the proposed approval, noting the availability of the non-confidential information contained in the submission for public inspection in at least one location in the community in which the source is located, providing for a public hearing upon request by at least 10 (ten) interested persons, and establishing a 30 (thirty)-day public comment period that can be extended to 60 (sixty) days upon request by at least ten interested persons; or

   B. Propose to disapprove the base year emission data and give notice to the applicant of the reasons for the disapproval. An applicant may correct disapproved base year data and submit revised data for review in accordance with this subsection, except that the review of a revision shall be accomplished within 30 (thirty) days.

4. If no adverse public comments are received by the reviewing agency on proposed base year data for a source, the data shall be considered approved at the close of the public comment period and a notice of the approval shall be sent to the applicant and published by the reviewing agency by advertisement in the area affected.

5. If adverse public comments are received and LRAPA agrees that corrections are needed, LRAPA shall give notice to the applicant of the disapproval and reasons for the disapproval. An applicant may correct disapproved base year emission data and submit revised emission data. If a revision is submitted by the applicant that, to the satisfaction of LRAPA, takes into account the adverse comments, LRAPA will publish by advertisement in the area affected a notice containing the approved base year emission data for the source and send notice of the approval to the applicant.

6. If adverse public comments are received and LRAPA determines that the comments do not warrant changes to the base year emission data, LRAPA will publish by advertisement in the area affected a notice containing the approved base year emission data for the source and the reasons for not accepting the adverse comments. A notice of the approval also shall be sent to the applicant.

Section 44-100 Early Reduction Demonstration Evaluation

1. LRAPA will evaluate an early reduction demonstration submitted by the source owner or operator in a permit application with respect to the requirements of 44-080.

2. An application for a compliance extension may be denied if, in the judgment of LRAPA, the owner or operator has failed to demonstrate that the requirements of 44-080 have been met. Specific reasons for denial include, but are not limited to:

   A. The information supplied by the owner or operator is incomplete;

B. The required 90 (ninety) percent reduction (95[ninety-five] percent in cases where the HAP is particulate matter) has not been demonstrated;

C. The base year or post-reduction emissions are incorrect, based on methods or assumptions that are not valid, or not sufficiently reliable or well documented to determine with reasonable certainty that required reductions have been achieved; or

D. The emission of HAP or the performance of emission control measures is unreliable so as to preclude determination that the required reductions have been achieved or will continue to be achieved during the extension period.

Section 44-110 Approval of Applications

1. If an early reduction demonstration is approved and other requirements for a complete permit application are met, LRAPA shall establish by a permit issued pursuant to **OAR 340 Division 218**, enforceable alternative emissions limitations for each Early Reductions Unit reflecting the reduction which qualified the Early Reductions Unit for the extension. However, if it is not feasible to prescribe a numerical emissions limitation for one or more emission points in the Early Reductions Unit, LRAPA shall establish such other requirements, reflecting the reduction which qualified the Early Reductions Unit for an extension, in order to assure that the 90 (ninety) or 95 (ninety-five) percent reduction, as applicable, is achieved.

2. An alternative emissions limitation or other requirement prescribed pursuant to section 1 of this rule shall be effective and enforceable immediately upon issuance of the permit for the source and shall expire exactly 6 (six) years after the compliance date of an otherwise applicable standard issued pursuant to **Section 112(d) of the FCAA**.

Section 44-120 Rules for Special Situations

1. If more than one standard issued under **Section 112(d) of the FCAA** would be applicable to an Early Reductions Unit as defined under 44-070, then the date of proposal referred to in 44-050-3, 44-060-1.B, and 44-080-5.D is the date the first applicable standard is proposed.

2. Sources emitting radionuclides are not required to reduce radionuclides by 90 (95) percent. Radionuclides may not be increased from the source as a result of the early reductions demonstration.

EMISSION STANDARDS

Section 44-130 Emissions Limitation for New and Reconstructed Major Sources

1. Federal MACT. Any person who proposes to construct a major source of HAP after an applicable emissions standard has been proposed by the EPA pursuant to **Section 112(d)**, **Section 112(n)**, or **Section 129 of the FCAA** shall comply with the requirements and emission standard for new sources when promulgated by EPA.

2. State MACT. Any person who proposes to construct or reconstruct a major source of hazardous air pollutants before MACT requirements applicable to that source have been proposed by the EPA and after the effective date of the program shall comply with new and reconstructed source MACT requirements of **40 CFR Part 63, Subpart B**.

Section 44-140 Emissions Limitation for Existing Sources

1. Federal MACT. Existing major and area sources shall comply with the applicable emissions standards for existing sources promulgated by the EPA pursuant to **Section 112(d)**, **section 112(n)**, or **Section 129 of the FCAA** and adopted by rule within this Title.

2. State MACT. After January 3, 1995 if the EPA fails to meet its schedule for promulgating a MACT standard for a source category, LRAPA shall approve HAP emissions limitations for existing major sources within that category on a case-by-case basis, in accordance with the requirements of **40 CFR, Part 63, Subpart B**.

   A. If, after a permit has been issued, the EPA promulgates a MACT standard applicable to a source, which is more stringent than the one established pursuant to this section, LRAPA shall revise the permit upon the next renewal to reflect the standard promulgated by the EPA. The source shall be given a reasonable time to comply, but no longer than 8 (eight) years after the standard is promulgated.

   B. LRAPA shall not establish a case-by-case MACT:

      (1) For existing solid waste incineration units where an emissions standard will be established for these units by the EPA pursuant to **Section 111 of the FCAA**. These sources are subject to applicable emissions standards under Title 46.

      (2) For existing major HAP sources where an emissions standard or alternative control strategy will be established by the EPA pursuant to **Section 112(n) of the FCAA**.

3. Compliance schedule

   A. The owner or operator of the source shall comply with the emission limitation:

      (1) Within the time frame established in the applicable Federal MACT standard, but in no case later than 3 (three) years from the date of federal promulgation of the applicable MACT requirements; or

      (2) Within the time frame established by LRAPA where a State- determined MACT has been established or a case-by-case determination has been made.

B. The owner or operator of the source may apply for, and LRAPA may grant, a compliance extension of up to 1 (one) year if such additional period is necessary for the installation of controls.

C. Notwithstanding the requirements of this section, no existing source that has installed Best Available Control Technology or been required to meet Lowest Achievable Emission Rate prior to the promulgation of a federal MACT applicable to that emissions unit shall be required to comply with such MACT standard until 5 (five) years after the date on which such installation or reduction has been achieved, as determined by LRAPA.

