

## Division 245

### CLEANER AIR OREGON

#### 340-245-0005

#### Purpose and Overview

(1) The purpose of Oregon’s risk-based toxic air contaminant permitting program, known as Cleaner Air Oregon, is to:

- (a) Prioritize and protect the health and well-being of all Oregonians;
- (b) Analyze public health risk due to toxic air contaminant emissions from industrial and commercial sources based on verified science and data;
- (c) Consider similar regulations in other states and jurisdictions and use a science-based, consistent and transparent process for communicating and addressing risks from industrial and commercial emissions of toxic air contaminants, provide regulatory predictability to businesses and the communities they are a part of; and
- (d) Reduce exposure to industrial and commercial toxic air contaminant emissions while supporting an environment where businesses and communities can thrive.

(2) The long-term goal of Cleaner Air Oregon is to achieve a 50% reduction in the number of existing facilities posing either an excess cancer risk of more than 25 in a million or a Hazard Index of more than 1 by the year 2034.

(3) This program supplements requirements in division 244, Oregon Federal Hazardous Air Pollutant Program, and division 246, Oregon State Air Toxics Program. This program includes four levels of risk assessment that allow sources to choose any level of assessment to assess risk.

(4) The term “risk” refers to both of the following:

(a) A calculation of the probability of developing cancer from exposure to toxic air contaminant emissions from a Toxics Emissions Unit (TEU) or an entire source. This risk is expressed in terms of ‘X’ in a million, and means that there may be X additional cases of cancer in a population of one million people, over and above the background rate of cancer.

(b) A calculation of the likelihood of an adverse noncancer health effect from exposure to toxic air contaminant emissions from a TEU or an entire source. This risk is expressed in terms of a Hazard Index of ‘Y’. Below a Hazard Index of 1, adverse health effects are unlikely, and above a Hazard Index of 1, adverse health effects become more likely.

(5) This statement of purpose and overview is an aid to understanding the regulations in OAR 340-245-0010 through 340-245-8050 that follow, and is not for the purpose of regulation or compliance.

- (a) OAR 340-245-0010, Applicability and Jurisdiction, through OAR 340-245-0022, Abbreviations and Acronyms, describes which sources the risk-based toxic air contaminant permitting program applies to and specifies definitions, abbreviations and acronyms to be used in the program.
- (b) OAR 340-245-0030, Submittal Deadlines, provides the deadlines by which owners or operators must submit risk assessment compliance information when required by DEQ under this division. Owners or operators may be allowed more time to submit the more complex assessments.
- (c) OAR 340-245-0040, Emissions Inventory, authorizes DEQ to require a source to submit an inventory of all of its toxic air contaminant emissions and to submit periodic emissions inventory updates.
- (d) OAR 340-245-0050, Source Risk Assessment, includes requirements and procedures for the owners and operators of sources to undertake any of the four levels of risk assessment to demonstrate compliance and determine what requirements apply. The first level of risk assessment is a conservative estimate that is likely to overestimate risk. As the levels progress from Level 1 to 4, the assessments become more complex but also provide increasingly more site-specific and refined estimates of risk.
- (e) OAR 340-245-0060, Toxic Emissions Units, explains how to analyze and regulate TEUs in the context of assessing and regulating risk from an entire source. This rule includes the criteria for a TEU to be designated exempt because it poses very low risk and the requirements for approval of new and modified TEUs, including criteria for determining whether a TEU is exempt or de minimis.
- (f) OAR 340-245-0100, Toxic Air Contaminant Permit Addendums, includes the procedural requirements for obtaining a permit addendum or new operating permit under these rules. A Toxic Air Contaminant Permit Addendum will amend the source's Air Contaminant Discharge Permit or Title V Operating Permit until it can be incorporated into the source's operating permit.
- (g) OAR 340-245-0110, Source Risk Limits, explains how risk or other limits will be set in Toxic Air Contaminant Permit Addendums.
- (h) OAR 340-245-0120, Community Engagement, contains requirements for community engagement meetings and other aspects of community engagement.
- (i) OAR 340-245-0130, Risk Reduction Plan Requirements, specifies how an owner or operator of an existing source must develop a plan to reduce risk if the source risk exceeds the TBACT Level or the Risk Reduction Level. Risk can be reduced using a variety of methods as long as they are enforceable as permit conditions and achieve the required level of risk reduction. Provisions for Voluntary Risk Reduction are included in this rule.
- (j) OAR 340-245-0140, TBACT Plan Requirements, specifies how an owner or operator must develop a plan to reduce risk if the source risk exceeds the applicable TBACT Level. The rule

requires an owner or operator to periodically review TBACT to see if new risk reduction methods become available.

(k) OAR 340-245-0150, Pollution Prevention, explains when and how the owner or operator of a source must perform a pollution prevention analysis.

(l) OAR 340-245-0160, Postponement of Risk Reduction, specifies how an owner or operator of a source may request postponement of risk reduction due to financial hardship.

(m) OAR 340-245-0200, Calculations, explains how the owner or operator of a source must perform the calculations required in this division. This rule explains how calculations should be rounded off to evaluate compliance with Source Risk Limits.

(n) OAR 340-245-0210, Modeling Requirements, contains air quality modeling requirements for owners or operators of sources that are required to perform modeling to assess risk.

(o) OAR 340-245-0220, Source Risk Assessment Requirements, contains the requirements that an owner or operator must use to perform risk assessments.

(p) OAR 340-245-0230, TBACT and TLAER Procedures, explains how the owner or operator of a source must perform, respectively, a Toxics Best Available Control Technology or Toxics Lowest Achievable Emission Rate analysis.

(q) OAR 340-245-0240, Air Monitoring, allows an owner or operator of a source to perform air monitoring to determine actual concentrations of toxic air contaminants in the ambient air around a source.

(r) OAR 340-245-0300 and 340-245-0310, Toxicity Reference Values and Process for Updating Lists of Regulated Toxic Air Contaminants and Their Risk-Based Concentrations, describe the list of authoritative sources that publish toxicity information that the EQC considers, upon the recommendation of DEQ, in consultation with OHA, to determine the RBCs and the process of how the RBCs may be updated.

(s) OAR 340-245-0400, Cleaner Air Oregon Fees, specifies the permitting fees that apply to sources subject to these rules.

(t) OAR 340-245-8000 through 340-245-8050, Tables, include the established Risk Action Levels, lists of the regulated toxic air contaminants, and the values used to develop Risk-Based Concentrations.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## **340-245-0010**

### **Applicability and Jurisdiction**

(1) This division applies in all areas of the state and to all sources, excluding sources located on tribal and federal lands that are not subject to regulation by DEQ.

(2) DEQ may consult with OHA as necessary on the implementation of the rules in this division.

(3) Subject to the requirements in this division and OAR 340-200-0010(3), Lane Regional Air Protection Agency is designated by the EQC to implement the rules in this division within its area of jurisdiction.

(4) The Cleaner Air Oregon rules apply to entire sources as well as to individual TEUs.

(5) The owner or operator of a source subject to this division may also be subject to other air quality rules including but not limited to those listed below, either in relation to its obligations under this division or independent of this division.

(a) OAR 340 division 209 Public Participation;

(b) OAR 340 division 210 Stationary Source Notification Requirements;

(c) OAR 340 division 212 Stationary Source Testing and Monitoring;

(d) OAR 340 division 214 Stationary Source Reporting Requirements;

(e) OAR 340 division 216, Air Contaminant Discharge Permits, including fees;

(f) OAR 340 division 218 Oregon Title V Operating Permits;

(g) OAR 340 division 220 Oregon Title V Operating Permit Fees;

(h) OAR 340 division 224 New Source Review;

(i) OAR 340 division 226 General Emission Standards;

(j) OAR 340 division 244 Oregon Federal Hazardous Air Pollutant Program; and

(k) OAR 340 division 246 Oregon State Air Toxics Program.

(6) Disclaimer.

Compliance with this division does not authorize the emission of any toxic air contaminant in violation of any other federal, state, or local law or regulation, or exempt the owner or operator from any other applicable law or regulation.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155

Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## **340-245-0020**

### **Definitions**

The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply to this division. If the same term is defined in this rule and 340-200-0020 or 340-204-0010, the definition in this rule applies to this division.

- (1) “ABEL” means a computer model developed by EPA that evaluates a corporation's or partnership's ability to afford compliance costs, cleanup costs or civil penalties.
- (2) “Actual toxic air contaminant emission rate” means:
  - (a) For an existing source, the toxic air contaminant emissions rate from the source’s actual production; or
  - (b) For a new or reconstructed source, the toxic air contaminant emissions rate from the reasonably anticipated actual production by the new or reconstructed source.
- (3) “Acute” means evaluated over a 24-hour period.
- (4) “AERMOD” is the EPA approved steady-state air dispersion model that is the primary model used for the analysis of ambient concentrations for regulatory compliance. AERMOD uses a fully developed set of meteorological and terrain data. AERMOD stands for American Meteorological Society/Environmental Protection Agency Regulatory Model.
- (5) “AERSCREEN” is the EPA approved screening dispersion model based on AERMOD. The model uses conservative screening meteorology to produce estimates of "worst-case" concentration estimates that are equal to or greater than the estimates produced by AERMOD. AERSCREEN stands for American Meteorological Society/Environmental Protection Agency Regulatory Screening Model.
- (6) “Area of impact” means the geographic area where risk is determined to be above the applicable Risk Action Level, and is determined by AERMOD or other comparable complex modeling approved by DEQ.
- (7) “Chronic” means evaluated over a one-year period or more.
- (8) “Cleaner Air Oregon rules” means OAR 340-245-0005 through 340-245-8050.
- (9) “Community Engagement Level” means the risk action levels, as identified under that name in OAR 340-245-8010 Table 1, at which DEQ will conduct community engagement. In addition to other forums for communication, DEQ may hold one or more public meetings under OAR

340-245-0120 for a source requesting a Source Risk Limit above that level and require attendance at the meeting by a representative of the owner or operator.

(10) “Construction permit” means a Construction Air Contaminant Discharge Permit under OAR chapter 340, division 216.

(11) “De minimis source” means a source whose excess cancer risk, chronic noncancer risk and acute noncancer risk estimates are each less than or equal to the Source Permit Level in OAR 340-245-8010 Table 1 when calculated based on capacity to emit, as determined under OAR 340-245-0050(7).

(12) “De minimis TEU” means a TEU whose excess cancer risk, chronic noncancer risk and acute noncancer risk estimates are each less than or equal to the Significant TEU Level in OAR 340-245-8010 Table 1, as determined under OAR 340-245-0060(6).

(13) “DEQ notice date” means the date that DEQ sends a notice to an owner or operator that a Source Risk Assessment is required.

(14) “Environmental Justice” has the meaning given by Oregon’s Environmental Justice Task Force, which defines Environmental Justice as equal protection from environmental and health hazards, and meaningful public participation in decisions that affect the environment in which people live, work, learn, practice spirituality, and play. Environmental Justice communities include minority and low-income communities, tribal communities, and other communities traditionally underrepresented in public process. Underrepresented communities may include those with significant populations of youth, the elderly, or those with physical or mental disabilities.

(15) “Excess cancer risk” means the probability of developing cancer from exposure to the toxic air contaminant emissions, over and above the background rate of cancer.

(16) “Exempt source” means a source at which all TEUs are exempt or no TEUs that emit toxic air contaminants are present, as determined under OAR 340-245-0050(6).

(17) “Exempt TEU” means a TEU that is not required to comply with the requirements of this division under OAR 340-245-0060(2).

(18) “Existing source” means a source that:

(a) Began construction before <enter effective date of rules>; or

(b) Submitted all necessary applications to DEQ under OAR 340 divisions 210 or 216 before <enter effective date of rules>, and all such applications were deemed complete by DEQ.

(19) “Existing TEU” means a TEU that is not a new or reconstructed TEU.

(20) “Exposure location” means a location where people live or congregate and will be exposed to a toxic air contaminant present in the air, and thus be the location of an air quality modeling receptor at which toxic air contaminant concentrations and risk are evaluated by exposure type.

Exposure locations are generally identified based on uses allowed land use zoning, except as allowed under OAR 340-245-0210(5)(b) or when DEQ has sufficient information to determine that an area is being used in a manner contrary to its land use zoning. Exposure locations may be subcategorized as follows:

(a) “Chronic exposure location” means a place outside the boundary of a source being modeled for annual average concentrations of a toxic air contaminant, including residential exposure locations and non-residential exposure locations; and

(b) “Acute exposure location” means a place outside the boundary of a source being modeled for 24-hour average concentrations of a toxic air contaminant, and that is either or both:

(A) A chronic exposure location; or

(B) A location where a person may spend several hours of one day, such as but not limited to parks, sports facilities and agricultural fields.

(21) “Fixed capital cost” means the capital needed to purchase and construct all the depreciable components of a source.

(22) “Hazard Index number” means a number equal to the sum of the hazard quotients attributable to toxic air contaminants that have noncancer effects on the same target organs or organ systems.

(23) “Hazard quotient” means a calculated numerical value that is used to evaluate noncancer health risk from exposure to a single toxic air contaminant on the same target organs or organ systems. The calculated numerical value is the ratio of the air concentration of a toxic air contaminant to the noncancer Risk-Based Concentration at which no serious adverse human health effects are expected to occur.

(24) “Immediate Curtailment Level” means the risk action levels, as identified under that name in OAR 340-245-8010 Table 1, at which an existing source will not be permitted to postpone risk reduction under OAR 340-245-0160.

(25) “INDIPAY” means a computer model developed by EPA that evaluates an individual's ability to afford compliance costs, cleanup costs or civil penalties.

(26) “Inhalation Unit Risk” means the upper-bound excess lifetime cancer risk estimated to result from continuous exposure to a toxic air contaminant at a concentration of  $1 \mu\text{g}/\text{m}^3$  in air. The interpretation of inhalation unit risk would be as follows: if unit risk =  $2 \times 10^{-6}$  per  $\mu\text{g}/\text{m}^3$ , 2 excess cancer cases (upper bound estimate) are expected to develop per 1,000,000 people if exposed daily for 70 years to  $1 \mu\text{g}$  of the toxic air contaminant per  $\text{m}^3$  of air.

(27) “Multipathway” means consideration of exposure pathways in addition to inhalation of chemicals in air, such as incidental ingestion and dermal contact with toxic air contaminants migrating to soil and water.

(28) “MUNIPAY” means a computer model developed by EPA that evaluates a municipality's or regional utility's ability to afford compliance costs, cleanup costs or civil penalties.

(29) “New or modified TEU” means that one of the following criteria is met for a TEU:

(a) Approval to construct or operate under OAR 340-210-0205 through 340-210-0250 was not required, and construction began on or after <enter effective date of rules>;

(b) Approval to construct or operate under OAR 340-210-0205 through 340-210-0250 is or was required, and the application was submitted on or after <enter effective date of rules>; or

(c) Approval to construct or operate under OAR 340-210-0205 through 340-210-0250 was required, but was not obtained as required, and construction began on or after the following, as applicable:

(A) For Type 1 changes under OAR 340-210-0225, 10 days before <enter effective date of rules>;

(B) For Type 2 changes under OAR 340-210-0225, 60 days before <enter effective date of rules>;

(C) For Type 3 changes under OAR 340-210-0225, 120 days before <enter effective date of rules>;

(D) For Type 4 changes under OAR 340-210-0225, 240 days before <enter effective date of rules>;

(d) With respect to a modification, approval to construct or operate refers to approval to construct or operate the modification.

(30) “New source” means a source that is not an existing source.

(31) “Nonresident” means persons who regularly spend time at a location but do not reside there. This includes but is not limited to children attending schools and daycare facilities and adults at workplaces.

(32) “Nonresidential exposure location” means a place outside the boundary of a source where a person or persons may reasonably be present for a few hours several days per week, possibly over a period of several years, and that is zoned for uses that do not allow residential use. Such locations include non-residential worker exposure locations and non-residential child exposure locations.

(33) “Notification area” means the area of impact or the area within a distance of 1.5 kilometers of a source, whichever is greater.

(34) “Operating permit” means a General, Basic, Simple or Standard Air Contaminant Discharge Permit under OAR 340 division 216 or an Oregon Title V Operating Permit under OAR 340 division 218.

(35) “Owner or operator” means a person or entity that either has the legal or rightful title to the source subject to the regulation (owner) or that has the legal right to control or operate the source subject to the regulation (operator).

(36) “Percentile low-income” means the percentile of a block group's population in households where the household income is less than or equal to twice the federal poverty level.

(37) “Percentile minority” means the percentile of individuals in a block group who list their racial status as a race other than white alone and/or list their ethnicity as Hispanic or Latino. That is, all people other than non-Hispanic white-alone individuals. The word "alone" in this case indicates that the person is of a single race, not multiracial.

(38) “Permit Denial Level” means the risk action levels, as identified under that name in OAR 340-245-8010 Table 1, at which DEQ will not approve an operating permit for a new source, as provided in OAR 340-245-0100(5).

(39) “Pollution Prevention” means any practice that reduces, eliminates, or prevents pollution at its source.

(40) “Reconstructed source” means a source where an individual project is constructed that, once constructed, increases the hourly capacity of any changed equipment to emit, and where the fixed capital cost of new components exceeds 50 percent of the fixed capital cost that would have been required to construct a comparable new source.

(41) “Residential exposure location” means a place outside the boundary of a source where a person or persons may reasonably be present for most hours of each day over a period of many years, including individual houses and areas that are zoned to allow residential use either exclusively or in conjunction with other uses.

(42) “Risk” means the chance of harmful effects to human health resulting from exposure to a toxic air contaminant. For the purpose of these rules, risk includes three types of risk: cancer, chronic noncancer, and acute noncancer.

(43) “Risk Action Level,” as identified under OAR 340-245-8010 Table 1, means the levels of risk posed by a source or a TEU at which particular requirements of these rules will apply, or the owner or operator will be required to take specific action, depending on the risk posed to the area of impact as described in these rules.

(44) “Risk assessment” means a procedure that identifies toxic air contaminant emissions from a source or a TEU and calculates the potential risk from those emissions. This term specifically refers to the procedures under OAR 340-245-0050(8) through (11) and may include the results of Cleaner Air Oregon Ambient Monitoring as allowed under OAR 340-245-0050(1)(c)(B). The procedures are designated Level 1 through Level 4, respectively. The complexity of a risk assessment increases as the level numeration increases, (i.e., a Level 1 risk assessment is the simplest and a Level 4 risk assessment is the most complex).

(45) “Risk limit” means a condition or requirement in a permit or permit addendum that serves to limit the risk from a source or part of a source. Such conditions or requirements may include, but

are not restricted to, limits on risk from the source or part of a source, limits on emissions of one or more toxic air contaminants, limits on emissions from one or more TEUs, or limits on source operation. A Source Risk Limit established under OAR 340-245-0110 is a risk limit.

(46) “Risk-Based Concentration” or “RBC” means the concentration of a toxic air contaminant listed in OAR 340-245-8040 Table 4 that, for the designated exposure scenario, results in an excess cancer risk of one in one million, or a noncancer hazard quotient of one for either chronic exposure or acute 24-hour exposure.

(47) Risk Reduction Level” means the risk action levels, as identified under that name in OAR 340-245-8010 Table 1, at which the owner or operator of a source will be required to have an approved Risk Reduction Plan under OAR 340-245-0130.

(48) “Sensitive Population” means people with biological traits that may magnify the harmful effects of toxic air contaminant exposures that include individuals undergoing rapid rates of physiological change, such as children, pregnant women and their fetuses, and individuals with impaired physiological conditions, such as elderly persons or persons with existing diseases such as heart disease or asthma. Other sensitive individuals include those with lower levels of protective biological mechanisms due to genetic factors and those with increased exposure rates.

(49) “Significant TEU” means a TEU that poses risk equal to or greater than the Significant TEU Level.

(50) “Significant TEU Level” means the risk action levels, as identified under that name in OAR 340-245-8010 Table 1, below which a TEU will be considered a de minimis TEU under OAR 340-245-0060(6).

(51) “Source Permit Level” means the risk action levels, as identified under that name in OAR 340-245-8010 Table 1, below which a source will be considered a de minimis source under OAR 340-245-0050(7).

(52) “Source risk” means the cumulative risk from all toxic air contaminants emitted by all significant TEUs at a source except that the source risk calculation for a de minimis source will include consideration of all significant and de minimis TEUs.

(53) “Source Risk Assessment” means a toxic air contaminant risk assessment under OAR 340-245-0050(8) through (11) that includes consideration of all significant TEUs at the source, except that a Source Risk Assessment for a de minimis source will include consideration of all significant and de minimis TEUs.

(54) “TBACT Level” means the risk action levels, as identified under that name in OAR 340-245-8010 Table 1, below which an existing source will be considered to be in compliance with these rules without having to further reduce its risk, but above which will require the owner or operator of the existing source to either demonstrate that its TEUs meet TBACT or further reduce risk from the source, under OAR 340-245-0050(1)(c).

(55) “TLAER Level” means the risk action levels, as identified under that name in OAR 340-245-8010 Table 1, below which a new or reconstructed source will be considered to be in

compliance with these rules, but above which will require the owner or operator of the new or reconstructed source to demonstrate that its TEUs meet TLAER, under OAR 340-245-0050(2)(b).

(56) “Toxic air contaminant” means the air pollutants that can cause, or reasonably be anticipated to cause, adverse effects to human health and are listed in OAR 340-245-8020 Table 2.

(57) “Toxic Air Contaminant Permit Addendum” means written authorization that incorporates the Cleaner Air Oregon Program requirements and amends an Air Contaminant Discharge Permit or a Title V Operating Permit or is directly incorporated into the Air Contaminant Discharge Permit or a Title V Operating Permit.

(58) “Toxicity Reference Value” or “TRV” means the following:

(a) For carcinogens, the air concentration corresponding to a one in one million excess cancer risk, calculated by dividing 1 in 1 million (0.000001) by the inhalation unit risk specific to that toxic air contaminant as established by the authoritative body from which it was adopted.

(b) For noncarcinogens, the air concentration above which relevant effects might occur to humans following environmental exposure and below which it is reasonably expected that effects will not occur.

(59) “Toxics Best Available Control Technology” or “TBACT” means a toxic air contaminant emission limitation or emission control measure or measures based on the maximum degree of reduction of toxic air contaminants that is feasible, determined for each source on a case-by-case basis, determined using the procedures in, OAR 340-245-0230.

(60) “Toxics emissions unit” or “TEU” means an emissions unit or one or more individual emissions producing activities that emit or have the potential to emit any toxic air contaminant, as designated under OAR 340-245-0060.

(61) “Toxics Lowest Achievable Emission Rate” or “TLAER” means that rate of emissions which reflects the most stringent emission limitation which is achieved in practice by a source in the same class or category of sources as the source required to perform the TLAER analysis, determined using the procedures in OAR 340-245-0230.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## **340-245-0022**

### **Abbreviations and Acronyms**

(1) “HI” means Hazard Index.

- (2) “IUR” means Inhalation Unit Risk.
- (3) “OHA” means Oregon Health Authority.
- (4) “PTE” means Potential to Emit.
- (5) “RBC” means Risk-Based Concentration.
- (6) “TBACT” means Toxics Best Available Control Technology.
- (7) “TEU” means Toxics Emissions Unit.
- (8) “TLAER” means Toxics Lowest Achievable Emission Rate.
- (9) “TRV” means Toxicity Reference Value.
- (10) “µg/m3” means micrograms per cubic meter.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040,  
468A.050, 468A.070, and 468A.155

### **340-245-0030**

#### **Submittal and Payment Deadlines**

(1) When required to demonstrate compliance with Cleaner Air Oregon under OAR 340-245-0050 or 340-245-0060, the owner or operator of a source must submit to DEQ all information and specific activity fees under OAR 340-216-8030 Table 3 required by, and by the deadlines specified in, subsections (a) through (i), as applicable, except as allowed under section (2).

(a) An emissions inventory that complies with OAR 340-245-0040(3) that will be used in the risk assessment must be submitted to DEQ no later than 30 days after the DEQ notice date. If the owner or operator is submitting source test data to supplement the emissions inventory, the updated emissions inventory must be submitted to DEQ no later than 120 days after the DEQ notice date, and the owner or operator must also submit an updated modeling protocol and Level 3 or Level 4 Source Risk Assessment work plan prior to or concurrent with that submission.

(b) The modeling protocol required under OAR 340-245-0210 must be submitted to DEQ no later than 30 days after receiving DEQ preliminary approval of the updated emissions inventory under subsection (a).

(c) The Level 3 or Level 4 Source Risk Assessment work plan required under OAR 340-245-0220 must be submitted to DEQ no later than 60 days after receiving DEQ preliminary approval of the modeling protocol under subsection (b).

(d) A Level 1 Risk Assessment under OAR 340-245-0050(8) must be submitted to DEQ no later than 60 days after DEQ preliminary approval of the updated emissions inventory required under subsection (a).

(e) A Level 2 Source Risk Assessment under OAR 340-245-0050(9) must be submitted to DEQ no later than 60 days after DEQ preliminary approval of both the updated emissions inventory required under subsection (a) and the modeling protocol required under subsection (b).

(f) A Level 3 Source Risk Assessment under OAR 340-245-0050(10) must be submitted to DEQ no later than 120 days after DEQ preliminary approval of the Level 3 Source Risk Assessment work plan required under subsection (c).

(g) A Level 4 Source Risk Assessment under OAR 340-245-0050(11) must be submitted to DEQ no later than 150 days after DEQ preliminary approval of the Level 4 Source Risk Assessment work plan required under subsection (c).

(h) An Air Monitoring Plan required under OAR 340-245-0240 must be submitted to DEQ no later than 30 days after DEQ preliminary approval of the Level 3 Source Risk Assessment or the Level 4 Source Risk Assessment under subsection (f) or (g), or earlier, if approved by DEQ.

(i) A Risk Reduction Plan under OAR 340-245-0130, that may include a TBACT plan under OAR 340-245-0140, must be submitted to DEQ no later than 120 days after DEQ preliminary approval of the Level 3 Source Risk Assessment or the Level 4 Source Risk Assessment under subsection (f) or (g).

(2) An owner or operator may request additional time to submit any of the required information in subsections (1)(a) through (i) following the procedures in subsection (3)(a).

(3) Upon receipt of a submittal described in section (1), DEQ will review the submittal and if DEQ determines that any additional information, corrections, or updates are required in order to approve the submittal, then DEQ will provide the owner or operator with written request to provide such information by a date certain.

(a) An owner or operator may request an extension of time from the date certain established in section (3) to submit the additional information, corrections or updates but must do so in writing to DEQ not fewer than 15 days prior to the deadline for submittal. DEQ may grant an extension based on the following criteria:

(A) The owner or operator has demonstrated progress in completing the submittal; and

(B) A delay is related to reasonably unforeseen changes in relevant data, analysis, operations or other key parameters necessary to complete the submittal.

(b) If the owner or operator's submittal is not approvable, or if the additional information or corrections requested by DEQ are not provided in writing by the deadline provided, then in addition to any other remedies available, DEQ may:

(A) Modify the information provided by the owner or operator, approve it as modified, and the owner or operator must pay the document modification fee in OAR 340-216-8030 Table 3; or

(B) Inform the owner or operator of the deficiency, and provide the owner or operator with a revised deadline to submit the needed information.

(4) Recordkeeping.

The owner or operator of a source that provides DEQ with any information related to a risk assessment completed under this rule must retain all of its records related to the risk assessment for five years from the date the information is submitted to DEQ.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## **340-245-0040**

### **Emissions Inventory**

(1) Individual emissions inventory for risk assessment.

For the purpose of assessing risk, DEQ may require the owner or operator of any permitted or unpermitted source to submit an emissions inventory of all toxic air contaminants listed in OAR 340-245-8020 Table 2, upon written request. The owner or operator must submit the emissions inventory within 90 days of its receipt of the written request, unless DEQ allows additional time under OAR 340-245-0030.

(2) Periodic state-wide emissions inventory.

(a)(A) Once every three years, DEQ may require the owners and operators of all permitted and unpermitted sources that have previously submitted emissions inventories to submit an updated toxic air contaminant emissions inventory. The reporting year will generally correspond with EPA's National Air Toxics Assessment reporting year (2020, 2023, 2026, etc.).

(B) DEQ may also require the owner or operator of a source that has previously submitted an emissions inventory to submit an updated toxic air contaminant emissions inventory if DEQ discovers or learns additional information that indicates that the source's emissions may have changed since it completed its most recent emissions inventory.

(b)(A) If DEQ requires an owner or operator to provide an updated inventory, DEQ will notify the owner or operator in writing; and

(B) The owner or operator must submit its updated emissions inventory electronically to DEQ not later than 60 days after the date DEQ sends the written notice, unless DEQ allows additional time under OAR 340-245-0030.

(3) Emissions inventory requirements.

(a) When required to submit an emissions inventory, the owner or operator must submit:

(A) A list of TEUs that emit toxic air contaminants, including exempt TEUs. The list of TEUs that emit toxic air contaminants should not be limited to what is listed in a source's operating permit but should include all potential sources of toxic air contaminant emissions;

(B) A list of production, fuel and material usage rates for each TEU for the following:

(i) The actual usage in the calendar year preceding the year DEQ's written request is made;

(ii) Potential usage in the projected maximum year. Use the projected maximum annual production and process rates that are used to calculate the Source Risk Limit; and

(iii) Potential usage in the projected maximum day. Use knowledge of process to estimate the maximum 24-hour production and process rates.

(C) Material balance information using Safety Data Sheets (formerly Material Safety Data Sheets) and Technical Data Sheets, as applicable, for solvent or coating materials used in any process; and

(D) Operating schedule (hours/day, days/year, seasonal variability) for the source, including schedule for each TEU, if different, for the calendar year preceding the year DEQ's written request is made and the projected maximum year.

(b) Sources with Title V, Standard and Simple Air Contaminant Discharge Permits, and unpermitted sources when DEQ so requires, must also submit:

(A) A list of all toxic air contaminants emitted by the source; and

(B) The amount of each toxic air contaminant emitted from each TEU, with the emission factors used or material balance information, as appropriate, for the following:

(i) The calendar year preceding the year DEQ's written request is made;

(ii) The projected maximum year. Use the projected maximum annual production and process rates that are used to calculate the Source Risk Limit, and include startup and shutdown emissions; and

(iii) The projected maximum day. Use knowledge of process to estimate the maximum 24-hour emissions, and include startup and shutdown emissions.

(C) Emissions reported as mass emitted per 24 hours for each toxic air contaminant that has an acute RBC, and as mass emitted per year for each toxic air contaminant that has an annual RBC or has no RBC; and

(D) The name of each resource used to obtain toxic air contaminant emission factors or methodologies used to estimate emissions (e.g., AP-42 or WebFIRE, California Air Toxic Emission Factors, etc.).

(4) Review of toxic air contaminant emissions inventory reports.

DEQ shall use the procedures in OAR 340-245-0030 to review any emissions inventory in determining its completeness, approving extensions, and requesting additional information, if needed.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0050**

#### **Source Risk Assessment**

(1) Existing source.

(a) When notified in writing by DEQ, the owner or operator of an existing source with an operating permit must perform a risk assessment.

(b) The owner or operator must obtain approval under this division before the New Source Review/Prevention of Significant Deterioration permit is issued, if the owner or operator has not previously been notified in writing by DEQ that they must perform a risk assessment under this rule and they propose to modify the existing source in such a way that would trigger New Source Review/Prevention of Significant Deterioration under OAR 340 division 224, then the owner or operator.