Section 44-150 Federal Regulations Adopted by Reference

1. Except as provided in section 2 of this rule, **40 CFR Part 61, Subparts A, C through F, J, L, N through P, V, Y, BB, and FF (July 1, 2008)** and **40 CFR Part 63, Subparts A, F, G, H, I, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, HH, II, JJ, KK, LL, MM, OO, PP, QQ, RR, SS, TT, UU, VV, WW, YY, CCC, DDD, EEE, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, WWWW, XXXX, YYYY, ZZZZ, AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, IIIII, JJJJJ, KKKKK, LLLLL, MMMMM, NNNNN, PPPPP, QQQQQ, RRRRR, SSSSS, TTTTT, WWWWW, YYYYY, ZZZZZ, BBBBBB, DDDDDD, EEEEEE, FFFFFF, GGGGGG, HHHHHH, JJJJJJ, LLLLLL, MMMMMM, NNNNNN, OOOOOO, PPPPPP, QQQQQQ, RRRRRR, SSSSSS, TTTTTT, VVVVVV, WWWWWW, XXXXXX, YYYYYY, ~~and~~ ZZZZZZ, AAAAAAA, BBBBBBB, CCCCCCC, DDDDDDD** are by reference adopted and incorporated herein.

2. Where "Administrator" or "EPA" appears in **40 CFR Part 61** or **63**, "LRAPA" shall be substituted, except in any section of **40 CFR Part 61** or **63** for which a federal rule or delegation specifically indicates that authority will not be delegated to the state.

3. 40 CFR Part 63 Subpart M -- Dry Cleaning Facilities using Perchloroethylene: The exemptions in 40 CFR 63.320(d) and (e) do not apply.

4. **40 CFR Part 61** Subparts adopted by this rule are titled as follows:

   A. Subpart A-General Provisions;

   B. Subpart C-Beryllium;

   C. Subpart D-Beryllium Rocket Motor Firing;

   D. Subpart E-Mercury;

   E. Subpart F-Vinyl Chloride;

F. Subpart J - Equipment Leaks (Fugitive Emission Sources) of Benzene;

G. Subpart L-Benzene Emissions from Coke By-Product Recovery Plants;

H. Subpart N-Inorganic Arsenic Emissions from Glass Manufacturing Plants;

I. Subpart O-Inorganic Arsenic Emissions from Primary Copper Smelters;

J. Subpart P-Inorganic Arsenic Emissions from Arsenic Trioxide and Metal Arsenic Facilities;

K. Subpart V-Equipment Leaks (Fugitive Emission Sources);

L. Subpart Y-Benzene Emissions from Benzene Storage Vessels; and

M. Subpart BB – Benzene Emissions from Benzene Transfer Stations

N. Subpart FF-Benzene Waste Operations.

5. **40 CFR Part 63** Subparts adopted by this rule are titled as follows:

A. Subpart A-General Provisions;

B. Subpart F-SOCMI;

C. Subpart G-SOCMI-Process Vents, Storage Vessels, Transfer Operations;

D. Subpart H-SOCMI-Equipment Leaks;

E. Subpart I-Certain Processes Subject to the Negotiated Regulation for Equipment Leaks;

F. Subpart J - Polyvinyl Chloride and Copolymers Production (federally vacated)

G. Subpart L-Coke Oven Batteries;

H. Subpart M-Dry Cleaning Facilities using Perchloroethylene;

I. Subpart N-Hard and Decorative Electroplating and Anodizing;

J. Subpart O-Ethylene Oxide Sterilization;

K. Subpart Q-Industrial Process Cooling Towers;

L. Subpart R-Gasoline Distribution (Bulk Gasoline Terminals and Pipeline Breakout Stations);

M. Subpart S-Pulp and Paper Industry;

N. Subpart T-Halogenated Solvent Cleaning;

O. Subpart U-Group I Polymers and Resins;

P. Subpart W-Epoxy Resins and Non-Nylon Polyamides Production;

Q. Subpart X-Secondary Lead Smelting;

R. Subpart Y-Marine Tank Vessel Loading Operations;

S. Subpart AA-Phosphoric Acid Manufacturing Plants;

T. Subpart BB-Phosphate Fertilizer Production Plants;

U. Subpart CC-Petroleum Refineries;

V. Subpart DD-Off-Site Waste and Recovery Operations;

W. Subpart EE-Magnetic Tape Manufacturing Operations;

X. Subpart GG-Aerospace Manufacturing Operations;

Y. Subpart HH-Oil and Natural Gas Production Facilities;

Z. Subpart II-Shipbuilding and Ship Repair (Surface Coating);

AA. Subpart JJ-Wood Furniture Manufacturing Operations;

BB. Subpart KK-Printing and Publishing Industry;

CC. Subpart LL-Primary Aluminum Reduction Plants;

DD. Subpart MM-Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semi-Chemical Pulp Mills

EE. Subpart OO-TanksBLevel 1;

FF. Subpart PP-Containers;

GG. Subpart QQ-Surface Impoundments;

HH. Subpart RR-Individual Drain Systems;

II. Subpart SS-Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process;

JJ. Subpart TT-Equipment LeaksBControl Level 1;

KK. Subpart UU-Equipment LeaksBControl Level 2 Standards;

LL. Subpart VV-Oil-Water Separators and Organic-Water Separators;

MM. Subpart WW-Storage Vessels (Tanks)- Control Level 2;

NN. Subpart XX - Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations;

OO. Subpart YY-Generic Maximum Achievable Control Technology Standards;

PP. Subpart CCC-Steel Pickling-HCI Process Facilities and Hydrochloric Acid Regeneration Plants;

QQ. Subpart DDD-Mineral Wool Production;

RR. Subpart EEE-Hazardous Waste Combustors;

SS. Subpart GGG-Pharmaceuticals Production;

TT. Subpart HHH-Natural Gas Transmission and Storage Facilities;

UU. Subpart III-Flexible Polyurethane Foam Production;

VV. Subpart JJJ-Group IV Polymers and Resins;

WW. Subpart LLL-Portland Cement Manufacturing Facilities;

XX. Subpart MMM-Pesticide Active Ingredient Production;

YY. Subpart NNN-Wool Fiberglass Manufacturing;

ZZ. Subpart OOO-Manufacture of Amino/Phenolic Resins;

AAA. Subpart PPP-Polyether Polyols Production;

BBB. Subpart QQQ - Primary Copper Smelting;

CCC. Subpart RRR-Secondary Aluminum Production

DDD. Subpart TTT-Primary Lead Smelting;

EEE. Subpart UUU - Petroleum Refineries -- Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units;

FFF. Subpart VVV-Publicly Owned Treatment Works;

GGG. Subpart XXX-Ferro Alloys, Ferromanganese, and Silico Manganese Production

HHH. Subpart AAAA -- Municipal Solid Waste Landfills;

III. Subpart CCCC-Manufacturing of Nutritional Yeast

JJJ. Subpart DDDD -- Plywood and Composite Wood Products;

KKK. Subpart EEEE -- Organic Liquids Distribution (non-gasoline);

LLL. Subpart FFFF -- Miscellaneous Organic Chemical Manufacturing;

MMM. Subpart GGGG-Solvent Extraction for Vegetable Oil Production

NNN. Subpart HHHH -- Wet Formed Fiberglass Mat Production;

OOO. Subpart IIII -- Surface Coating of Automobiles and Light-Duty Trucks;

PPP. Subpart JJJJ -- Paper and Other Web Coating;

QQQ. Subpart KKKK -- Surface Coating of Metal Cans;

RRR. Subpart MMMM -- Surface Coating of Miscellaneous Metal Parts and Products;

SSS. Subpart NNNN -- Surface Coating of Large Appliances;