(c) The owner or operator must first attempt to demonstrate that the source is exempt, de minimis, or that risk from the source is less than or equal to the TBACT Level following the procedure under paragraph (A). If the owner or operator is not able to do so, then the owner or operator must comply either with paragraph (B) or (C).

(A) Risk assessment. The owner or operator must either demonstrate that the source is an exempt source by following the procedure in section (6), a de minimis source by demonstrating that all TEUs are de minimis by following the procedure in section (7), or that the risk from the source is less than or equal to TBACT Level. The owner or operator of a source that is not an exempt source must:

(i) Assess risk from the source using any of the Level 1 through 4 Source Risk Assessment procedures in sections (8) through (11);

(ii) Assess risk from the source using the actual toxic air contaminant emission rate or emissions based on a requested PTE limit to calculate toxic air contaminant emission rates;

- (iii) Follow the applicable calculation procedures under OAR 340-245-0200; and
- (iv) Apply for a Toxic Air Contaminant Permit Addendum under OAR 340-245-0100 with Source Risk Limits or an application that otherwise modifies the existing permit in a manner that ensures that the risk from the source will be less than or equal to the TBACT Level.

(B) Air monitoring.

The owner or operator of a source may use air monitoring information to estimate risk from the source after completing and submitting to DEQ a Level 3 or 4 Source Risk Assessment and complying with the applicable requirements of OAR 340-245-0240 before beginning air monitoring.

(i) If risk from the source, based on the Level 3 or Level 4 risk assessment required under paragraph (B) exceeds a cancer risk of 200 in 1 million or a hazard index of 20, then the owner or operator must not delay submission of an application for a Toxics Air Contaminant Permit Addendum and subsequent implementation of the approved addendum, including implementation of the approved Risk Reduction Plan prepared under OAR 340-246-0130.

(ii) If risk from the source, based on the Level 3 or Level 4 risk assessment required under paragraph (B) does not exceed a cancer risk of 200 in 1 million or a hazard index of 20:

(I) The owner or operator is not required to submit an application for a Toxics Air Contaminant Permit Addendum until after the air monitoring is complete; and

(II) DEQ shall issue a Toxics Air Contaminant Permit Addendum addressing only monitoring requirements, including a reporting and compliance schedule for implementing the Air Monitoring Plan required under OAR 340-245-0240,

(iii) Upon completion and DEQ approval of the air monitoring, the owner or operator must use the air monitoring results, in association with other relevant data, if applicable, to determine compliance requirements under paragraph (c)(A) or (C) and apply for a Toxic Air Contaminant Permit Addendum modification.

(C) Risk Reduction Plan. The owner or operator may demonstrate compliance under subparagraph (i), (ii), (iii), or (iv), whichever is applicable:

(i) If the owner or operator is required to make physical, operational or process changes to reduce the risk from the source to less than or equal to the TBACT Level, then the owner or operator must apply for a Toxic Air Contaminant Permit Addendum under OAR 340-245-0100 that includes a Risk Reduction Plan under OAR 340-245-0130 that ensures that the risk will be less than or equal to the TBACT Level;

(ii) If the risk from the source is greater than the TBACT Level and all significant TEUs meet TBACT under OAR 340-245-0230, the owner or operator must apply for a Toxic Air Contaminant Permit Addendum under OAR 340-245-0100 that includes Source Risk Limits that ensures the risk from the source will be less than or equal to the Risk Reduction Level;

(iii) If the risk from the source is greater than the TBACT Level and not all significant TEUs meet TBACT under OAR 340-245-0230, the owner or operator must either reduce risk below the TBACT level as required in (i), or apply for a Toxic Air Contaminant Permit Addendum under OAR 340-245-0100 with a TBACT Plan under OAR 340-245-0140 to install TBACT on all significant TEUs and with Source Risk Limits that ensure that the risk from the source will be less than or equal to the Risk Reduction Level; or

(iv) If the risk from the source is greater than the Risk Reduction Level, the owner or operator must apply for a Toxic Air Contaminant Permit Addendum under OAR 340-245-0100 that includes additional risk reduction measures, under a Risk Reduction Plan under OAR 340-245-0130, and Source Risk Limits that ensure that the risk from the source will be less than or equal to the Risk Reduction Level.

(2) New or reconstructed source.

(a) The owner or operator of a proposed new or reconstructed source that is required to obtain a Simple, Standard or Construction Air Contaminant Discharge Permit also must perform a risk assessment and demonstrate compliance with this division before such a permit may be issued. DEQ shall incorporate the toxic air contaminant permit conditions directly into the new Simple, Standard or Construction Air Contaminant Discharge Permit and shall not issue a Toxic Air Contaminant Permit Addendum.

(b) For a new or reconstructed source, the owner or operator must first assess risk to demonstrate that the source is exempt, de minimis, or that the risk from the source is less than or equal to the TLAER Level following the procedure under paragraph (A). If the owner or operator is not able to do so, then the owner or operator must comply with paragraph (B).

(A) Risk assessment. The owner or operator must demonstrate that the source is an exempt source by following the procedure in section (6), or a de minimis source by demonstrating that all TEUs are de minimis TEUs by following the procedure in section (7), or demonstrate that the risk from the source is less than or equal to the TLAER Level. The owner or operator of a source that is not an exempt source must:

(i) Assess risk from the source using any of the Level 1 through 4 Source Risk Assessment procedures in sections (8) through (11);

(ii) Assess risk from the source using the reasonably anticipated actual production rate or the requested PTE limit to calculate toxic air contaminant emission rates;

(iii) Follow the applicable calculation procedures under OAR 340-245-0200; and

(iv) Apply for a construction or operating permit with Source Risk Limits that ensure that the risk from the source will be less than or equal to the TLAER Level.

(B) Risk Limit. If the risk from the source is greater than the TLAER Level and all significant TEUs meet TLAER under OAR 340-245-0230, the owner or operator must request a construction or operating permit with Source Risk Limits that ensure that the risk from the source will be less than or equal to the Permit Denial Level.

(3) Other sources.

When notified in writing by DEQ, the owner or operator of a source that is not subject to sections (1) or (2) must perform a risk assessment using any of the Level 1 through 4 Source Risk Assessment procedures in sections (8) through (11). DEQ may notify such a source after determining through an investigation or file review that the source may emit toxic air contaminants in quantities that may cause the source's risk to exceed the Source Permit Level.

(4) A Source Risk Assessment must include all TEUs at the source, and for which an application was submitted under OAR chapter 340 division 210 or 216, as of the date that the owner or operator submits an application under OAR 340-245-0100 for a Toxic Air Contaminant Permit Addendum or for a new operating permit that complies with this division, except as allowed under section (5).

(5)(a) Except when required by section (7), exempt and de minimis TEUs may be omitted from a Source Risk Assessment.

(b) Risk from toxic air contaminants emitted solely from the combustion of natural gas, propane, liquefied petroleum gas, pretreated landfill gas and pretreated digester gas must be calculated and reported in the risk assessment, but the risk from such toxic air contaminants may be treated as follows:

(A) At each exposure location, risk may be reported as two values:

(i) The risk from toxic air contaminants emitted solely from the combustion of natural gas, propane, liquefied petroleum gas, pretreated landfill gas and pretreated digester gas; and

(ii) The risk from all other toxic air contaminant emissions.

(B) At each exposure location, the risk from toxic air contaminants emitted solely from the proper combustion of natural gas, propane, liquefied petroleum gas, pretreated landfill gas and pretreated digester gas may be excluded from the total risk for the purpose of determining compliance with Risk Action Levels and may be omitted from any requirements determined under a Risk Reduction Plan under OAR 340-245-0130.

(C) Notwithstanding paragraphs (A) and (B), an owner or operator must include in its Source Risk Assessment any toxic air contaminants that are emitted from materials that are contacted by the flame or combustion gases from the combustion of natural gas, propane, liquefied petroleum gas, pretreated landfill gas or pretreated digester gas. Materials that may emit toxic air contaminants include but are not limited to VOCs combusted in thermal oxidizers and materials dried in direct-contact dryers.

(6) Exempt Source Determination.

(a) To be approved as an exempt source, the owner or operator must submit a Toxic Air Contaminant Permit Addendum application to DEQ that demonstrates that all TEUs at the source are exempt TEUs and meet the criteria under OAR 340-245-0060(2); and

(b) Upon receipt of a submittal from an owner or operator under subsection (a), DEQ will:

(A) Review the submissions and, if approved, write a memo to the DEQ file for the source summarizing the assessment that will be incorporated into the review report of a permitted source upon permit renewal;

(B) Follow the Category I public notice procedure in OAR chapter 340, division 209, prior to approving or denying the request to be considered an exempt source; and

(C) Keep records of exempt in a database for the emissions inventory and future communication if RBCs change or other information about risk is received such that toxic air contaminant emissions must be reevaluated.

(7) De minimis Source Determination.

(a) To be approved as a de minimis source, the owner or operator must assess toxic air contaminant emissions at the capacity to emit of each TEU, including de minimis TEUs, and submit a Toxic Air Contaminant Permit Addendum application to DEQ that demonstrates that the source does not exceed the Source Permit Level.

(b) Upon receipt of a submittal from an owner or operator under subsection (a), DEQ will:

(A) Review the submissions and, if approved, either:

(i) Write a memo to the DEQ file for the source summarizing the assessment that will be incorporated into the review report of a permitted source upon permit renewal; or

(ii) If the owner or operator is required to operate and maintain control devices to remain a de minimis source, an existing Title V or Air Contaminant Discharge Permit or a Toxic Air Contaminant Permit Addendum issued under OAR 340-245-0100 may be required to monitor such control devices;

(B) Follow the Category I public notice procedure in OAR chapter 340, division 209, prior to approving or denying the request to be considered a de minimis source; and

(C) Keep records of de minimis sources in a database for the emissions inventory and future communication if RBCs change and toxic air contaminant emissions must be reevaluated.

(8) Level 1 Source Risk Assessment.

The owner or operator must assess toxic air contaminant emissions by using the Level 1 Risk Assessment Tool in OAR 340-245-8050 Table 5 to determine toxic air contaminant concentrations at the maximum chronic and acute exposure locations approved by DEQ under OAR 340-245-0220.

(a) Restrictions on use of the Level 1 Risk Assessment Tool.

A Level 1 Source Risk Assessment will not be approved if:

(A) The source is located near elevated terrain that DEQ determines could invalidate the assumptions used to develop the Level 1 Risk Assessment Tool.

(B) The source has multiple stacks and does not assess its stacks individually, or does not combine the stack emissions into a single modeled stack.

(C) The source has fugitive emissions. The Level 1 procedure is not appropriate for fugitive emissions, such as might be characterized as a volume or area source. The owner or operator of a source with fugitive emissions must use Level 2, Level 3 or Level 4 for their risk analysis.

(b) The owner or operator must follow the directions for using the Level 1 Risk Assessment Tool described in OAR 340-245-0200(2).

(c) DEQ will follow the Category II public notice procedure in OAR chapter 340, division 209 for issuance of a Toxic Air Contaminant Permit Addendum based on the Level 1 Risk Assessment Tool.

(9) Level 2 Source Risk Assessment.

The owner or operator must assess toxic air contaminant emissions by modeling emissions to determine air concentrations at exposure locations approved by DEQ using AERSCREEN or another substantially equivalent screening model approved by DEQ. DEQ will follow the Category II public notice procedure in OAR chapter 340, division 209 for issuance of a Toxic Air Contaminant Permit Addendum based on the Level 2 Source Risk Assessment.

(10) Level 3 Source Risk Assessment.

The owner or operator must assess toxic air contaminant emissions by submitting a work plan, conducting modeling, and performing a risk assessment as specified in OAR 340-245-0220. The owner or operator must use AERMOD or another substantially equivalent complex model approved by DEQ to determine air concentrations at approved exposure locations. DEQ will follow the Category III public notice procedure in OAR chapter 340, division 209 for issuance of a Toxic Air Contaminant Permit Addendum based on the Level 3 Source Risk Assessment.

(11) Level 4 Source Risk Assessment.

The owner or operator must assess toxic air contaminant emissions by submitting a work plan, conducting modeling, and performing a risk assessment as specified in OAR 340-245-0220. The owner or operator must use AERMOD or another substantially equivalent complex model approved by DEQ to determine air concentrations at approved exposure locations. The risk assessment must include toxicity and bioaccumulation assessments, and may include proposed modifications to default exposure assumptions as specified in OAR 340-245-0220. DEQ will follow the Category III public notice procedure in OAR chapter 340, division 209 for issuance of a Toxic Air Contaminant Permit Addendum based on the Level 4 Source Risk Assessment.

(12) The owner or operator of a source may be required to conduct and submit an additional multipathway evaluation for any level of Source Risk Assessment if DEQ determines that airborne deposition of chemicals could be important for scenarios not included in the default

multipathway adjustment factor assumptions used in the original Source Risk Assessment for the source.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0060**

#### **Toxic Emissions Units**

##### (1) TEU Designation.

An owner or operator must designate TEUs the same as the emissions units listed in a source's operating or construction permit unless they request and DEQ approves a different designation. The request for a different TEU designation must be compatible with the following:

- (a) TEUs may not be designated in such a way as to avoid the requirements of this division;
- (b) An individual emissions producing activity that exhausts through multiple stacks or openings must be designated as an individual TEU;
- (c) Where multiple emissions-producing activities exhaust through a common opening, exhaust stack or emissions control device, each emissions producing activity may be considered a single TEU; and
- (d) The list of TEUs should not be limited to what is listed in a source's operating permit but should include all potential processes and activities that emit toxic air contaminants.

##### (2) Exempt TEUs.

A TEU is an exempt TEU if:

- (a) The TEU is listed in the definition of categorically insignificant activity in OAR 340-200-0020, excluding subsections (a) and (m) of that definition; or
- (b) The owner or operator of the TEU has demonstrated to DEQ's satisfaction in an approved risk assessment that the TEU is not likely to emit toxic air contaminants. The demonstration may include any information the owner or operator considers relevant, including but not limited to:
  - (A) The chemical make-up of the materials handled or processed in the TEU; the type of handling or processing in the TEU, including whether or not the handling or processing is likely to alter the chemical make-up of the materials; and the chemical make-up or likely chemical make-up of the materials emitted by the TEU; and
  - (B) Any toxic air contaminant present in materials emitted are only trace contaminants that are not intentionally present in the materials handled, processed or produced in the TEU, and are

present in such small amounts that they would typically not be listed in a Safety Data Sheet, product data sheet or equivalent document.

(3) New or modified TEU requirements.

The owner or operator of an existing source that has previously submitted a Toxic Air Contaminant Permit Addendum application required under OAR 340-245-0050, and that proposes to construct a new or modified TEU, must comply with this rule before beginning construction of the new or modified TEU.

(4) The owner or operator must request approval for a new or modified TEU by following one of the procedures in sections (5) through (7), and must pay to DEQ all applicable specific activity fees under OAR 340-216-8030 Table 3 prior to DEQ consideration of any approval request under those sections.

(5) New or modified exempt TEUs.

(a) The owner or operator may request designation of a new or modified TEU as exempt by demonstrating that the new or modified TEU will be an exempt TEU under section (2) and submitting that information in a Toxic Air Contaminant Permit Addendum application to DEQ.

(b) The owner or operator may proceed with the construction or modification 10 days after DEQ receives the notification required in subsection (a) or on the date that DEQ approves the proposed construction in writing, whichever is sooner, unless DEQ notifies the owner or operator in writing that the proposed construction or modification is not approved or is not approvable as an exempt TEU.

(c) If the owner or operator has been issued a Toxic Air Contaminant Permit Addendum and will be constructing a new or modified exempt TEU, an application to revise its Toxic Air Contaminant Permit Addendum or operating permit is not required. The new or modified exempt TEU will be incorporated into the operating permit the next time the operating permit is modified, either when requested by the owner or operator, when required by DEQ, or when renewed.

(6) New or modified de minimis TEUs.

(a) The owner or operator may request approval of a new or modified de minimis TEU by:

(A) Demonstrating that the risk from the new or modified TEU for all toxic air contaminants emitted that are listed in OAR 340-245-8040 Table 4 will be no more than the Significant TEU Level. The owner or operator must make this demonstration by applying and complying with one of the Source Risk Assessment procedures in OAR 340-245-0050(8) through (11), for the TEU; and

(B) Submitting a Toxic Air Contaminant Permit Addendum application to DEQ, including all information necessary to verify that the risk from the new or modified TEU for all toxic air contaminants listed in OAR 340-245-8040 Table 4 is no more than the Significant TEU Level.

(b) The owner or operator may not begin construction of the proposed de minimis TEU prior to its receipt from DEQ of a new or modified Toxic Air Contaminant Permit Addendum that approves the de minimis TEU.

(c) The owner or operator of a source that has previously applied for, but has not yet been issued a Toxic Air Contaminant Permit Addendum and that requests approval a new or modified de minimis TEU, must submit an updated Toxic Air Contaminant Permit Addendum application:

(A) For all new de minimis TEUs; or

(B) For modified de minimis TEUs that require any additional permit conditions.

(d) The owner or operator of a source that has been issued a Toxic Air Contaminant Permit Addendum and that will be constructing a new or modified de minimis TEU under this section, must submit an application for a modified Toxic Air Contaminant Permit Addendum for:

(A) Approval of all new de minimis TEUs; and

(B) Approval of a modified de minimis TEU, if the TEU requires additional permit conditions. If the modified de minimis TEU does not require any additional permit conditions, an application to revise the Toxic Air Contaminant Permit Addendum is not required, but documentation of the de minimis TEU must be added to the source's operating permit or Toxic Air Contaminant Permit Addendum the next time the operating permit is renewed or modified or the Toxic Air Contaminant Permit Addendum is modified, either when requested by the owner or operator or required by DEQ.

(7) New or modified significant TEUs.

(a) The owner or operator of a proposed new or modified significant TEU must submit a revised Source Risk Assessment that includes assessment of the new or modified significant TEU, including all of the following information:

(A) Information necessary to assess the risk from the new or modified TEU for all toxic air contaminants listed in OAR 340-245-8040 Table 4 using any Source Risk Assessment procedure, Level 1 through Level 4, under OAR 340-245-0050(8) through (11). The owner or operator may add the risk from the new or modified TEU to prior results from the latest Source Risk Assessment rather than updating the entire Source Risk Assessment for the whole source. The owner or operator must receive DEQ approval of the modeling protocol under OAR 340-245-0210 and the risk assessment work plan under OAR 340-245-0220 before performing the risk assessment, whichever is applicable.

(B) Information necessary to verify that the new or modified TEU has either TLAER, if the source risk is greater than the TLAER Level for a new or reconstructed source, or TBACT, if the source risk is greater than the TBACT Level for an existing source. If a TLAER or TBACT determination under OAR 340-245-0230 is required, the TLAER or TBACT determination must be approved by DEQ.

(b) The owner or operator of a source that has previously applied for, but has not yet been issued a Toxic Air Contaminant Permit Addendum, must submit an updated Toxic Air Contaminant Permit Addendum application:

(A) For all new significant TEUs;

(B) If the modified significant TEU requires any additional permit conditions; or

(C) If the risk from the new or modified significant TEU increases the source risk to greater than the risk calculation that was included in the Toxic Air Contaminant Permit Addendum application.

(c) The owner or operator of a source that has been issued a Toxic Air Contaminant Permit Addendum must:

(A) Submit an application for a modified Toxic Air Contaminant Permit Addendum or operating permit:

(i) For all new significant TEUs;

(ii) If the modified significant TEU requires any additional permit conditions; or

(iii) If the risk from the new or modified significant TEU increases the source risk to greater than the source's currently permitted level; and

(B) If the new or modified significant TEU does not require any additional permit conditions or does not increase the risk to greater than the source's currently permitted level, an application to revise the Toxic Air Contaminant Permit Addendum is not required. Other permitting requirements continue to apply, and documentation of the significant TEU must be added to the source's operating permit or Toxic Air Contaminant Permit Addendum the next time the operating permit is renewed or modified or the Toxic Air Contaminant Permit Addendum is modified, either when requested by the owner or operator or required by DEQ.

(d) The owner or operator of a proposed new or modified significant TEU may not begin construction of the proposed new or modified significant TEU prior to its receipt from DEQ of a Toxic Air Contaminant Permit Addendum that approves the new or modified significant TEU.

(e) The owner or operator of a source that was previously determined to be an exempt source under OAR 340-245-0050(6) but the source will no longer be an exempt source after the new or modified significant TEU is constructed, must follow the procedures in subsections (a) through (c) above. Such an owner or operator may not operate the significant TEU prior to its receipt from DEQ of a new or modified Toxic Air Contaminant Permit Addendum or an operating permit modification that approves the significant TEU.

(f) In conjunction with seeking authorization for the construction of a new or modified significant TEU, if the owner or operator makes simultaneous changes to existing TEUs or processes other than the new or modified significant TEU for the purpose of reducing source risk, all such changes must be identified, described, approved by DEQ, and implementation

completed on or before the date that the new or modified significant TEU begins operating and the risk reduction must be enforceable through a permit condition.

(8) DEQ will not approve an application for a Toxic Air Contaminant Permit Addendum required under this rule for a new or modified TEU if:

(a) The TEU does not comply with this rule; or

(b) The source does not comply with OAR 340-245-0050, if required.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0100**

#### **Toxic Air Contaminant Permit Addendums**

(1) Purpose and Intent.

(a) A Toxic Air Contaminant Permit Addendum is used to:

(A) Authorize owners or operators of a source to construct or modify TEUs that discharge toxic air contaminants;

(B) Authorize owners or operators of a source to discharge toxic air contaminants subject to enforceable permit requirements, limitations, and conditions, including to:

(i) Establish enforceable Source Risk Limits for the purpose of limiting the risk from toxic air contaminants from a source;

(ii) Approve, modify and implement a Risk Reduction Plan, which may include a TBACT plan, and require the owner or operator of a source to implement the ongoing requirements; and

(ii) Approve, modify and implement a Voluntary Risk Reduction Plan, which may include a TBACT plan, and require the owner or operator of a source to implement the ongoing requirements;

(C) Approve, modify and implement an Air Monitoring Plan; and

(D) Approve postponement of risk reduction.

(b) A Toxic Air Contaminant Permit Addendum:

(A) Is issued to an owner or operator of a source as an addendum to the owner's or operator's operating or construction permit for the source. If the toxic air contaminant permit conditions are

incorporated into the modified or renewed operating permit or a new construction permit, then an addendum is not required.

(B) May not be issued to an owner or operator before the source has obtained an operating or construction permit; and

(C) May not be issued in lieu of an otherwise required operating or construction permit.

(2) A Toxic Air Contaminant Permit Addendum amends a source's operating permit, but if the terms of such addendum and the operating permit contain any limit or restriction applicable to the same emissions or processes, then the owner or operator must comply with the more stringent limit or requirement.

(3) Application Requirements.

Any owner or operator requesting a new operating permit or a new or modified Toxic Air Contaminant Permit Addendum must submit an application that includes all of the information specified in this section as well as the relevant information required under OAR 340-245-0050, except that DEQ may waive the requirement to provide certain information that DEQ deems unnecessary or duplicative. The owner or operator must submit all required information by the submittal deadlines in OAR 340-245-0030, certified by a responsible official of truth, accuracy, and completeness. The owner or operator must submit to DEQ at least two paper copies and one electronic copy of the application.

(a) Identifying information, including the name of the company that owns or operates the source, the owner's or operator's mailing address, the source address, and the nature of business, name and phone number of the primary contact at the source, permit number, and SIC or NAICS code of the source;

(b) The name, phone number, and email address of a local person employed by the owner or operator who is responsible for compliance with the permit;

(c) The name of a person authorized to receive requests for data and information;

(d) A description of the source's production processes and a flow chart of each process;

(e) A plot plan showing the location and height of air contaminant emissions locations at the source. The plot plan must also indicate the nearest residential and commercial property;

(f) The type and quantity of fuels used by the source;

(g) The amount and type of each toxic air contaminant emitted by the source in terms of maximum 24-hour, or monthly if 24-hour is not available, and annual average rates, showing calculation procedures for the previous calendar year;

- (h) An estimate of the amount and type of each toxic air contaminant emitted by the source in terms of maximum 24-hour, or monthly if 24-hour is not available, and annual average rates, showing calculation procedures at the level used to determine the Source Risk Limits;
  - (i) Estimated efficiency of air pollution control devices in place at the source under present or anticipated operating conditions;
  - (j) Where the operation or maintenance of air pollution control devices and emission reduction processes can be adjusted or varied from the highest reasonable efficiency and effectiveness, information necessary for DEQ to establish operational and maintenance requirements in OAR 340-226-0120(1) and (2);
  - (k) The risk assessment required under OAR 340-245-0050;
  - (l) For sources whose risk is greater than or equal to the TBACT Level before any additional risk reduction measures are included to further reduce risk, a pollution prevention analysis that meets the requirements of OAR 340-245-0150;
  - (m) Incorporate by reference information required for a Risk Reduction Plan under OAR 340-245-0130, if applicable;
  - (n) Incorporate by reference information required for a TBACT plan under OAR 340-245-0140, if applicable;
  - (o) Incorporate by reference information required for postponement of risk reduction under OAR 340-245-0160, if applicable;
  - (p) Incorporate by reference information required for air monitoring under OAR 340-245-0240, if applicable; and
  - (q) Any other information requested by DEQ.
- (4) Application review and processing.
- (a) DEQ shall use the procedures in OAR 340-245-0030 to review an application submitted under this rule to determine its completeness, approving extensions, and requesting additional information, if needed.
  - (b) If DEQ determines that a Toxic Air Contaminant Permit Addendum is not required during preliminary review of an application or at any time during application processing, DEQ will so notify the applicant in writing.
  - (c) After DEQ considers an application complete, if DEQ is prepared to issue a Toxic Air Contaminant Permit Addendum, then DEQ will prepare a draft Toxic Air Contaminant Permit Addendum and a review report for public notice. DEQ will consider holding a public meeting to inform the community about the application and receive feedback.

(d) DEQ will provide a copy of the draft Toxic Air Contaminant Permit Addendum to the owner or operator and will provide the owner or operator 14 days to review and provide feedback to DEQ regarding the draft Toxic Air Contaminant Permit Addendum. DEQ may provide a longer review time at its discretion. Following consideration of comments from the owner or operator, DEQ may revise the draft Toxic Air Contaminant Permit Addendum before placing it on public notice.

(e) Public notice requirements for Toxic Air Contaminant Permit Addendum issuance.

(A) The minimum public notice procedures for issuance of a Toxic Air Contaminant Permit Addendum are listed in the applicable sections of OAR 340-245-0050. DEQ may enhance the public notice procedures at its discretion.

(B) Public comments received under subsection (A) that are relevant to the draft permit addendum and within the scope of DEQ's legal authority must be considered in DEQ's determination of whether to deny, revise, or issue a Toxic Air Contaminant Permit Addendum.

(5) DEQ may not issue a Toxic Air Contaminant Permit Addendum or a new operating permit for a source if:

(a) The owner or operator of a proposed new or reconstructed source does not comply with OAR 340-245-0050, 340-245-0060 and this rule, as applicable;

(b) DEQ determines that the emissions from a proposed new or reconstructed source would result in risk at any exposure location that will exceed a Permit Denial Level; or

(c) DEQ determines that the emissions from an existing source would result in risk at any exposure location that will exceed the Immediate Curtailment Risk Action Level.

(6) Toxic Air Contaminant Permit Addendum content.

A Toxic Air Contaminant Permit Addendum must:

(a) Identify the owner or operator and the source that the Toxic Air Contaminant Permit Addendum is issued for;

(b) Include a list of all TEUs that are subject to a Toxic Air Contaminant Permit Addendum, including all exempt TEUs and de minimis TEUs;

(c) Include permit conditions that contain Source Risk Limits to implement the requirements specified in OAR 340-245-0110;

(d) Establish or revise any operating limits or conditions necessary under this division, including annual or short-term toxic air contaminant emission limits, conditions to limit risk from TEUs or the entire source, and operational limits for toxic air contaminants, including limits or levels that are equipment specific, process specific, or that apply to the entire source;

- (e) Include testing, monitoring, recordkeeping, and reporting requirements sufficient to determine compliance with all limits or requirements in the Toxic Air Contaminant Permit Addendum, as necessary;
- (f) Include a requirement to obtain the applicable construction approval under OAR division 210 or 216, if applicable;
- (g) Include complaint line information by providing an email address or phone number to the source's owner or operator, or its representative;
- (h) At the discretion and option of the owner or operator, a description of the owner's or operator's plans to continue its community engagement activities after DEQ has completed its notification requirements. These activities could take the form of newsletters or source tours;
- (i) Include other limits and requirements as necessary to ensure compliance with the Cleaner Air Oregon rules;
- (j) Include a compliance schedule to ensure compliance or progress toward compliance with the requirements in the Cleaner Air Oregon rules, as necessary;
- (k) Include a condition that requires the owner or operator to notify DEQ within 60 days of a change in zoning within 1.5 kilometers of the source if zoning results in a change to the source's risk;
- (l) If applicable, include a condition that requires the owner or operator to submit documentation showing the excluded zoned areas continue to not be used in the manner allowed by the land use zoning applicable to the area; and
- (m) Include a review report that sets forth the legal and factual basis for the permit conditions, including references to the applicable regulatory provisions, lists the source's most recent risk assessment results, and which level of risk assessment was used to perform the risk assessment.

(7) Procedures for Toxic Air Contaminant Permit Addendum Modification.

If the Toxic Air Contaminant Permit Addendum has not been incorporated into the operating permit, the following procedures must be followed for modifications to existing Toxic Air Contaminant Permit Addendums. Otherwise, the owner or operator must apply for an operating permit modification under OAR 340 division 216 or 218 for the following modifications:

- (a) Modifications initiated by the owner or operator.

An owner or operator of any source must submit an application for modification before making any of the following applicable changes:

- (A) Change the source name or ownership;
- (B) Construct a new or modify a TEU that is not exempt or de minimis, except as allowed under OAR 340-245-0060(7)(c)(B);

(C) Modify an established Source Risk Limit;

(D) Request an extension to a compliance date in a Toxic Air Contaminant Permit Addendum. The owner or operator must submit the application for extension at least 180 days before the compliance date specified in the current Toxic Air Contaminant Permit Addendum. Criteria for granting any extension include the following:

(i) The owner or operator has a clear plan towards meeting the Risk Action Level;

(ii) The owner or operator has made demonstrated progress towards meeting the requirements that are the subject of the extension request; and

(iii) The owner or operator has submitted documentation proving that the delay is due to reasonably unforeseeable events beyond their control;

(E) Relocate a TEU or stack by more than 10 meters;

(F) Modify any physical modeling parameter, such as fence lines, building heights, or stack heights, that affects the results of the risk assessment;

(G) Terminate postponement of risk reductions;

(H) Modify the risk assessment because the zoning in the area has changed in a way that could increase risk;

(I) Modify air monitoring requirements; and

(J) Revise or update the approved risk assessment. An owner or operator must promptly submit a corrected risk assessment upon becoming aware of the need for corrections or additional information. This requirement is in addition to, and not in lieu of, a DEQ decision to commence an enforcement action against such owner or operator for such violation, as DEQ determines appropriate under the circumstances.

(b) Modifications required by DEQ.