TTT. Subpart OOOO - Printing, Coating, and Dyeing of Fabrics and Other Textiles;

UUU. Subpart PPPP - Surface Coating of Plastic Parts and Products;

VVV. Subpart QQQQ - Surface Coating of Wood Building Products;

WWW. Subpart RRRR - Surface Coating of Metal Furniture;

XXX. Subpart SSSS - Surface Coating of Metal Coil;

YYY. Subpart TTTT - Leather Finishing Operations;

ZZZ. Subpart UUUU - Cellulose Production Manufacturing;

AAAA. Subpart VVVV - Boat Manufacturing;

BBBB. Subpart WWWW - Reinforced Plastics Composites Production;

CCCC. Subpart XXXX - Rubber Tire Manufacturing;

DDDD. Subpart YYYY - Stationary Combustion Turbines;

EEEE. Subpart ZZZZ - Reciprocating Internal Combustion Engines;

FFFF. Subpart AAAAA - Lime Manufacturing;

GGGG. Subpart BBBBB - Semiconductor Manufacturing;

HHHH. Subpart CCCCC - Coke Ovens: Pushing, Quenching & Battery Stacks;

~~hhhh.~~IIII. Subpart DDDDD - Industrial, Commercial, and Institutional Boilers and Process Heaters

~~iiii.~~JJJJ. Subpart EEEEE - Iron and Steel Foundries;

~~jjjj.~~KKKK. Subpart FFFFF - Integrated Iron and Steel Manufacturing Facilities;

~~kkkk.~~LLLL. Subpart GGGGG - Site Remediation;

~~llll.~~MMMM. Subpart HHHHH – Misc. Coating Manufacturing;

~~mmmm.~~NNNN. Subpart IIIII - Mercury Cell Chlor-Alkali Plants;

~~nnnn.~~OOOO. Subpart JJJJJ - Brick and Structural Clay Products Manufacturing (federally vacated);

~~oooo.~~PPPP. Subpart KKKKK - Clay Ceramics Manufacturing (federally vacated);

~~pppp.~~QQQQ. Subpart LLLLL - Asphalt Processing & Asphalt Roofing Manufacturing;

~~qqqq.~~RRRR. Subpart MMMMM - Flexible Polyurethane Foam Fabrication Operations;

~~rrrr.~~SSSS. Subpart NNNNN - Hydrochloric Acid Production;

~~ssss.~~TTTT. Subpart PPPPP - Engine Tests Cells/Stands;

~~tttt.~~UUUU. Subpart QQQQQ - Friction Materials Manufacturing Facilities;

~~uuuu.~~VVVV. Subpart RRRRR - Taconite Iron Ore Processing;

~~vvvv.~~WWWW. Subpart SSSSS - Refractory Products Manufacturing;

~~wwww.~~XXXX. Subpart TTTTT - Primary Magnesium Refining

~~xxxx.~~YYYY. Subpart WWWWW - Area Sources: Hospital Ethylene Oxide Sterilization.

~~yyyy.~~ZZZZ. Subpart YYYYY - Area Sources: Electric Arc Furnace Steelmaking Facilities.

~~zzzz.~~AAAAA. Subpart ZZZZZ - Area Sources: Iron and Steel Foundries.

~~aaaaa.~~BBBBB. Subpart BBBBBB- Area Source: Gasoline Distribution Bulk Plant and Pipeline Facilities.

~~bbbbb.~~CCCCC. Subpart DDDDDD- Area Source: PVC and Coplymer Production.

~~ccccc.~~DDDDD. Subpart EEEEEE - Area Sources: Primary Copper Smelting.

~~ddddd.~~EEEEE. Subpart FFFFFF - Area Sources: Secondary Copper Smelting.

~~eeeee.~~FFFFF. Subpart GGGGGG - Area Sources: Primary Nonferrous Metals Zinc, Cadmium, and Beryllium.

GGGGG. Subpart HHHHHH -- Area Sources: Paint Stripping and Miscellaneous Surface Coating Operations.

~~fffff.~~HHHHH. Subpart JJJJJJ – Area Sources: Industrial, Commercial, and Institutional Boilers

~~ggggg.~~IIIII. Subpart LLLLLL - Area Sources: Acrylic and Modacrylic Fibers Production.

~~hhhhh.~~JJJJJ. Subpart MMMMMM - Area Sources: Carbon Black Production.

~~iiiii.~~KKKKK. Subpart NNNNNN - Area Sources: Chemical Manufacturing: Chromium Compounds.

~~jjjjj.~~LLLLL. Subpart OOOOOO - Area Sources: Flexible Polyurethane Foam Production.

~~kkkkk.~~MMMMM. Subpart PPPPPP - Area Sources: Lead Acid Battery Manufacturing.

~~lllll.~~NNNNN. Subpart QQQQQQ - Area Sources: Wood Preserving.

~~mmmmm.~~OOOOO. Subpart RRRRRR - Area Sources: Clay Ceramics Manufacturing.

~~nnnnn.~~PPPPP. Subpart SSSSSS - Area Sources: Glass Manufacturing.

QQQQQ. Subpart TTTTTT - Area Sources: Secondary Nonferrous Metals Processing.

~~ooooo.~~RRRRR. Subpart VVVVVV – Area Sources: Chemical Manufacturing

~~ppppp.~~SSSSS. Subpart WWWWWW - Area Source: Plating and Polishing Operations.

~~qqqqq.~~TTTTT. Subpart XXXXXX - Area Source: Nine Metal Fabrication and Finishing Source Categories.

~~rrrrr.~~UUUUU. Subpart YYYYYY - Area Sources: Ferroalloys Production Facilities.

VVVVV. Subpart ZZZZZZ - Area Sources - Aluminum, Copper, and Other Nonferrous Foundries.

WWWWW. Subpart AAAAAAA – Area Sources: Asphalt Processing and Asphalt Roof Manufacturing.

XXXXX. Subpart BBBBBBB – Area Sources: Chemical Preparations Industry.

YYYYY. Subpart CCCCCCC – Area Sources: Paints and Allied Products Manufacturing

~~sssss.~~ZZZZZ. Subpart DDDDDDD – Area Sources: Prepared Feeds Manufacturing

(Section 37-150 Original Adoption 06/11/02, includes updated provisions of 43-020 through 43-035 which were deleted from Title 43 by 06/11/02 rulamking; Amended 1/12/2010)

Section 44-160 Accidental Release Prevention

1. List. For purposes of this rule LRAPA adopts by reference the List of Regulated Substances and Thresholds for Accidental Release Prevention **40 CFR Part 68 Subpart F (July 1, 2001)** which includes the **Department of Transportation Division 1.1 Explosive Standards List (49 CFR 172.101)**. (Table 3)

2. Risk Management Plan. The owner or operator of a stationary source at which a substance listed in Table 3 is present, as stored on site (not necessarily emitted to the air), in greater than the threshold quantity shall prepare and implement a written risk management plan to detect and prevent or minimize accidental releases, and to provide a prompt emergency response to any such releases in order to protect human health and the environment.