When notified in writing by DEQ, the owner or operator of any source must update or correct the previous Source Risk Assessment and submit an application for a modification if:

(A) DEQ determines through an investigation or file review that a previous Source Risk Assessment may contain errors or omissions that, when corrected, could increase the risk;

(B) An RBC in OAR 340-245-8040 Table 4 has been added or lowered that would substantially impact risk, implementation, or effectiveness of the Risk Reduction Plan;

(C) Risk assessment procedures change that would substantially impact risk, implementation, or effectiveness of the Risk Reduction Plan; and

(D) Results of air monitoring done by the owner or operator show higher risk than any risk determined by the risk assessment.

(c) To modify a Toxic Air Contaminant Permit Addendum, the owner or operator must submit a complete application for a modification of the Toxic Air Contaminant Permit Addendum, and pay the applicable addendum modification fees in subsection (f). The owner or operator must submit the application for modification to DEQ no more than 120 days after becoming aware of the need for a Toxic Air Contaminant Permit Addendum modification, except as required under paragraph (a)(D), or after receipt of notification from DEQ. Upon request by the owner or operator, DEQ may allow the owner or operator an additional 60 days to submit the updated or corrected risk assessment based on the following criteria:

(A) The owner or operator has demonstrated progress in completing a risk assessment; and

(B) A delay is related to reasonably unforeseen changes in or lack of relevant data, changes in operations or other key parameters necessary to perform the risk assessment.

(d) The owner or operator must submit the necessary information required for the Toxic Air Contaminant Permit Addendum modification under section (3). Updating or correcting a risk assessment must be done in consultation with DEQ and must follow the applicable Source Risk Assessment requirements in OAR 340-245-0050.

(e) When DEQ receives an application to modify a Toxic Air Contaminant Permit Addendum, DEQ will use the following public notice procedures:

(A) Category III public notice procedures in OAR 340 division 209 if the change will:

(i) Increase source risk;

(ii) Extend any compliance dates in a compliance schedule established in the permit; or

(iii) Significantly change proposed control methods in a Risk Reduction Plan.

(B) Category I public notice procedures in OAR 340 division 209 for changes that do not increase the level of risk that the Risk Reduction Plan is intended to achieve.

(C) Category II public notice procedures in OAR 340 division 209 for all other types of permit changes not described in paragraphs (A) and (B).

(f) The fee for a Toxic Air Contaminant Permit Addendum modification is:

(A) The Complex Technical Modification fee under OAR 340-216-8020 Table Part 4 for modifications under paragraph (e)(A);

(B) The Basic Technical Modification fee under OAR 340-216-8020 Table 2 Part 4 for modifications under paragraph (e)(B); or

(C) The Moderate Technical Modification fee under OAR 340-216-8020 Table 2 Part 4 for modifications under paragraph (e)(C).

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155

Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0110**

#### **Source Risk Limits**

(1) The purpose of the Source Risk Limits rule is to limit the chronic and acute risk from a source. DEQ will establish Source Risk Limits based on the results of the risk assessment performed by the owner or operator or DEQ. DEQ may establish Source Risk Limits separately for each of the following risk categories: chronic cancer risk, chronic noncancer risk and acute noncancer risk.

(a) Source Risk Limits that are based on chronic risk apply on a rolling 12 consecutive month basis and limit the source's chronic risk or annual PTE, as applicable.

(b) Source Risk Limits that are based on acute risk apply on a 24-hour basis and limit the source's acute risk or 24-hour PTE, as applicable.

(c) DEQ may establish multiple chronic or acute noncancer Source Risk Limits for an individual source on a case-by-case basis to account for different target organs or organ systems.

(2) Establishing Source Risk Limits. For new and existing sources whose risk is greater than the Source Permit Level, DEQ may set Source Risk Limits at any of the following levels used in the risk assessment required under OAR 340-245-0050:

(a) The source's PTE in its current operating permit;

(b) A PTE or risk limit that is lower than the source's PTE in its current operating permit, if requested by the owner or operator; or

(c) The actual toxic air contaminant emission rate of the source, if requested by the owner or operator.

(3) Owners or operators may choose the type of risk limit that will be included in their Toxic Air Contaminant Permit Addendum or operating permit. The owner or operator may choose a limit on emissions, a limit on source operation, or a limit on risk.

(a) Source Risk Limits will generally be based on emissions, operational parameters or production limits that serve to maintain risk below the Source Risk Limits.

(b) Source Risk Limits may be expressed in terms of risk, such as X per million for excess cancer risk or Hazard Index of Y, where X and Y indicate a numerical value.

(4) If a compliance schedule to reduce risk is included in the Toxic Air Contaminant Permit Addendum or operating permit for an existing source, the owner or operator must comply with

all the requirements in the compliance schedule and maintain proposed risk below the Immediate Curtailment Level, if applicable.

(5) Determining Compliance with Source Risk Limits.

(a) Frequency.

The owner or operator must demonstrate compliance with the Source Risk Limit on the frequency specified in the Toxic Air Contaminant Permit Addendum as follows:

(A) Cancer risk, using the annual actual toxic air contaminant emission rates of the source that have cancer RBCs determined on a 12-rolling month basis. Compliance must be demonstrated monthly, unless less frequent compliance demonstrations are specified in a source's Toxic Air Contaminant Permit Addendum;

(B) Chronic noncancer risk for each different chronic noncancer risk limit for each target organ or organ systems, using the annual actual emission rates of the toxic air contaminants emitted by the source that contribute to that chronic noncancer risk result determined on a 12-rolling month basis. Compliance must be demonstrated monthly, unless less frequent compliance demonstrations are specified in a source's Toxic Air Contaminant Permit Addendum;

(C) Acute noncancer risk for each different acute noncancer risk limit for each target organ or organ systems, using the maximum 24-hour actual emission rates of the toxic air contaminants emitted by the source that contribute to that acute noncancer risk result determined for the preceding month. Compliance must be demonstrated at least monthly, unless more frequent compliance demonstrations are specified in a source's Toxic Air Contaminant Permit Addendum;

(b) Compliance demonstration method.

(A) If the Source Risk Limit is based on emissions, production, or other limits on source operation, the owner or operator must monitor emissions, production, or other limits on source operation, using one or more of the following methods:

(i) Continuous emissions monitors;

(ii) Material balance calculations;

(iii) Emissions calculations using approved emission factors and process information;

(iv) Production or process parameter monitoring; and

(v) Other methods approved by DEQ.

(B) If the Source Risk Limit is based on risk, the owner or operator must estimate ongoing risk in a manner approved in writing by DEQ.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155

Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0120**

#### **Community Engagement**

(1) The purpose of community engagement is to notify the community affected by a source's toxic air contaminant emissions and provide a mechanism for the affected community to provide input to DEQ's work with sources called into the program. The requirements of this rule are intended to ensure that consideration of environmental justice is appropriately emphasized throughout implementation of Cleaner Air Oregon.

(2) Public meetings.

(a) DEQ may hold one or more public meetings for new, reconstructed and existing sources if the owner or operator requests Source Risk Limits greater than any of the Community Engagement Levels except as allowed by OAR 340-245-0130(8). DEQ, in consultation with members of the impacted community, may determine that another forum for communication, in lieu of or in addition to a public meeting, is appropriate, as listed in section (3).

(b) If DEQ does not hold a public meeting, DEQ will provide written notice to the impacted community that the owner or operator has requested Source Risk Limits greater than any of the Community Engagement Levels except as allowed by OAR 340-245-0130(8).

(c) DEQ may also hold one or more public meetings for any other reporting, monitoring or permitting action associated with activities under this division.

(d) In planning and holding public meetings, DEQ will consider:

(A) A location that is Americans with Disabilities Act compliant, is convenient for community members to attend and can be accessed by public transportation, if available;

(B) The timing of the meeting, scheduled in a manner that is convenient to the majority of community attendees;

(C) Whether translation services and childcare are necessary, and may provide such services if needed; and

(D) Best practices for public and community meetings as identified in resources published by the State of Oregon Environmental Justice Task Force and OHA.

(e) DEQ will provide a 30 day notice of any public meeting by sending an email through GovDelivery or mailing written notice via U.S. mail to the impacted community.

(f) When DEQ determines to hold a public meeting, then such meeting is required by these rules, and at least one representative of the owner or operator must appear at the public meeting. The owner or operator must pay the applicable community engagement fee specified in OAR 340-216-8030 Table 3.

(3) Other forums for communication.

Other forums for communication may include any or all of the following:

(a) Notifying the community of information and reports submitted by an applicant related to Cleaner Air Oregon by sending an email through GovDelivery or mailing written notice via U.S. mail;

(b) Posting all information and reports submitted by an applicant on the DEQ website;

(c) Attending community forums or other local meetings when requested by the community. The representative of the owner or operator is not required to attend this type of meeting;

(d) Electronic meeting forums such as webinars or conference calls; and

(e) Other activities as determined necessary by DEQ.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## **340-245-0130**

### **Risk Reduction Plan Requirements**

(1) A Risk Reduction Plan for an existing source must:

(a) Reduce risk to less than or equal to the Risk Reduction Level within the specified period of time;

(b) Reduce risk to less than or equal to the TBACT Level within the specified period of time;

(c) Reduce risk as much as possible through a TBACT plan under OAR 340-245-0140 for all significant TEUs for a source that is not able to reduce risk to less than or equal to the TBACT Level; or

(d) Reduce risk to less than or equal to the Community Engagement Level if the owner or operator voluntarily agrees to do so.

(2) An existing source that employs TBACT on all significant TEUs will not be required to undertake additional risk reduction measures to limit or reduce toxic air contaminant emissions unless the source risk is above the Risk Reduction Level.

(3) Risk Reduction Plan Requirements.

The owner or operator of an existing source that is requesting approval of a Risk Reduction Plan must submit to DEQ the following:

(a) Two air contaminant emissions inventories:

(A) An emissions inventory for the source before implementation of the proposed Risk Reduction Plan measures; and

(B) An emissions inventory for the source after implementation of the proposed Risk Reduction Plan measures;

(b) The results of a Source Risk Assessment performed under OAR 340-245-0050(10) or (11) including the risk before and after full implementation of the Risk Reduction Plan;

(c) Identification of each TEU for which an action will be taken to reduce risk;

(d) For each TEU identified in subsection (c), a description of how risk will be reduced; and

(e) A schedule for implementing the proposed Risk Reduction Plan measures within the time frames allowed under section (6), if not sooner. The schedule must specify:

(A) The dates by which the source will implement the proposed Risk Reduction Plan measures;

(B) The dates for submittal of periodic reports showing progress toward completion of the proposed Risk Reduction Plan measures. Progress reports should include achievement of significant milestones, such as but not limited to dates of equipment delivery and construction progress; and

(C) The dates for submittal of applications for permits to construct or modify, not to exceed 90 days after approval of the Risk Reduction Plan, or other time period approved by DEQ; and

(f) The proposed Source Risk Limits.

(4) If the owner or operator is not able to reduce risk to less than or equal to the TBACT Level through the Risk Reduction Plan, the owner or operator must submit a TBACT plan required under OAR 340-245-0140 as part of its Risk Reduction Plan.

(5) The owner or operator may request a postponement of risk reduction under OAR 340-245-0160.

(6) Risk Reduction Plan implementation deadlines.

(a) The owner or operator of a source that has either or both a cancer or chronic noncancer source risk that is greater than the TBACT Level must implement the Risk Reduction Plan within two years from the effective date or at an earlier time as required by DEQ in the Toxic Air Contaminant Permit Addendum. If additional time is needed to implement the risk reduction

measures, the owner or operator must apply for a permit modification as specified under OAR 340-245-0100(7).

(A) DEQ may allow the owner or operator not more than two additional years beyond the initial two years to implement the required risk reduction measures and achieve required risk reductions if the cancer or chronic noncancer source risk is greater than the TBACT level but less than the Risk Reduction Level; or

(B) DEQ may allow the owner or operator not more than three additional years beyond the initial two years to implement the required risk reduction measures and achieve required risk reductions if the cancer or chronic noncancer source risk is greater than the Risk Reduction Level.

(b) The owner or operator of a source that has acute risk that is greater than the TBACT Level must implement the Risk Reduction Plan on the following timeline:

(A) Within 1 month from the effective date of the Toxic Air Contaminant Permit Addendum; or

(B) DEQ may allow the owner or operator up to six months after the effective date of the Toxic Air Contaminant Permit Addendum based on health factors including but not limited to severity of acute health effect, degree of scientific certainty, and averaging time of the acute TRV used to develop the RBC.

(7) Reporting Requirements.

(a) The owner or operator of a source that has been issued a Toxic Air Contaminant Permit Addendum that includes a Risk Reduction Plan must submit twice-annual progress reports to DEQ describing the source's progress in reducing toxic air contaminant emissions and risk achieved by the Risk Reduction Plan, including risk reductions due to TBACT implementation. The progress reports are due to DEQ on or before February 15 and July 31 of each year the Risk Reduction Plan is in effect, or other dates specified in the Toxic Air Contaminant Permit Addendum. The progress reports must include at a minimum all of the following:

(A) The increments of progress achieved in implementing the risk reduction measures specified in the Risk Reduction Plan;

(B) A schedule indicating dates for future increments of progress;

(C) A description of any increases or decreases in emissions of toxic air contaminants that have occurred at the source since approval of the Risk Reduction Plan;

(D) An estimate of when all Risk Reduction Plan elements will be completed; and

(E) Dates for demonstrating the effectiveness of risk reduction measures.

(b) The owner or operator must submit a Risk Reduction Plan completion report to DEQ no more than 60 days after completing all Risk Reduction Plan requirements. The report must include:

- (A) The final increments of progress achieved in fully implementing the risk reduction measures specified in the Risk Reduction Plan and the date the final increments of progress were achieved;
  - (B) A summary of the actions taken to implement the Reduction Plan;
  - (C) The results of the demonstration of the effectiveness of the Risk Reduction Plan measures; and
  - (D) The remaining source risk after completion of all risk reduction measures.
- (8) Voluntary Risk Reductions.

If requested by the owner or operator, DEQ will not conduct community engagement meetings, as described in OAR 340-245-0120(2), for the owner or operator of an existing source whose risk is less than the TBACT Level and that agrees to voluntarily reduce risk below the Community Engagement Level.

(a) Voluntary Risk Reduction Plan.

(A) An owner or operator of a source that has risk greater than the Community Engagement Level and less than the TBACT Level may submit for approval a Voluntary Risk Reduction Plan to reduce risk to below the Community Engagement Level after being called into Cleaner Air Oregon.

(B) The Voluntary Risk Reduction Plan must follow the requirements and procedures in this rule.

(b) The owner or operator must fully implement the Voluntary Risk Reduction Plan within two years from the effective date of the Toxic Air Contaminant Permit Addendum, or at an earlier time as required by DEQ. If additional time is needed to implement the risk reduction measures, the owner or operator must apply for a permit modification as specified under OAR 340-245-0100(7).

(c) DEQ may allow the owner or operator not more than two additional years beyond the initial two years to implement the required risk reduction measures and achieve the voluntary risk reductions.

(d) If the owner or operator does not implement the Voluntary Risk Reduction Plan within the approved time, DEQ may initiate the community engagement requirements under OAR 340-245-0120.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## **340-245-0140**

### **TBACT Plan Requirements**

(1) A TBACT plan describes how an existing source will meet TBACT for all significant TEUs within the specified period of time if the source is not able or otherwise chooses not to reduce risk to less than or equal to the TBACT Level. The TBACT plan is part of the Risk Reduction Plan.

(2) TBACT Plan Requirements.

The owner or operator of a source must also submit a proposed TBACT Plan, which must include the following:

(a) A demonstration that all significant TEUs at the source meet TBACT under OAR 340-245-0230; or

(b) A demonstration that all significant TEUs at the source will meet TBACT when the plan is fully implemented under OAR 340-245-0230. For each TEU, provide:

(A) The TBACT evaluation under OAR 340-245-0230; and

(B) A schedule for implementing the proposed TBACT plan measures within the time frames allowed under section (3), if not sooner.

(3) TBACT plan implementation deadlines.