3. Compliance. The owner or operator of a stationary source required to prepare and implement a risk management plan under section 2 of this rule shall:

   A. Register the risk management plan with the EPA;

   B. Submit copies of the risk management plan to the U.S. Chemical Safety and Hazard Identification Board, LRAPA, and the Oregon Office of Emergency Management; and

   C. Submit; as part of the compliance certification required under **OAR 340-218-0080**, annual certification to LRAPA that the risk management plan is being properly implemented.

4. Compliance Schedule:

   A. The owner or operator of a stationary source shall prepare and implement a risk management plan under section 2 of this rule according to the schedule promulgated by the EPA.

   B. The owner or operator of a stationary source that adds a listed substance or exceeds the threshold shall prepare and implement a risk management plan according to the schedule promulgated by the EPA.

Section 44-170 Purpose

This rule establishes emission limitations and management practices for hazardous air pollutants (HAP) and volatile organic compounds (VOCs) emitted from the loading of gasoline storage tanks and dispensing of fuel at gasoline dispensing facilities (GDFs). This rule also establishes requirements to demonstrate compliance with the emission limitations and management practices.

Section 44-180 Definitions

The definitions in Title 12 and this rule apply to Sections 44-170 through 44-290. If the same term is defined in this rule and Title 12, the definition in this rule applies.

1. "Affected Gasoline Storage Tank" as used in this title means any gasoline storage tank located at a GDF that meets the specifications listed in Section 44-190.

2. "Annual throughput" means the amount of gasoline transferred into a gasoline dispensing facility during 12 consecutive months.

3. "Aviation Gasoline" means a type of gasoline suitable for use as a fuel in an aviation gas spark-ignition internal combustion engine.

4. "Dual Point Vapor Balance System" means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

5. "Gasoline Cargo Tank" means a delivery tank truck or railcar which is loading gasoline or which has loaded gasoline on the immediately previous load.

6. "Gasoline Dispensing Facility" (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle or gas cans.

7. "Monthly Throughput" means the total volume of gasoline that is loaded into all gasoline storage tanks during a month as calculated on a rolling 30-day average.

8. "Motor Vehicles" are mobile sources that operate on roads and highways.

9. "Stage I Vapor Recovery" is used during the refueling of gasoline storage tanks to reduce HAP. Vapors in the tank, which are displaced by the incoming gasoline, are routed through a hose into the cargo tanker, instead of being vented to the atmosphere. There are two types of Stage I systems, **dual point** and **coaxial**.

10. "Submerged Filling" as used in this title, means the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in Section 44-230 from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

11. "Topping off" means, in the absence of equipment malfunction, continuing to fill a gasoline tank after the nozzle has clicked off.

12. "Vapor Balance System" means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

13. "Vapor Tight" means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by monitoring to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

Section 44-190 Applicability

1. The affected source to which this rule applies is each GDF. The affected source includes each gasoline cargo tank during the unloading of gasoline to a GDF and also includes each storage tank.

2. Gasoline storage tanks with a capacity of less than 250 gallons must comply with the work practices in subsection 44-230-1.A through 44-230-1.E, but are not required to comply with the submerged fill requirements in Section 44-230 and vapor balance requirements in Section 44-240.

3. The owner or operator of a GDF that has any gasoline storage tanks with a capacity of 250 gallons or more must comply with the work practices requirements and the submerged fill requirements in Section 44-230.

4. The owner or operator of a GDF whose total volume of gasoline that is loaded into all gasoline storage tanks greater than 250 gallon capacity must comply with the vapor balance requirements in Section 44-240 if either:

    A. the annual throughput is 480,000 gallons or more in any 12 consecutive months; or

    B. the monthly throughput is 100,000 gallons or more, as calculated on a rolling 30 day basis.

5. Each GDF must, upon request by the Agency, demonstrate that their annual and average monthly gasoline throughput is below any applicable thresholds.

6. Any cargo tank unloading at a GDF equipped with a functional vapor balance system must connect to the vapor balance system whenever gasoline is being loaded.

7. The owner or operator of a GDF that installs a new tank with a capacity of 10,000 gallons or more after the effective date of this rule shall be equipped with a vapor balance system that meets the requirements in Section 44-240.

Section 44-200 Exceptions

1. *Agricultural Operations.* The requirements in this rule do not apply to GDF used **exclusively** for agricultural operations as defined in ORS 468A.020. Agricultural operations are however required to comply with the applicable requirements in 40 CFR 63 Subpart CCCCCC – National Hazardous Air Pollutant Emission Standards (NESHAP) for Gasoline Dispensing Facilities.

2. *Aviation Gasoline.* The provisions of this rule do not apply to the loading of aviation gasoline in storage tanks at airports, and aviation gasoline is not included in subsections 44-190-4.A and 44-190-4.B.

3. The owner or operator of a GDF subject to this rule, as defined in Section 44-190, is not required to obtain a Title V Operating Permit. However, the owner or operator must still apply for and obtain a Title V Operating Permit if meeting one or more of the applicability criteria found in OAR 340-218-0020.

Section 44-210 Affected Equipment or Processes

1. The emission sources to which this rule applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in Section 44-190. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this rule with the exception of topping off.

2. *New GDF*. For purposes of this rule, a GDF is a new GDF if the owner or operator commenced construction of the GDF after November 9, 2006 and meets the applicability criteria in Section 44-190 upon startup of the GDF.

3. *Reconstructed GDF*. A GDF is a reconstructed GDF if meeting the criteria for reconstruction as defined in 40 CFR 63.2.

4. *Existing GDF*. A GDF is an existing GDF if it is not new or reconstructed.

Section 44-220 Compliance Dates

1. For a new or reconstructed affected source, the owner or operator must comply with the standards in Sections 44-230 and 44-240, as applicable, no later than January 10, 2008 or upon startup, whichever is later. Except a GDF subject to Table 4 of this title which must comply no later than September 23, 2008 or upon startup, whichever is later.

2. The owner or operator of an existing GDF must comply with subsections 44-230-1.A through 44-230-1.E no later than the effective date of this rule or upon startup, whichever is later.

3. For an existing affected source, the owner or operator must comply with the standards in Section 44-230 and 44-240, as applicable, by no later than January 10, 2011.

4. The owner or operator of an existing affected source that becomes subject to the control requirements in this rule because of an increase in throughput, as specified in Section 44-190, must comply with the applicable standards in this rule no later than January 10, 2011 or within 2 years after the affected source becomes subject to the additional control requirements in this rule, whichever is later.

Section 44-230 Work Practice and Submerged Fill Requirements

1. The owner or operator of a GDF must take reasonable precautions to prevent gasoline vapor releases to the atmosphere. Reasonable precautions include, but are not limited to, the following:

    A. Minimize gasoline spills;

    B. Do not top off or overfill vehicle tanks. If a person can confirm that a vehicle tank is not full after the nozzle clicks off, the person may continue to dispense fuel using best judgment and caution to prevent a spill;

    C. Post a sign at the GDF instructing a person filling up a motor vehicle to not top off vehicle tanks;

    D. Clean up spills as expeditiously as practicable;

    E. Cover all gasoline storage tank fill-pipes with a gasketed seal and all gasoline containers when not in use;

    F. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

    G. Ensure that cargo tanks unloading at the GDF comply with practices A, D and E of this subsection.

2. Any cargo tank unloading at a GDF equipped with a functional vapor balance system must connect to the vapor balance system whenever gasoline is being loaded.

3. The owner or operator of cargo tank or GDF must only load gasoline into storage tanks at the facility by utilizing submerged filling as specified in A, B or C of this subsection.

    A. Submerged fill pipes installed on or before November 9, 2006, must extend to no less than 12 inches from the bottom of the storage tank.

    B. Submerged fill pipes installed after November 9, 2006, must extend to no less than 6 inches from the bottom of the storage tank.

    C. Bottom filling.

4. The GDF owner or operator must submit the applicable notifications as required in Section 44-260.

5. The GDF owner or operator must have records available within 24 hours of a request by the Agency to document gasoline throughput.

6. The GDF owner or operator must comply with the requirements of this rule by the applicable dates specified in Section 44-220.

Section 44-240 Vapor Balance Requirements

1. Except for gasoline storage tanks equipped with floating roofs or the equivalent, the owner or operator of a GDF must meet the requirements in either A or B of this subsection for all affected gasoline storage tanks.

   A. Each management practice in Table 4 of this title that applies to the GDF.

   B. If, prior to January 10, 2008, the owner or operator operates a vapor balance system on all affected tanks at the GDF that meets either requirement listed in (1) or (2), the owner or operator will be deemed in compliance with this section.

      (1) Achieves emissions reduction of at least 90 percent.

      (2) Operates using management practices at least as stringent as those in Table 4 of this title.

2. Gasoline storage tanks equipped with floating roofs or the equivalent are not required to comply with the control requirements in subsection 44-240-1.

3. Cargo tanks unloading at a GDF must comply with the work practice requirements of subsection 44-230-1 and management practices in Table 5 of this title.

4. The owner or operator of a GDF subject to subsection 44-240-1 must comply with the following requirements on and after the applicable compliance date in Section 44-220:

   A. When loading a gasoline storage tank equipped with a vapor balance system, connect and ensure the proper operation of the vapor balance system whenever gasoline is being loaded.

   B. Maintain all equipment associated with the vapor balance system to be vapor tight and in good working order.

   C. Have the vapor balance equipment inspected on at least an annual basis to discover potential or actual equipment failures.

   D. Replace, repair or modify any worn or ineffective component or design element within 24 hours of discovery to ensure the vapor-tight integrity and efficiency of the vapor balance system. If repair parts must be ordered, either a written or verbal order for those parts must be initiated within 2 working days of detecting such a leak. Such repair parts must be installed within 5 working days after receipt.

5. The owner or operator of a GDF subject to subsection 44-240-1 must also comply with the following requirements:

   A. The applicable testing requirements in Section 44-250.

   B. The applicable notification requirements in Section 44-260.

   C. The applicable recordkeeping and reporting requirements in Sections 44-270 and 44-280.

   D. The owner or operator must have records available within 24 hours of a request by the Agency to document gasoline throughput.

Section 44-250 Testing and Monitoring Requirements

1. For all testing required by this rule, submit notification to the Agency at least ten (10) days prior to testing.

2. If required to install a vapor balance system subject to the requirements of Section 44-240, the owner or operator must comply with the testing requirements in subsections 44-250-2.A and 44-250-2.B at the time of installation of a vapor balance system or a new gasoline storage tank. Further, each owner or operator of a GDF with monthly throughput of 100,000 gallons of gasoline or more must also test every three years after installation.

   A. The owner or operator must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 4 of this title, for pressure/vacuum vent valves installed on gasoline storage tanks using test method A(1) or A(2):

      (1) PV (pressure/vacuum test valve) Vent Cap Testing in accordance with CARB TP–201.1E,–Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003.

      (2) Use alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f), must be approved by the EPA.

   B. The owner or operator must demonstrate compliance with the static pressure performance requirement, specified in item 1(h) of Table 4 of this title, for the vapor balance system by conducting a static pressure test on the gasoline storage tanks using test method B(1) or B(2):

      (1) Pressure Decay Testing in accordance with CARB TP–201.3,–Determination of 2 inches of WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities.

(2) Use alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f), must be approved by the EPA.

3. Each owner or operator of a GDF, choosing, under the provisions of 40 CFR 63.6(g), to use a vapor balance system other than that described in Table 4 of this title, must demonstrate to the EPA the equivalency of their vapor balance system to that described in Table 4 of this title using the procedures specified in this subsection.

   A. The owner or operator must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction in accordance with CARB TP–201.1 Vapor Recovery Test Procedure,—Volumetric Efficiency for Phase I Vapor Recovery Systems.

   B. The owner or operator must, during the initial performance test required in 3.A of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 4 of this title and for the static pressure performance requirement in item 1(h) of Table 4 of this title.

   C. The owner or operator must also comply with the testing requirements specified in subsection 44-250-2.

Section 44-260 Notifications

1. Each owner or operator subject to the submerged fill requirements in subsection 44-230-2 or the vapor balance requirements in Subsection 44-240 must comply with subsections 2 through 6.

2. The owner or operator must submit an Initial Notification that the owner or operator is subject to the GDF NESHAP by May 9, 2008, or at the time the owner or operator becomes subject to the submerged fill requirements in subsection 44-230-2 or the vapor balance requirements in Section 44-240, unless the owner or operator meets the requirements in subsection 44-260-4. The Initial Notification must contain the information specified in subsections 2.A through C of this section. The notification must be submitted to the EPA's Region 10 Office as specified in 40 CFR 63.13 and to the Agency.

   A. The name and address of the owner and the operator.

   B. The physical address of the GDF.

   C. A statement that the notification is being submitted in response to the GDF NESHAP and identifying the requirements in subsections 44-230-1 through 3 and Section 44-240 that apply to the owner or operator.

3. The owner or operator must submit a Notification of Compliance Status to the EPA's Region 10 Office as specified in 40 CFR 63.13 and to the Agency, by the compliance

date specified in Section 44-220 unless the owner or operator meets the requirements in subsection 4. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy and must indicate whether the source has complied with the requirements of Sections 44-170 through 44-290. If the facility is in compliance with the requirements of Sections 44-170 through 44-290 at the time the Initial Notification required in subsection 2 is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required in subsection 2.

4. If, prior to January 10, 2008 the owner or operator satisfies the requirements in subsections 44-260-4.A or 44-260-4.B, the owner or operator is not required to submit an Initial Notification or a Notification of Compliance Status specified in subsections 44-260-2 and 44-260-3.

   A. The owner or operator is not subject to the vapor requirements in Section 44-240, and is operating in compliance with an enforceable federal, state or local rule or permit that requires submerged fill as specified in subsection 44-230-2.

   B. The owner or operator is subject to the vapor requirements in Section 44-240, and meets the requirements in subsections 44-260-4.B(1) and 44-260-4.B(2).

      (1) The owner or operator operates a vapor balance system at the GDF that meets the requirements specified in Table 4 of this title.

      (2) The owner or operator is operating in compliance with an enforceable federal, state, or local rule or permit that requires submerged fill as specified in subsection 44-230-2, and requires the operation of a vapor balance system as specified in subsection 44-260-4.B(1).