(a)(A) The owner or operator of a source that has either or both a cancer or chronic noncancer source risk that is greater than the TBACT Level and does not have TBACT applied on all significant TEUs must implement the TBACT plan within two years from the effective date of the Toxic Air Contaminant Permit Addendum, or at an earlier time as required by DEQ. If additional time is needed to implement the risk reduction measures, the owner or operator must apply for a permit modification as specified under OAR 340-245-0100(7).

(B) DEQ may allow the owner or operator not more than two additional years beyond the initial two years to implement the required risk reduction measures and achieve required risk reductions if the cancer or chronic noncancer source risk is greater than the TBACT level but less than the Risk Reduction Level.

(b) The owner or operator of a source that has acute risk that is greater than the TBACT Level must implement the TBACT plan, as incorporated into the Risk Reduction Plan on the following timeline:

(A) Within 1 month from the effective date of the Toxic Air Contaminant Permit Addendum; or

(B) DEQ may allow the owner or operator up to six months after the effective date of the Toxic Air Contaminant Permit Addendum based on health factors including but not limited to severity

of acute health effect, degree of scientific certainty, and averaging time of the acute TRV used to develop the RBC.

(4) Periodic TBACT Review.

The owner or operator must perform periodic TBACT reviews and submit periodic TBACT updates as follows:

(a) For all significant TEUs for which the most recent TBACT determination concluded that no toxic air contaminant emission limits or additional control measure was required, submit an annual TBACT update report to DEQ with each annual report required by the Toxic Air Contaminant Permit Addendum; and

(b) For all significant TEUs that currently meet TBACT through toxic air contaminant emission limits or control measures, the owner or operator must submit TBACT update reports to DEQ upon the following:

(A) The owner or operator learns of new technology that could reduce toxic air contaminant emissions beyond currently implemented TBACT and further reduce cancer risk;

(B) EPA performs an update of an applicable Risk and Technology Review required by the Federal Clean Air Act after the application of a NESHAP that applies to the source or a TEU; or

(C) DEQ requests an updated TBACT report.

(c) The TBACT update reports must include the following:

(A) A review identifying all new or improved emissions control measures, if any, that can apply to any of the significant TEUs at the source, whether they are currently controlled or not; and

(B) For each new or improved emissions control measure identified, a statement whether or not the owner or operator intends to apply the control measure;

(i) If the owner or operator intends to apply the control measure, then the owner or operator must provide an estimated date by which the control measure will be applied; or

(ii) If the owner or operator does not intend to apply the control method, then the owner or operator must provide justification for not applying it, including at a minimum, a review following the procedures of OAR 340-245-0230(3).

(d) The requirement to perform periodic TBACT reviews and submit periodic TBACT update reports under subsections (a) and (b) must continue until such time as the risk from the source no longer exceeds the applicable TBACT Risk Level. If a TEU is equipped with new or improved control measures under this section, future TBACT reviews must still include review of new or improved control measures for that TEU.

(e) When a new or improved emissions control measure is identified under subsection (c), DEQ must review the control measure and any justification provided by the owner or operator for not

applying the control measure, and will make a preliminary determination with regard to whether or not the control measure must be applied.

(A) If DEQ's preliminary determination is that the control measure must be applied, DEQ shall provide the owner or operator with notice and opportunity to provide input on a final determination. In making the final determination, DEQ shall take into consideration the following:

- (i) The remaining service life of any existing emission control system that would be replaced;
- (ii) The relative effectiveness of the new or improved control measure to reduce the source risk as compared to the risk using the existing control measure;
- (iii) The cost of installation and operation, including the cost of removing any existing control measure; and
- (iv) Any other factors that DEQ finds are relevant.

(B) If DEQ's final determination is that the control measure must be applied, DEQ shall:

- (i) After consultation with the owner or operator, determine the date by which the control measure must be applied; and
- (ii) Determine a new Source Risk Limit based on information on the amount of toxic air contaminants removed by the control measure and issue a modified Toxic Air Contaminant Permit Addendum.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0150**

#### **Pollution Prevention**

- (1) The owner or operator of a source whose risk is greater than or equal to the TBACT Level, before any additional risk reduction measures are included to further reduce risk, is required to do an analysis of pollution prevention measures.
- (2) The owner or operator must evaluate pollution prevention measures that may reduce or eliminate emissions of toxic air contaminants. If the owner or operator chooses to implement any such measures, the owner or operator must include that information in the Toxic Air Contaminant Permit Addendum Application.
- (3) An analysis of pollution prevention measures must include the following:

(a) A detailed review of source and process level data related to the toxic air contaminants of concern including:

(A) A process flow diagram with all the steps through which material inputs pass to form a product and the point at which toxics enter the system and leave the production unit, with identification of the inputs and outputs relevant to generation of toxic air contaminants; and

(B) Materials accounting which quantifies the total chemical inputs and outputs of a particular toxic air contaminant in a process, and ultimately, source-wide usage;

(b) The identification of pollution prevention options that includes measures focused on the toxic air contaminants, by-products (outputs not in products) and processes that have been mapped and quantified. The categories of toxic air contaminant pollution prevention options include the following:

(A) Chemical input alternatives evaluated for hazard characteristics, technical performance, cost and availability, and exposure;

(B) Product reformulation;

(C) Production process redesign or modification;

(D) Production process modernization;

(E) Improved operations and maintenance;

(F) In-process recycling; and

(G) Inventory management controls;

(c) The technical screening and feasibility evaluation of toxic air contaminant pollution prevention options include the following:

(A) Performance needs for the application, process or product that contains the toxic air contaminant for which the pollution prevention option is being sought;

(B) Identification of the option as favorable with respect to performance by other industries;

(C) Availability as “off-the-shelf” technology with demonstrated successful use;

(D) Compatibility of the option with existing process technology;

(E) Effects on product quality and compliance with customer specifications; and

(F) Long term viability of the option; and

(d) The economic feasibility evaluation of toxic air contaminant pollution prevention options to determine all of the costs and savings associated with implementing the option, include the following:

- (A) Direct costs or savings (e.g., capital investment, operations and maintenance, annual chemical costs vs. per unit cost);
- (B) Indirect costs or savings (e.g., reduced worker health and safety costs, compliance cost reductions, and lower waste and by-product management costs);
- (C) Effects on future liability (e.g., liability insurance premium reductions);
- (D) Non-monetized costs or benefits (e.g., improved company public image and community relations); and
- (E) New revenue sources associated with this option (e.g., will there be new markets for modified products).

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0160**

#### **Postponement of Risk Reduction**

- (1) Postponement of risk reduction is only available for existing sources and cannot be approved if risk is over the Immediate Curtailment Risk Action Levels. An owner or operator may request postponement of risk reduction for one five year period. After that five year period, the owner or operator must reduce risk in accordance with OAR 340-245-0130 or 340-245-0140.
- (2) An owner or operator of an existing source requesting postponement of the requirement to meet TBACT or make other physical, operational or process changes to reduce risk for one or more significant TEUs must submit a request to DEQ that includes the following:
  - (a) Information proving inability to pay;
  - (b) The TEUs for which the postponement is being requested;
  - (c) A determination of:
    - (A) The TBACT or other physical, operational or process changes that could be made to reduce risk; and
    - (B) The cost to install, operate and maintain each risk reduction measure identified in paragraph (A) for which a postponement is being requested.
  - (d) A description of any other emission reduction measures, including a pollution prevention analysis under OAR 340-245-0150, that will be taken to reduce risk in lieu of implementing each emission reduction measure identified in paragraph (A) for which a postponement is being requested and when those emission reduction measures will be implemented; and

(e) The number of employees at the source.

(3) An owner or operator must include a postponement request in the source's Toxic Air Contaminant Permit Addendum application under OAR 340-245-0100.

(4) The owner or operator making a request to postpone risk reduction:

(a) Must use the applicable U.S. Environmental Protection Agency's ABEL, INDIPAY or MUNIPAY computer models to evaluate financial condition or ability to pay the full cost of meeting TBACT in accordance with EPA standards for determining ability to pay. DEQ may generally determine that the owner or operator is able to pay if the model results show that the owner or operator has a 70% probability of being able to absorb the cost of installing TBACT or other physical, operational or process changes that could be made to reduce risk; and

(b) Is required to provide DEQ, on a confidential basis if the information meets the requirements of OAR 340-214-0130, audited financial information about the source. The information must include federal tax returns for the most recent three years, the most current year's audited financial statement, a signed auditor's statement provided by a certified public accountant, the source's latest income statement and balance sheet, and a completed DEQ form Statement of Financial Condition for Businesses or Statement of Financial Condition for Individuals. The information will be held as confidential to the extent consistent with the Oregon Public Records Law, ORS 192.311 through 192.478.

(5) Negotiation and consultation.

(a) DEQ may negotiate alternatives to the postponement with the owner or operator, and may consider such alternatives in the final determination regarding the postponement; and

(b) DEQ will consult with OHA, local elected officials, local Indian governing bodies, and relevant state and federal agencies that have jurisdiction in the notification area before making a final determination regarding the postponement.

(6) DEQ may grant a request for postponement of risk reduction in full or in part and may impose any conditions, implementation of reasonable alternative measures, and implementation schedules that DEQ determines are appropriate based on the following:

(a) Evaluate the following at exposure locations that will exceed an applicable Risk Action Level:

(A) The presence of sensitive populations;

(B) The percentile of persons with low income, minority persons, and residents under 5 years old; and

(C) Total population resident within one kilometer of the source; and

(b) Consider both the potential economic harm to the business of requiring that the identified risk reductions be made against the burden of risk to the exposed population if the risk reductions are postponed.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## **340-245-0200**

### **Calculations**

(1) When a risk assessment is required under this rule, the risk assessment must consider the toxic air contaminants and the Risk-Based Concentrations listed in OAR 340-245-8040 Table 4 to assess cancer and noncancer risk.

(2) Directions for the Level 1 Risk Assessment Tool.

(a) When required under OAR 340-245-0050, an owner or operator must calculate a separate sum of risk ratios for each of the following categories: excess cancer risk and chronic noncancer risk for the maximum chronic exposure locations, and acute noncancer risk for maximum acute exposure locations.

(b) When making this calculation, the owner or operator must use the following emission rates for each toxic air contaminant at the maximum exposure location:

(A) The actual toxic air contaminant emission rate or the emission rate based on requested PTE or risk limits, as appropriate;

(B) For excess cancer risk and chronic noncancer risk, the average annual emission rates; and

(C) For acute noncancer risk, the maximum 24-hour emission rates.

(c) The owner or operator must perform each of the following calculations in paragraphs (A) and (B), except as allowed in paragraph (C):

(A) For cancer risk and chronic noncancer risk:

(i) For each TEU, use the stack height and distance to the maximum exposure locations to identify the appropriate dispersion factor under OAR 340-245-8050 Table 5A;

(ii) For each TEU and each toxic air contaminant emitted from the TEU, multiply the annual emission rate by the dispersion factor identified under subparagraph (i) to calculate an air concentration at the maximum exposure locations;

(iii) For each TEU and each toxic air contaminant emitted from the TEU, divide the air concentration of the toxic air contaminant calculated under subparagraph (ii) by the appropriate

RBC of that toxic air contaminant under OAR 340-245-8040 Table 4 to calculate the excess cancer risk or chronic noncancer risk from that toxic air contaminant at the maximum exposure locations;

(iv) For each TEU, add up the risk from each toxic air contaminant calculated under subparagraph (iii) to calculate the total excess cancer risk or chronic noncancer risk from that TEU at the maximum exposure locations; and

(v) For all TEUs, add up all of the risks calculated under subparagraph (iv) to obtain the total excess cancer risk in 1 million or the total chronic noncancer hazard index for the entire source. For chronic noncancer risk, hazard indices may be calculated by noncancer target organ or organ systems in consultation with DEQ.

(B) For acute noncancer risk:

(i) For each TEU, use the stack height and distance to the maximum exposure location to identify the appropriate dispersion factor under OAR 340-245-8050 Table 5B;

(ii) For each TEU and each toxic air contaminant emitted from the TEU, multiply the maximum 24-hour emission rate by the dispersion factor identified under subparagraph (i) to calculate an air concentration at the maximum exposure location;

(iii) For each TEU and each toxic air contaminant emitted from the TEU, divide the air concentration of the toxic air contaminant calculated under subparagraph (ii) by the acute RBC for that toxic air contaminant under OAR 340-245-8040 Table 4 to calculate the acute risk from that toxic air contaminant at the maximum exposure location;

(iv) For each TEU, add up the risk from each toxic air contaminant calculated under subparagraph (iii) to calculate the total acute noncancer risk from that TEU at the maximum exposure location; and

(v) For all TEUs, add up all of the risks calculated under subparagraph (iv) to obtain the total acute noncancer Hazard Index for the entire source. Hazard Indices may be calculated by noncancer target organ or organ systems in consultation with DEQ.

(C) Instead of using stack height and distance to the maximum exposure location to obtain the appropriate dispersion factor under OAR 340-245-8050 Table 5A or 6B, the owner or operator may instead use, as a default, the most conservative dispersion factor, assuming a stack height of 5 meters and an exposure location of 50 meters, which is listed in the upper-left corner of each table. Using these default dispersion factors will result in conservatively high estimates of risk. If the risks calculated using these default dispersion factors are less than or equal to the applicable Source Risk Action Levels, the owner or operator may choose to use the risks calculated in this manner to show compliance with the Source Risk Action Levels.

(3) Sum of Risk Ratios calculation procedure for Level 2, 3 and 4 Source Risk Assessments.

(a) When required under OAR 340-245-0050, an owner or operator must calculate a separate sum of risk ratio for each of the following risk categories: excess cancer risk, chronic noncancer

risk, and acute noncancer risk for the maximum residential, non-residential worker and non-residential child exposure locations;

(b) When making this calculation, the owner or operator must use the following concentrations for each toxic air contaminant at the maximum exposure locations:

(A) For excess cancer risk and chronic noncancer risk, the annual average concentrations must be used; and

(B) For acute noncancer risk, the maximum 24-hour average concentrations must be used.

(c) The owner or operator must perform the following calculations for each of the risk categories listed in subsection (a) and using the concentrations in subsection (b):

(A) For each TEU, divide the modeled concentration of each toxic air contaminant at the maximum exposure location by each of the appropriate RBCs of that toxic air contaminant in OAR 340-245-8040 Table 4, ensuring that the concentration is expressed in micrograms per cubic meter;

(B) For each TEU, add up the ratios calculated under paragraph (A) for each toxic air contaminant;

(C) For all TEUs, add up all of the risks calculated under paragraph (B) to obtain the total excess cancer risk in 1 million or the total chronic noncancer hazard index for the entire source; and

(D) For chronic noncancer risk, hazard indices may be calculated by noncancer target organ or organ systems in consultation with DEQ.

(4) Significant figures and rounding. When a source risk is calculated for comparison to a Risk Action Level and Source Permit Level:

(a) The final risk calculation must be rounded off as follows:

(A) For comparison to De Minimis Levels, round off to one decimal place; and

(B) For comparison to Risk Action Levels, round off to a whole number; and

(b) Round up if the last figure to be rounded off is 5 or greater, otherwise round down.

(5) Non-detect source test results. Owners and operators of sources must use the DEQ Source Sampling Manual, OAR 340-200-0035, reference test methods for measuring toxic air contaminants and must use the criteria listed in the DEQ Source Sampling Manual to determine how to analyze non-detect data from source tests conducted in accordance with OAR 340 division 212.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## 340-245-0210

### Modeling Requirements

#### (1) Purpose.

Air Quality modeling is the basis for all risk assessments in Cleaner Air Oregon. The Level 1 Source Risk Assessment uses a lookup table developed using the AERMOD air dispersion model. The Level 2 Source Risk Assessment uses AERSCREEN, the screening version of AERMOD. Level 3 and 4 Source Risk Assessments use AERMOD. In all cases, the model provides concentrations in air that are compared to the Risk-Based Concentrations to estimate risk as part of the risk assessment process in OAR 340-245-0050.