5. The owner or operator must submit a Notification of Performance Test as specified in 40 CFR 63.9(e), prior to initiating testing required by subsections 44-250-2 and 44-250-3 as applicable.

6. The owner or operator must submit additional notifications specified in 40 CFR 63.9 as applicable.

Section 44-270 Recordkeeping Requirements

1. Each owner or operator must keep the following records:

   A. Records of all tests performed in accordance with subsections 44-250-2 and 44-250-3.

   B. Records related to the operation and maintenance of vapor balance equipment required in Section 44-240. Any vapor balance component defect must be logged and tracked by the GDF owner or operator using forms provided by the Agency or a reasonable facsimile.

   C. Records of total monthly and annual throughput in gallons as defined.

D. Records of permanent changes made at the GDF and to vapor balance equipment which may affect emissions.

2. Records required in this section must be kept for a period of 5 years and must be available within 24 hours of a request by the Agency.

Section 44-280 Reporting Requirements

1. Each owner or operator subject to Section 44-240 must report to the Agency the results of all tests required in Section 44-250. Test results must be submitted within 30 days of the completion of the performance testing.

Section 44-290

Federal NESHAP Subpart A Applicability
[Note] Table 3 to 40 CFR part 63 subpart CCCCCC shows which parts of the General Provisions apply to the owner or operator.

CAS NUMBER	TABLE 1 LIST OF HAZARDOUS AIR POLLUTANTS (44-020) CHEMICAL NAME
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
8107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl) phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106900	1,3-Butadiene
156627	Calcium cyanamide
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbon sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
97118	Chloroacetic acid

CAS NUMBER	TABLE 1 LIST OF HAZARDOUS AIR POLLUTANTS (44-020) CHEMICAL NAME
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
19773	Cresols/Cresylic acid (isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dicholorobenzene(p)
91941	3,3-Dichlorobenzidene
111444	Dichloroethyl ether [Bis(2-chloroethyl)ether]
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethyloxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinitrotoluene

CAS NUMBER	TABLE 1 LIST OF HAZARDOUS AIR POLLUTANTS (44-020) CHEMICAL NAME
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chlorethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1,-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid
7664393	Hydrogen fluoride (Hydrofluoric acid)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)

CAS NUMBER	TABLE 1 LIST OF HAZARDOUS AIR POLLUTANTS (44-020) CHEMICAL NAME
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
	~~EPA Delisted June 20, 2005~~
60344	Methyl hydrazine
74884	Methyl iodide (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4.4-Methylene bis(2-Chloroaniline)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diiocyanate (MDI)
101779	4,4-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone
57578	beta-Propriolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2-Dichloropropane)

CAS NUMBER	TABLE 1 LIST OF HAZARDOUS AIR POLLUTANTS (44-020) CHEMICAL NAME
75569	Propylene oxide
75558	1,2-Propylenimine (2-Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloroethane
79016	Trichloroethylene
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
540841	2,2,4-Trimethylpentane
108054	Vinyl acetate
593602	Vinyl bromide
75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (isomers and mixture)
95476	o-Xylenes
108383	m-Xylenes
106423	p-Xylenes
0	Antimony Compounds
0	Arsenic Compounds (inorganic including arsine)
0	Beryllium Compounds
0	Cadmium Compounds

CAS NUMBER	TABLE 1 LIST OF HAZARDOUS AIR POLLUTANTS (44-020) CHEMICAL NAME
0	Chromium Compounds
0	Cobalt Compounds
0	Coke Oven Emissions
0	Cyanide Compounds[1]
0	Glycol ethers[2]
0	Lead Compounds
0	Manganese Compounds
0	Mercury Compounds
0	Fine mineral fibers[3]
0	Nickel Compounds
0	Polycyclic Organic Matter[4]
0	Radionuclides (including radon)[5]
0	Selenium Compounds

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

*1 X=CN where X = H= or any other group where a formal dissociation may occur. For example KCN or $Ca(CN)_2$
*2 Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH_2CH_2)n-OR= where: n = 1,2, or 3; R - alkyl or aryl groups; R= - R,H, or groups which, when removed, yield glycol ethers with the structure: R-$(OCH_2CH)_n$-OH. Polymers are excluded from the glycol category.
*3 Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
*4 Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.
*5 A type of atom which spontaneously undergoes radioactive decay.

(Table 1 original adoption 06/11/02)

TABLE 2
LIST OF EARLY REDUCTIONS HIGH-RISK POLLUTANTS
(44-060)

CAS Number	Chemical Name	Weighing Factor
53-96-3	2-Acetylaminofluorene	100
107-02-8	Acrolein	100
79-06-1	Acrylamide	10
107-13-1	Acrylonitrile	10
1332-21-4	Asbestos	100

TABLE 2
LIST OF EARLY REDUCTIONS HIGH-RISK POLLUTANTS
(44-060)

CAS Number	Chemical Name	Weighing Factor
71-43-2	Benzene	10
92-87-5	Benzidine	1000
542-88-1	Bis(chloromethyl)ether	1000
106-99-0	1,3-Butadiene	10
57-74-9	Chlordane	100
532-27-4	2-Chloroacetophenone	100
107-30-2	Chloromethyl methyl ether	10
334-88-3	Diazomethane	10
132-64-9	Dibenzofurans	10
96-12-8	1,2-Dibromo-3-chloropropane	10
111-44-4	Dichloroethyl ether [Bis(2-chloroethyl)ether]	10
79-44-7	Dimethylcarbamoyl chloride	100
122-66-7	1,2-Diphenylhydrazine	10
106-93-4	Ethylene dibromide	10
151-56-4	Ethyleneimine (Aziridine)	100
75-21-8	Ethylene oxide	10
76-44-8	Heptachlor	100
118-74-1	Hexachlorobenzene	100
77-47-4	Hexachlorocyclopentadiene	10
302-01-2	Hydrazine	100
60-34-4	Methyl hydrazine	10
624-83-9	Methyl isocyanate	10
62-75-9	N-Nitrosodimethylamine	100
684-93-5	N-Nitroso-N-methylurea	1000
56-38-2	Parathion	10
75-44-5	Phosgene	10
7803-51-2	Phosphine	10
7723-14-0	Phosphorus	10
75-55-8	1,2-Propylenimine	100
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin	100,000
8001-35-2	Toxaphene (chlorinated camphene)	100
75-01-4	Vinyl chloride	10
0	Arsenic Compounds	100

TABLE 2
LIST OF EARLY REDUCTIONS HIGH-RISK POLLUTANTS
(44-060)

CAS Number	Chemical Name	Weighing Factor
0	Beryllium Compounds	10
0	Cadmium Compounds	10
0	Chromium Compounds	100
0	Coke Oven Emissions	10
0	Manganese Compounds	10
0	Mercury Compounds	100
0	Nickel Compounds	10

(Table 2 original adoption 06/11/02)

TABLE 3
LIST OF REGULATED TOXIC AND FLAMMABLE SUBSTANCES
FOR PURPOSES OF ACCIDENTAL RELEASE PREVENTION
(44-160)

PART A - REGULATED TOXIC SUBSTANCES

CAS Number	Chemical Name	Threshold Quantity Stored or Present Onsite (lbs.)
107-02-8	Acrolein (2-Propenal)	5,000
107-13-1	Acrylonitrile (2-Propenenitrile)	20,000
814-68-6	Acrylyl chloride (2-Propenoyl chloride)	5,000
107-18-6	Allyl alcohol (2-Propen-l-ol)	15,000
107-11-9	Allylamine (2-Propen-l-amine)	10,000
7664-41-7	Ammonia (anhydrous)	10,000
7664-41-7	Ammonia (concentration 20% or greater)	20,000
7784-34-1	Arsenous trichloride	15,000
7784-42-1	Arsine	1,000
10294-34-5	Boron trichloride (Borane, trichloro-)	5,000
7637-07-2	Boron trifluoride (Borane, trifluoro-)	5,000
353-42-4	Boron trifluoride compound with methyl ether (1:1) (Boron, trifluoro[oxybis(methane)])	15,000

TABLE 3
LIST OF REGULATED TOXIC AND FLAMMABLE SUBSTANCES
FOR PURPOSES OF ACCIDENTAL RELEASE PREVENTION
(44-160)

PART A - REGULATED TOXIC SUBSTANCES

CAS Number	Chemical Name	Threshold Quantity Stored or Present Onsite (lbs.)
7726-95-6	Bromine	10,000
75-15-0	Carbon disulfide	20,000
7782-50-5	Chlorine	2,500
10049-04-4	Chlorine [Chlorine oxide (ClO_2)]	1,000
67-66-3	Chloroform (Methane trichloro-)	20,000
542-88-1	Chloromethyl ether [Methane, oxybis(chloro-)]	1,000
107-30-2	Chloromethyl methyl ether (Methane, Chloromethoxy-)	5,000
4170-30-3	Crotonaldehyde (2-Butenal)	20,000
123-73-9	Crotonaldehyde (2-Butenal)	20,000
506-77-4	Cyanogen chloride	10,000
108-91-8	Cyclohexylamine (Cyclohexanamine)	15,000
19287-45-7	Diborane	2,500
75-78-5	Dimetyldichlorosilane (Silane, dichlorodemethyl-)	5,000
57-14-7	1,1-Demethylhydrazine (Hydrazine, 1,1-dimethyl-)	15,000
106-89-8	Epichlorohydrin [Oxirane, (chloromethyl)-]	20,000
107-15-3	Ethylenediamine (1,2-Ethanediamine)	20,000
151-56-4	Ethyleneimine (Aziridine)	10,000
75-21-8	Ethylene oxide (Oxirane)	10,000
7782-41-4	Fluorine	1,000
50-00-0	Formaldehyde (solution)	15,000
110-00-9	Furan	5,000
302-01-2	Hydrazine	15,000
7647-01-0	Hydrochloric acid (concentration 30% or greater)	15,000
74-90-8	Hydrocyanic acid	2,500

TABLE 3
LIST OF REGULATED TOXIC AND FLAMMABLE SUBSTANCES
FOR PURPOSES OF ACCIDENTAL RELEASE PREVENTION
(44-160)

PART A - REGULATED TOXIC SUBSTANCES

CAS Number	Chemical Name	Threshold Quantity Stored or Present Onsite (lbs.)
7647-01-0	Hydrogen chloride (anhydrous) [Hydrochloric acid]	5,000
7664-39-3	Hydrogen fluoride/Hydrofluoric acid (concentration 50% or greater) [Hydrofluoric acid]	1,000
7783-39-3	Hydrogen selenide	500
7783-06-4	Hydrogen sulfide	10,000
13463-40-6	Iron, pentacarbonyl-[Iron carbonyl-$Fe(CO)_5$	2,500
78-82-0	Isobutyronitrile [Propanenitrile, 2-methyl-]	20,000
108-23-6	Isopropyl chloroformate [Carbonochloric acid, 1-methylethyl ester]	15,000
126-98-7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	10,000
74-87-3	Methyl chloride [Methane,chloro-]	10,000
79-22-1	Methyl chloroformate [Carbonochloric acid, methylester]	5,000
60-34-4	Methyl hydrazine [Hydrazine, methyl-]	15,000
624-83-9	Methyl isocyanate [Methane, isocyanato-]	10,000
74-93-1	Methyl mercaptan [Methanethiol]	10,000
556-64-9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	20,000
75-79-6	Methyltrichlorosilane [Silane, trichloromethyl-]	5,000
13463-39-3	Nickel carbonyl	1,000
7697-37-2	Nitric acid (concentration 80% or greater)	15,000
10102-43-9	Nitric oxide [Nitrogen oxide (NO)]	10,000
8014-95-7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide][1]	10,000
79-21-0	Peracetic acid [Ethaneperoxoic acid]	10,000
594-42-3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	10,000
75-44-5	Phosgene [Carbonic dichloride]	500
7803-51-2	Phosphine	5,000

TABLE 3
LIST OF REGULATED TOXIC AND FLAMMABLE SUBSTANCES
FOR PURPOSES OF ACCIDENTAL RELEASE PREVENTION
(44-160)

PART A - REGULATED TOXIC SUBSTANCES

CAS Number	Chemical Name	Threshold Quantity Stored or Present Onsite (lbs.)
10025-87-3	Phosphorus oxychloride [Phosphoryl chloride]	5,000
7719-12-2	Phosphorus trichloride [Phosphoryl chloride]	15,000
110-89-4	Piperidine	15,000
107-12-0	Propionitrile [Propanenitrile]	10,000
109-61-5	Propyl chloroformate [Carbonochloric acid, propylester]	15,000
75-55-8	1,2-Propylenimine [Aziridine, 2-methyl-]	10,000
75-56-9	Propylene oxide [Oxirane, methyl-]	10,000
7446-09-5	Sulfur dioxide (anhydrous)	5,000
7783-60-0	Sulfur tetrafluoride [Sulfur fluoride (SF4)]	2,500
7446-11-9	Sulfur trioxide	10,000
75-74-1	Tetramethyllead [Plumbane, tetramethyl-]	10,000
509-14-8	Tetranitromethane]Methane, tetranitro-]	10,000
7550-45-0	Titanium tetrachloride [Titanium chloride ($TiCl_4$)]	2,500
584-84-9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-][1]	10,000
91-08-7	Toluene 2,6-diisocyanate [Benzene, 1,3-diiosocyanato-2-methyl-][1]	10,000
26471-62-5	Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-isomer) [Benzene, 1,3-diiocyanatomethyl-][1]	10,000
75-77-4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	10,000
108-05-4	Vinyl acetate monomer [Acetic acid ethenyl ester]	15,000

[1] The mixture exemption in **40 CFR Part 68.115(b)(1)** does not apply to the substance.