(2) When required to perform modeling, the owner or operator of a source must first submit a modeling protocol to DEQ for approval. The modeling protocol must be approved by DEQ before the owner or operator may submit modeling results and the risk assessment based on that modeling.

(3) All modeled estimates of ambient concentrations required under this division must be based on the applicable air quality models and other requirements as specified in 40 CFR part 51, Appendix W, "Guidelines on Air Quality Models (Revised)." Any change or substitution from models and procedures specified in 40 CFR part 51, Appendix W must be approved by DEQ in advance and incorporated in the modeling protocol. AERSCREEN and AERMOD are examples of approved air quality models.

(4) Modeling of toxic air contaminant emissions will be based on the requested PTE or risk limits and actual toxic air contaminant emission rates.

(5)(a) When a Level 2, 3 or 4 Source Risk Assessment under OAR 340-245-0050(9) through (11) is performed, the exposure locations where ambient concentrations will be modeled, including but not limited to residential areas, commercial areas, and public space, must be identified by the owner or operator and are subject to approval by DEQ as part of the modeling protocol.

(b) An owner or operator may provide documentation to demonstrate an area is not being used in the manner allowed by the land use zoning at the time the modeling is to be performed.

(A) An owner or operator may exclude these chronic exposure locations from the modeling only if approved by DEQ.

(B) If DEQ approves the exclusion, the owner or operator must annually submit to DEQ documentation showing the excluded zoned areas continue to not be used in the manner allowed by the land use zoning applicable to the area.

(C) If the annual documentation provided under paragraph (B) shows the excluded zoned areas usage changes to the manner allowed by the land use zoning applicable to the area, the owner or operator must update the risk assessment based on the change in use and apply for a Toxic Air Contaminant Permit Addendum modification under OAR 340-245-0100(7), if applicable.

(6) The owner or operator must submit to DEQ all information that DEQ determines is necessary to perform any modeling required under this division. The information that is necessary will depend on the model being used and may include, but is not limited to:

(a) Emissions data for all existing and proposed emission points from the entire source or the new or modified TEU including, as applicable, the following for the relevant averaging times:

(A) The actual toxic air contaminant emission rate; and

(B) The emissions based on a requested PTE or risk limit;

(b) Stack parameter and building data, including stack height above ground, exit diameter, exit velocity, and exit temperature, for all existing and proposed emission points from the source, and dimension data of buildings that could potentially affect downwash;

(c) Meteorological and topographical data;

(d) Information about the dispersion models and modeling parameters used; and

(e) Other information that may be necessary to estimate air quality concentrations and risk at exposure locations.

(7) For the purpose of any risk assessment undertaken by DEQ, DEQ may require the owner or operator of any permitted or unpermitted source to submit the information in section (6) upon written request. The owner or operator must submit the requested information within 30 days of receipt of the request, unless DEQ allows additional time.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155

Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## **340-245-0220**

### **Source Risk Assessment Requirements**

(1) The owner or operator of a source must follow the applicable procedures in this rule when required to perform a risk assessment under OAR 340-245-0050 or 340-245-0060.

(2) When required to conduct a Level 1 or Level 2 Source Risk Assessment, the owner or operator of a source must receive approval from DEQ about the following:

- (a) How to characterize their source and exposure locations;
  - (b) How to determine distance to exposure locations;
  - (c) How to estimate stack height;
  - (d) What emission points to include in the analysis; and
  - (e) If conducting a Level 1 Source Risk Assessment, confirm that there are no fugitive emissions;  
or
  - (f) If conducting a Level 2 Source Risk Assessment, how to estimate building dimensions.
- (3) When required to conduct a Level 3 or Level 4 Source Risk Assessment, the owner or operator of a source must first submit to DEQ a Source Risk Assessment work plan for DEQ's approval as required in OAR 340-245-0030. The work plan must be developed in consultation with DEQ and approved by DEQ before the owner or operator conducts the Source Risk Assessment.
- (4) Elements of a Level 3 or Level 4 Source Risk Assessment.
- (a) The Level 3 and Level 4 Source Risk Assessment must include but is not limited to:
    - (A) A problem formulation step ending with development of a conceptual site model identifying TEUs and existing and reasonably likely future human populations that may be exposed to toxic air contaminant emissions from the source, including residents, nonresident adults, and nonresident children and other sensitive populations;
    - (B) An exposure assessment that models or measures toxic air contaminant concentrations at locations of existing and reasonably likely future human populations that may be exposed to toxic air contaminant emissions from the source;
    - (C) A risk characterization presenting a quantitative evaluation of potential cancer, chronic noncancer and acute noncancer health risks associated with human exposure to toxic air contaminant emissions from the source; and
    - (D) A quantitative or qualitative uncertainty evaluation of appropriate elements of the risk assessment.
  - (b) A Level 4 Risk Assessment, in addition to the requirements in subsection (a), must include a toxicity assessment evaluating the carcinogenic effects, noncarcinogenic chronic effects, and noncarcinogenic acute effects of toxic air contaminants to which human populations may be exposed, and determining persistence and bioaccumulation potential. Sources may not consider Toxicity Reference Values other than those listed in OAR 340-245-8030 Table 3;
  - (c) In a Level 4 Risk Assessment, the owner or operator may propose modifications to default exposure assumptions, including but not limited to the following:

- (A) Exposure times, frequencies, and durations;
- (B) Relative bioavailability of chemicals; and
- (C) Multipathway considerations for persistent, and bioaccumulative and toxic chemicals.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0230**

#### **TBACT and TLAER Procedures**

- (1) If required to apply or demonstrate TBACT or TLAER on any significant TEU, the owner or operator of a source must perform a TBACT or TLAER determination.
  - (a) The owner or operator must perform the TBACT determination and analysis by conducting a case-by-case TBACT determination under section (3), except as provided in section (2).
  - (b) The owner or operator must perform the TLAER determination and analysis by conducting a case-by-case TLAER determination under section (4).
  - (c) The owner or operator must submit the TBACT or TLAER determination to DEQ for approval, and the owner or operator must pay the case-by-case TBACT or TLAER determination fee, as applicable, specified in OAR 340-216-8030 Table 3 and OAR 340-245-0400; and
  - (d) A TEU is determined to meet TBACT if DEQ approves the TBACT determination for the TEU and the owner or operator has implemented all operational or source modifications required to meet TBACT, or will implement them on an enforceable schedule included in its Toxic Air Contaminant Permit Addendum.
  - (e) A TEU is determined to meet TLAER if DEQ approves the TLAER determination for the TEU and the owner or operator has implemented all operational or source modifications required to meet TLAER upon beginning operation of the new or reconstructed source.
- (2) Presumptive TBACT.

For an existing TEU, compliance with emission control requirements, work practices or limitations established by a major source NESHAP adopted by the EPA after 1993 is deemed to be TBACT, provided that:

- (a) The emission control requirements, work practices or limitations result in an actual reduction to the emissions of the hazardous air pollutants regulated under the NESHAPs; and
- (b) There are no other toxic air contaminants emitted by the source that:

(A) Are not controlled by the emission control requirements, work practices or limitations established by a major source NESHAP. The NESHAP must reduce the emissions of the toxic air contaminants of concern to the same or a similar degree as the NESHAP reduces the emissions it is intended to reduce. For the purpose of this paragraph, a requirement that reduces emissions of toxic air contaminants in one pollutant category (e.g., particulate matter), but has little or no effect on emissions in another pollutant category (e.g., volatile organic compounds), may meet TBACT for toxic air contaminants in the first pollutant category but does not meet TBACT for pollutants in the other pollutant category; and

(B) Materially contribute to public health risks.

(c) TEUs that are subject to and comply with OAR 340-244-9000 through 340-244-9090, Colored Art Glass Manufacturing rules, or OAR 340-245-9000 through 340-245-9080, Colored Art Glass Manufacturing rules, meet TBACT and a case-by-case determination is not required for such TEUs.

(3) Case-by-Case TBACT determination.

The owner or operator of the TEU must submit a proposed case-by-case TBACT determination to DEQ for review and approval.

(a) TBACT must be a toxic air contaminant emissions limitation or emissions control measure based on the maximum degree of reduction of toxic air contaminants that is feasible considering:

(A) What has been achieved in practice for:

(i) Sources in the same class as the source to which the toxic air contaminant emissions limitation or control measure will apply, as classified under ORS 468A.050; or

(ii) Processes or emissions similar to the processes or emissions of the source;

(B) Energy, health, and environmental impacts not related to air quality; and

(C) Economic impacts and cost-effectiveness, including the costs of changing existing processes or equipment or adding equipment or controls to existing processes and equipment.

(b) TBACT technology may be based on a design standard, equipment standard, work practice standard or other operational standard, or a combination thereof.

(c) In assessing the cost-effectiveness of any measure for purposes of determining TBACT for a source, DEQ will assess only the economic impacts and benefits associated with controlling toxic air contaminants.

(4) Case-by-Case TLAER determination.

The owner or operator of the TEU must submit a proposed case-by-case TLAER determination to DEQ for review and approval. DEQ will review a case-by-case TLAER determination and ensure that it is a toxic air contaminant emissions limitation or emissions control measure that is

the maximum degree of reduction technically feasible without regard to energy impacts, health and environmental impacts, or economic impacts. TLAER is not considered achievable if the cost of control is so great that a new source could not be built or operated because it was rendered economically infeasible. If some other facility in the same or a comparable industry uses that control technology, then such use constitutes evidence that the cost to the industry of that control is not prohibitive.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0240**

#### **Air Monitoring Requirements**

(1) An owner or operator that chooses to perform air monitoring must follow an Air Monitoring Plan developed with and approved by DEQ. Air monitoring must be conducted for a period of not less than 12 months with at least 12 months of valid data with greater than 75 percent data completeness per quarter.

(2) Public involvement requirements.

DEQ shall work with the owner or operator to develop public information concerning an approved air monitoring plan and the timeline for the approved air monitoring plan.

(3) Air monitoring requirements.

The owner or operator requesting approval of an Air Monitoring Plan in accordance with OAR 340-245-0030 must include, but is not limited to, the following:

(a) Identification of all toxic air contaminants that will be monitored;

(b) A description of all proposed monitoring locations;

(c) A description of the monitoring and analysis protocols for each toxic air contaminant to be monitored, including at a minimum:

(A) The monitoring equipment and methods to be used for each toxic air contaminant;

(B) The sampling methods, including sample handling and custody storage requirements;

(C) The frequency of sampling at each monitoring location; the duration of each sample (i.e., the length of time in hours that each sample runs), and time of year;

(D) Analytical methods and the analytical method detection limits and reporting limits to be used for each toxic air contaminant;

(E) Quality assurance and quality control measures to be taken and who will be performing these measures; and

(F) Descriptions of security measures to protect the monitoring equipment.

(d) A description of how to determine and account for the ambient concentration of each toxic air contaminant being monitored that results from all causes other than the source under consideration, including natural and unknown causes;

(e) A description of how and where meteorological monitoring will be performed and the meteorology equipment used; and

(f) A description of how the data will be reduced and how often the results will be reported to DEQ.

#### (4) Reporting Requirements.

The owner or operator of a source that has been issued a Toxic Air Contaminant Permit Addendum that includes air monitoring requirements must report to DEQ the following information:

(a) Monthly monitoring result reports, no more than 15 days after all monitoring data becomes available for the month to which the data applies. The reports must include at a minimum all of the following:

(A) Ambient toxic air contaminant concentrations, all 24-hour risks and all monthly average risks from all monitoring locations specified in the Air Monitoring Plan;

(B) Meteorological data summary;

(C) Daily production data; and

(D) A description of any excess emissions or upset conditions that may have affected the ambient toxic air contaminant concentrations monitored, including conditions outside the property boundary that may affect ambient air (i.e., forest fires, house fires, train derailments, etc.);

(b) An air monitoring final report, no more than 60 calendar days after completing all Air Monitoring Plan requirements that also includes a description of any process changes that have occurred during the air monitoring period that may affect the results of the monitoring.

#### (5) Air monitoring results.

(a) Upon completion of the air monitoring, the owner or operator must submit to DEQ an assessment of risk based on the air monitoring data and other relevant information.

(b) For all toxic air contaminants that are not monitored, or for which monitoring results were inconclusive, the owner or operator must use the modeled concentrations of those toxic air

contaminants and add the risk from the modeled concentrations to the risk from the monitored concentrations to arrive at a total risk from the source.

(c) Upon receipt of air monitoring data and assessment of risk under subsections (a) and (b), DEQ will review the submittal and approve or deny it in accordance with the procedures OAR 340-245-0100(4).

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0300**

#### **Toxicity Reference Values**

(1) This rule lists sources of toxicity information that OHA and DEQ consider authoritative in terms of their scientific rigor and methods for producing toxicity information. OHA and DEQ will recommend adoption and use of Toxicity Reference Values from the toxicity information published by the following authoritative sources:

(a) DEQ Ambient Benchmark Concentrations specified in OAR 340 division 246;

(b) DEQ and OHA Short-term Guideline Concentrations;

(c) EPA Integrated Risk Information System (IRIS) or Office of Superfund Remediation and Technology Innovation (OSRTI);

(d) United States Agency for Toxic Substances and Disease Registry (ATSDR); and

(e) California's Office of Environmental Health Hazard Assessment (OEHHA).

(2) DEQ will calculate Toxicity Reference Values using 1 in 1 million as the target excess cancer risk level or a hazard quotient of 1 for noncancer Toxicity Reference Values.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

## 340-245-0310

### Process for Updating Lists of Regulated Toxic Air Contaminants and Their Risk-Based Concentrations

#### (1) Purpose.

(a) As risk assessment and toxicological sciences advance, it is important to have rules for Cleaner Air Oregon that allow for air quality regulation to continue to reflect the latest practices and science. The list of toxic air contaminants that are regulated and their RBCs represent one area where regulations will need regular updating to accommodate advancing science and practices.

(b) These rules include two lists of toxic air contaminants; OAR 340-245-8020 Table 2 contains toxic air contaminants that are for emissions reporting only, and OAR 340-245-8040 Table 4 contains toxic air contaminants for which RBCs are readily available for regulation as part of air permitting. The purpose of OAR 340-245-8020 Table 2 is to inform prioritization of RBC development and maintain a current and broad understanding of statewide toxic air contaminant emissions as industries and industrial practices change over time. The purpose of OAR 340-245-8040 Table 4 is to ensure that impacts to public health from industrial air emissions are minimized.

#### (2) OAR 340-245-8020 Table 2, Toxic Air Contaminant Reporting List.

(a) The Toxic Air Contaminant Reporting List is comprised of California Air Resources Board's Toxic Air Contaminant Identification List Appendix A-1, Washington's Table of ASIL, SQER and de minimis emission values, Oregon's Toxics Focus list, and EPA's Hazardous Air Pollutants list.

(b) Every three years starting from the effective date of this rule, DEQ, in consultation with OHA, will review the four lists in subsection (a) for changes and may propose to update the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2 to capture changes in any of those four lists over the intervening three years.

(c) During the reviews of the Toxic Air Contaminant Reporting List, DEQ may also propose to add or remove toxic air contaminants based on information gathered from past reporting, industry types in Oregon that are not in California or Washington, or OHA's and DEQ's knowledge of toxic air contaminants that may be of potential public health concern in Oregon.

(d) Owners or operators of sources must report emissions of any newly listed toxic air contaminant during the next periodic state-wide emissions inventory required in OAR 340-245-0040 following the new listing or earlier upon request by DEQ.

#### (3) OAR 340-245-8030 Table 3, Toxicity Reference Values and OAR 340-245-8040 Table 4, Risk-Based Concentrations.

(a) The list of Risk-Based Concentrations is comprised of all toxic air contaminants from the Toxic Air Contaminants Reporting List for which OHA and DEQ were able to establish RBCs.