CAS Number	TABLE 3 LIST OF REGULATED TOXIC AND FLAMMABLE SUBSTANCES FOR PURPOSES OF ACCIDENTAL RELEASE PREVENTION (44-160) --- Part B - Regulated Flammable Substances Chemical Name	Threshold Quantity Stored or Present Onsite (lbs.)
75-07-0	Acetaldehyde	10,000
74-86-2	Acetylene [Ethyne]	10,000
598-73-2	Bromotrifluorethylene [Ethene, bromotrifluoro-]	10,000
106-99-0	1,3-Butadiene	10,000
106-97-8	Butane	10,000
106-98-9	1-Butene	10,000
107-01-7	2-Butene	10,000
25167-67-3	Butene	10,000
590-18-1	2-Butene-cis	10,000
624-64-6	2-Butene-trans [2-Butene]	10,000
463-58-1	Carbon oxysulfide [Carbon oxide sulfide (COS)]	10,000
7791-21-1	Chlorine monoxide [Chlorine oxide]	10,000
557-98-2	2-Chloropropylene [1-Propene, 2-Chloro-]	10,000
590-21-6	1-Chloropropylene [1-Propene, 1-chloro-]	10,000
460-19-5	Cyanogen [Ethanedinitrile]	10,000
75-19-4	Cyclopropane	10,000
4109-96-0	Dichlorosilane [Silane, dichloro-]	10,000
75-37-6	Difluoroethane [Ethane, 1,1-difluoro-]	10,000
124-40-3	Dimethylamine [Methanamine, N-methyl-]	10,000
463-82-1	2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	10,000
84-84-0	Ethane	10,000
107-00-6	Ethyl acetylene [1-Butyne]	10,000
75-04-7	Ethylamine [Ethanamine]	10,000
75-00-3	Ethyl chloride [Ethane, chloro-]	10,000
74-85-1	Ethylene [Ethene]	10,000

CAS Number	TABLE 3 LIST OF REGULATED TOXIC AND FLAMMABLE SUBSTANCES FOR PURPOSES OF ACCIDENTAL RELEASE PREVENTION (44-160) --- Part B - Regulated Flammable Substances Chemical Name	Threshold Quantity Stored or Present Onsite (lbs.)
60-29-7	Ethyl ether [Ethane, 1,1'-oxybis-]	10,000
75-08-1	Ethyl mercaptan [Ethanethiol]	10,000
109-95-5	Ethyl nitrite [Nitrous acid, ethyl ester]	10,000
1333-74-0	Hydrogen	10,000
75-28-5	Isobutane [Propane, 2-methyl]	10,000
78-78-4	Isopentane [Butane, 2-methyl-]	10,000
78-79-5	Isoprene [1,3-Butadiene, 2-methyl-]	10,000
75-31-0	Isopropylamine [2-Propanamine]	10,000
75-29-6	Isopropy.l Chloride [Propane, 2-chloro-]	10,000
74-82-8	Methane	10,000
74-89-5	Methylamine [Methanamine]	10,000
563-45-1	3-Methyl-1-butene	10,000
563-46-2	2-Methyl-1-butene	10,000
115-10-6	Methyl ether [Methane, oxybis-]	10,000
107-31-3	Methyl formate [Formic acid, methyl ester]	10,000
115-11-7	Methylpropene [1-Propene, 2-methyl-]	10,000
504-60-9	1,3-Pentadiene	10,000
109-66-0	Pentane	10,000
109-67-1	1-Pentene	10,000
646-04-8	2-Pentene	10,000
627-20-3	2-Pentene	10,000
463-49-0	Propadiene [1,2-Propadiene]	10,000
74-98-6	Propane	10,000
115-07-1	Propylene [1-Propene]	10,000
74-99-7	Propyne [1-Propyne]	10,000

CAS Number	TABLE 3 LIST OF REGULATED TOXIC AND FLAMMABLE SUBSTANCES FOR PURPOSES OF ACCIDENTAL RELEASE PREVENTION (44-160) --- Part B - Regulated Flammable Substances Chemical Name	Threshold Quantity Stored or Present Onsite (lbs.)
7803-62-5	Silane	10,000
116-14-3	Tetrafluoroethylene [Ethene, tetrafluoro-]	10,000
75-76-3	Tetramethylsilane [Silane, tetramethyl-]	10,000
10025-78-2	Trichlorosilane [Silane, trichloro-]	10,000
79-38-9	Trifluororochloroethylene [Ethene, chlorotrifluoro-]	10,000
75-50-3	Trimethylamine [Methanamine, N,N-dimethyl-]	10,000
689-97-4	Vinyl acetate [1-Buten-3-yne]	10,000
75-01-4	Vinyl chloride [Ethene chloro-1]	10,000
109-92-2	Vinyl ethyl ether [Ethene, ethoxy-]	10,000
75-02-5	Vinyl fluoride [Ethene, fluoro-]	10,000
75-35-4	Vinylidene chloride [Ethene, 1, 1-dichloro-]	10,000
75-38-7	Vinylidene fluoride [Ethene, 1,1,-difluoro-]	10,000
107-25-5	Vinyl methyl ether [Ethene, methoxy-]	10,000

(Table 3 Original Adoption 06/11/02)

TITLE 44 – TABLE 4
MANAGEMENT PRACTICES FOR GASOLINE DISPENSING FACILITIES SUBJECT TO STAGE I VAPOR CONTROLS

If owning or operating	The owner or operator must
1. An existing GDF	Install and operate a vapor balance system on gasoline storage tanks that meets the design criteria in paragraphs (a) through (h). a) All vapor connections and lines on the storage tank must be equipped with closures that seal upon disconnect. b) The vapor line from the gasoline storage tank to the gasoline cargo tank must be vapor-tight, as defined in Section 44-180. c) The vapor balance system must be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer. d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, must be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations. e) If a gauge well separate from the fill tube is used, it must be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in Section 44-240-2. f) Liquid fill connections for all systems must be equipped with vapor-tight caps. g) Pressure/vacuum (PV) vent valves must be installed on the storage tank vent pipes. The pressure specifications for PV vent valves must be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, must not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water. h) The vapor balance system must be capable of meeting the static pressure performance requirement of the following equation: $Pf = 2e^{-500.887/v}$ Where: Pf = Minimum allowable final pressure, inches of water. v = Total ullage affected by the test, gallons. e = Dimensionless constant equal to approximately 2.718. 2 = The initial pressure, inches water.
2. For a new or reconstructed GDF with monthly throughput of 100,000 gallons of gasoline or more, or a new storage tank(s) at an existing GDF with monthly throughput of 100,000 gallons of gasoline or more	Install and operate a dual-point vapor balance system, as defined in Section 44-180, on each affected gasoline storage tank and comply with the design criteria in item 1 of this Table.

TITLE 44 – TABLE 5
MANAGEMENT PRACTICES FOR GASOLINE CARGO TANKS UNLOADING AT GASOLINE

DISPENSING FACILITIES EQUIPPED WITH STAGE I VAPOR CONTROLS	
If owning or operating	**The owner or operator must**
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF with stage I vapor controls unless the following conditions are met: i. All hoses in the vapor balance system are properly connected, ii. The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect, iii. All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight, iv. All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and v. All hatches on the tank truck are closed and securely fastened. vi. The filling of storage tanks at GDF must be limited to unloading by vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 must be carried on the cargo tank.

(Table 4 Original Adoption 01/12/2010)