(b) Every three years starting from the effective date of this rule, or as necessary, DEQ, in consultation with OHA, will review the toxic air contaminants and Toxicity Reference Values published by the authoritative sources listed in OAR 340-245-0300 for changes over the intervening three years. DEQ will propose to:

(A) Revise Toxicity Reference Values and associated Risk-Based Concentrations for toxic air contaminants listed in OAR 340-245-8030 Table 3 and OAR 340-245-8040 Table 4, as applicable, if Toxicity Reference Values have been revised by authoritative sources listed in OAR 340-245-0300.

(B) Add toxic air contaminants to OAR 340-245-8030 Table 3 and 340-245-8040 Table 4, as applicable, if Toxicity Reference Values have been generated by authoritative sources listed in OAR 340-245-0300 for toxic air contaminants on the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2 from which RBCs can be set; or

(C) Remove or revise toxic air contaminants from OAR 340-245-8030 Table 3 and 340-245-8040 Table 4, as applicable, if some or all authoritative sources listed in OAR 340-245-0300 have rescinded Toxicity Reference Values for that toxic air contaminant without providing a replacement.

(c) DEQ will propose updates to OAR 340-245-8030 Table 3 through 340-245-8050 Table 5, as applicable, through the rulemaking process.

(4) Interested parties may submit petitions to DEQ to update the lists of regulated toxic air contaminants to add or remove toxic air contaminants from OAR 340-245-8020 Table 2, revise a TRV in OAR 340-245-98030 Table 3, or revise an RBC in OAR 340-245-8040 Table 4.

(a) All petitions must be made in writing and must be received by DEQ at least 18 months before the applicable triennial review described in section (2) or (3).

(b)(A) A request to revise a Toxicity Reference Value or an RBC in OAR 340-245-8040 Table 4 must include either:

(i) Inhalation Toxicity Reference Values established by a federal agency or by another state; or

(ii) Publicly available and peer-reviewed toxicity information for the toxic air contaminant that demonstrates a quantitative dose-response relationship in human or animal studies from which Toxicity Reference Values could be calculated.

(B) If the request applies to a toxic air contaminant for which toxicity information is available from one or more of the authoritative sources listed in OAR 340-245-0300, then only petitions to select a Toxicity Reference Value from one of those authoritative sources will be considered.

(C) If a toxic air contaminant being requested for review has no available toxicity information as described in paragraph (A) and is emitted at a rate of at least 1 pound per year in the state of Oregon, then DEQ will put the toxic air contaminant on a formal "Wait List", to be held there until toxicity information for that toxic air contaminant becomes available.

(c) A request to add a toxic air contaminant to the Toxic Air Contaminant Reporting List in OAR 340-0245-8020 Table 2 must include evidence that:

(A) The chemical is emitted in the state of Oregon at a rate of at least 1 pound per year; and

(B) The chemical is toxic.

(d) A request to remove a toxic air contaminant from the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2, the TRV list in OAR 340-245-8030 Table 3, or the RBC list in OAR 340-245-8040 Table 4 must demonstrate that all authoritative sources listed in OAR 340-245-0300 either do not have or have rescinded Toxicity Reference Values for that toxic air contaminant without providing a replacement.

(e) If DEQ, after consultation with OHA, determines that revisions are warranted as a result of a petition, DEQ will propose revisions to RBCs or additions or removals of toxic air contaminants to the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2, the TRV list in OAR 340-245-8030 Table 3 or the RBC list in OAR 340-245-8040 Table 4 through the rulemaking process.

(f) If DEQ receives a request to revise an RBC or add or remove a toxic air contaminant from the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2, the TRV list in OAR 340-245-8030 Table 3 or the RBC list in OAR 340-245-8040 Table 4 and the request is received less than 18 months before the applicable triennial review described in section (2) or (3), the request will be reviewed during the triennial review in section (3).

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

### **340-245-0400**

#### **Cleaner Air Oregon Fees**

(1) Any owner or operator required to obtain an Oregon Title V Operating Permit under OAR 340 division 218 must submit the annual CAO base fees to DEQ as specified in OAR 340-220-0050(4).

(2) Any owner or operator required to obtain a Basic, General, Simple or Standard Air Contaminant Discharge Permit under OAR 340 division 216 must submit the annual CAO base fee to DEQ as specified in OAR 340-216-8020 Table 2 Part 3.

(3) When notified in writing by DEQ, the owner or operator of an existing source that must perform a risk assessment is required to pay the applicable existing source call-in fee in OAR 340-216-8030 Table 3 within 30 days of receiving DEQ notification.

(4) Owners or operators of new or reconstructed sources must pay the applicable new source consulting fee and the applicable specific activity fees in OAR 340-216-8030 Table 3 with the permit application.

(5) Any owner or operator required to obtain a Toxic Air Contaminant Permit Addendum must also submit the applicable Cleaner Air Oregon Specific Activity Fees specified in OAR 340-216-8030 Table 3 to DEQ with the permit application.

(a) The fees in OAR 340-216-8030 Table 3 are additive in most cases.

(b) A TBACT/TLAER fee will be due to DEQ based on DEQ's determination of the complexity and nature of the TEU or process and the toxic air contaminant being reviewed.

(A) If multiple TEUs are similar and require the same pollution control device, one TBACT/TLAER fee may be due and payable to DEQ; and

(B) If one TEU required two different pollution control devices because it emitted different types of toxic air contaminants (particulate matter and volatile organic compounds), then two TBACT/TLAER fees may be due and payable to DEQ.

(c) The individual TEU fees can be additive or charged individually, depending on the situation. If an owner or operator is constructing or modifying multiple, identical TEUs, then one TEU Risk Assessment fee may be charged. If the TEUs were not identical, then multiple TEU Risk Assessment fees be due and payable to DEQ.

(d) A community engagement fee, high, medium, or low, will be due to DEQ based on DEQ's determination of the complexity and nature of the needed outreach and engagement activities.

(e) A source test fee is required when an owner or operator submits a source test report for DEQ review under this division.

(A) The complex source test review fee is for multiple TEUs and multiple toxic air contaminant test methods.

(B) The moderate source test review fee is for a single TEU and multiple toxic air contaminant test methods.

(C) The simple source test review fee is for a single TEU and a single toxic air contaminant test method.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155  
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

**Revised Colored Art Glass Manufacturing Facility Rules** [NOTE: These are new rules based on OAR 340-244-9000 through 340-244-9090. Rules OAR 340-244-9000 through 340-244-9090 have been copied here and amended, except that OAR 340-244-9040 and 340-244-9090 have been omitted. Although these are new rules, they are shown in redline/strikeout to show the differences from the original rules in OAR 340-244-9000 through 9090.]

[NOTE: Application of these rules is subject to OAR 340-244-8990.]

### **340-245-9000**

#### **Colored Art Glass Manufacturing Facility Rules; Applicability and Jurisdiction**

Notwithstanding OAR 340 division 246, OAR 340-245-9000 through 340-245-9080 apply to all facilities in the state of Oregon that:

- (1) Manufacture glass from raw materials, or a combination of raw materials and cullet, for:
  - (a) Use in art, architecture, interior design and other similar decorative applications, or
  - (b) Use by glass manufacturers for use in art, architecture, interior design and other similar decorative applications; and
- (2) Manufacture 5 tons per year or more of glass using raw materials that contain glassmaking HAPs.
- (3) Subject to the requirements in this division and OAR 340-200-0010(3), LRAPA is designated by the EQC to implement OAR 340-245-9000 through 9095 within its area of jurisdiction.

**NOTE:** This rule was moved verbatim from OAR 340-244-9000 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9000

### **340-245-9010**

#### **Colored Art Glass Manufacturing Facility Rules; Definitions**

The definitions in OAR 340-200-0020 and this rule apply to OAR 340-245-9000 through 9095. If the same term is defined in this rule and 340-200-0020, the definition in this rule applies to this division.

(1) “Colored Art Glass Manufacturer” or “CAGM” means a facility that meets the applicability requirements in OAR 340-245-9000 and refers to the owner or operator of such a facility when the context requires.

(2) “Chromium III” means chromium in the +3 oxidation state, also known as trivalent chromium.

(3) “Chromium VI” means chromium in the +6 oxidation state, also known as hexavalent chromium.

(4) “Chromium”, without a following roman numeral, means total chromium.

(5) “Controlled” means the glassmaking furnace emissions are treated by an emission control device approved by DEQ.

(6) “Cullet” means pieces of finished glass that, when mixed with raw materials and charged to a glassmaking furnace, is used to produce new glass. Cullet does not include frit as defined in subsection (9)(a). Cullet is not considered to be a raw material.

(7) “Emission control device” means control device as defined in OAR 340 Division 200.

(8) “Finished glass” means the final glass product that results from melting and refining materials in a glassmaking furnace. Finished glass that has been remelted without the addition of raw materials is still finished glass.

(9) “Frit” means both of the following:

(a) Granules of glassified or vitrified material that is not made from finished glass, and which contains a higher proportion of glassmaking HAP than would be found in a finished glass. The purpose of such material includes, but is not limited to, making powdered glassmaking HAPs safer to handle by combining them with silica or other oxides.

(b) Granules of crushed finished glass.

(10) “Glassmaking furnace” means a refractory-lined vessel in which raw materials are charged and melted at high temperature to produce molten glass.

(11) “Glassmaking HAP” means arsenic, cadmium, chromium, lead, manganese, nickel or selenium in any form, such as the pure chemical element, in compounds or mixed with other materials.

(12) “Raw material” means:

(a) Substances that are intentionally added to a glass manufacturing batch and melted in a glassmaking furnace to produce glass, including but not limited to:

(A) Minerals, such as silica sand, limestone, and dolomite;

(B) Inorganic chemical compounds, such as soda ash (sodium carbonate), salt cake (sodium sulfate), and potash (potassium carbonate);

(C) Oxides and other compounds of chemical elements, such as lead oxide, chromium oxide, and sodium antimonate; and

(D) Ores of chemical elements, such as chromite and pyrolusite.

(b) Glassmaking HAPs that are naturally-occurring trace constituents or contaminants of other substances are not considered to be raw materials.

(c) Raw material includes materials that contain glassmaking HAPs in amounts that materially affect the properties of the finished product, such as its color, texture or bubble content. Such materials may be powdered, frit, or in some other form. For the purpose of this definition, frit as described in subsection (9)(a) is a raw material, but frit as described in subsection (9)(b) is not a raw material.

(d) Cullet and material that is recovered from a glassmaking furnace control device for recycling into the glass formulation are not considered to be raw materials.

(13) “Tier 1 CAGM” means a CAGM that produces at least 5 tons per year, but less than 100 tons per year, of glass using raw materials that contain glassmaking HAPs in glassmaking furnaces that are only electrically heated.

(14) “Tier 2 CAGM” means:

(a) A CAGM that produces 5 tons per year or more of glass using raw materials that contain glassmaking HAPs in glassmaking furnaces, at least one of which is fuel-heated or combination fuel- and electrically-heated; or

(b) Produces 100 tons per year or more of glass using raw materials that contain glassmaking HAPs in any type of glassmaking furnace.

(15) “Uncontrolled” means the glassmaking furnace emissions are not treated by an emission control device approved by DEQ.

(16) “Week” means Sunday through Saturday.

**NOTE:** This rule was moved verbatim from OAR 340-244-9010 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9010

### **340-245-9015**

#### **Colored Art Glass Manufacturing Facility Rules; Compliance Extensions**

A Tier 1 CAGM may request, and DEQ may grant, one or more extensions, not to exceed a total of 12 months, to the compliance date for installation of emission control systems if the CAGM cannot meet the compliance date for reasons beyond its reasonable control. A Tier 1 CAGM that has been granted an extension:

- (1) Is allowed to operate without the emission control device required by OAR 340-224-9050 until the required emission control device is installed and operational, or the extension expires, whichever is earlier; and
- (2) Must comply with OAR 340-245-9020 and 340-245-9060(1) as applicable.

**NOTE:** This rule was moved verbatim from OAR 340-244-9015 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9015

### **340-245-9020**

#### **Colored Art Glass Manufacturing Facility Rules; Permit Required**

(1) Not later than December 1, 2016, if located within the Portland AQMA, and not later than April 1, 2017, if located outside the Portland AQMA, all CAGMs not otherwise subject to a permitting requirement must apply for a permit under OAR 340-216-8020 Table 2, Part B, category #84.

(2) A CAGM that applies for a permit on or before the required date is not in violation of OAR 340-216-0020(3).

(3) CAGMs constructed after September 1, 2016 must obtain a permit prior to construction.

**NOTE:** This rule was moved verbatim from OAR 340-244-9020 and renumbered.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9020

### **340-245-9030**

## **Colored Art Glass Manufacturing Facility Rules; Requirements That Apply To Tier 2 CAGMs**

(1) Tier 2 CAGMs located within the Portland AQMA may not use raw materials containing arsenic, cadmium, chromium, lead, manganese or nickel except in glassmaking furnaces that use an emission control device that meets the requirements of OAR 340-245-9070.

(2) Effective January 1, 2017, Tier 2 CAGMs located within the Portland AQMA may not use raw materials containing selenium except in glassmaking furnaces that use an emission control device that meets the requirements of OAR 340-245-9070.

(3) Tier 2 CAGMs located outside the Portland AQMA may not use raw materials containing arsenic, cadmium or chromium VI except in glassmaking furnaces that use an emission control device that meets the requirements of OAR 340-245-9070.

(4) Effective April 1, 2017, Tier 2 CAGMs located outside the Portland AQMA may not use raw materials containing chromium, lead, manganese, nickel or selenium except in glassmaking furnaces that use an emission control device that meets the requirements of OAR 340-245-9070.

**NOTE:** This rule was moved verbatim from OAR 340-244-9030 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9030

**NOTE: OAR 340-244-9040 was not moved to this division. This note to be deleted in the version that goes to the Secretary of State.**

### **340-245-9050**

## **Colored Art Glass Manufacturing Facility Rules; Requirements That Apply To Tier 1 CAGMs**

(1) No later than October 1, 2016, if located within the Portland AQMA, and April 1, 2017, if located outside the Portland AQMA, each Tier 1 CAGM must comply with subsection (a) or (b) for each glassmaking furnace or group of glassmaking furnaces that use raw material containing arsenic, cadmium, chromium, lead, manganese or nickel:

(a) Install an emission control device that meets the emission control device requirements in OAR 340-245-9070; or

(b) Request a permit condition that prohibits the use of arsenic, cadmium, chromium, lead, manganese or nickel in the glassmaking furnace or group of glassmaking furnaces, and comply with that condition.

(2) No later than January 1, 2017, if located within the Portland AQMA, and April 1, 2017, if located outside the Portland AQMA, each Tier 1 CAGM must comply with subsection (a) or (b) for each glassmaking furnace or group of glassmaking furnaces that use raw material containing selenium:

(a) Install an emission control device that meets the emission control device requirements in OAR 340-245-9070; or

(b) Request a permit condition that prohibits the use of selenium in the glassmaking furnace or group of glassmaking furnaces, and comply with that condition.

**NOTE:** This rule was moved verbatim from OAR 340-244-9050 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9050

### **340-245-9060**

#### **Colored Art Glass Manufacturing Facility Rules; Operating Restrictions That Apply To Tier 1 CAGMs**

(1) Tier 1 CAGMs may not use raw materials that contain chromium VI in any uncontrolled glassmaking furnace.

(2) Tier 1 CAGMs are not restricted on the raw materials that may be used in glassmaking furnaces that are controlled by an emission control device approved by DEQ.

**NOTE:** This rule was moved verbatim from OAR 340-244-9060 and renumbered.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9060

### **340-245-9070**

#### **Colored Art Glass Manufacturing Facility Rules; Emission Control Device Requirements**

(1) CAGMs must comply with the requirements in subsection (a) or (b), as applicable, for each emission control device used to comply with this rule.

(a) Tier 1 CAGMs must comply with one of the requirements in paragraphs (A), (B) or (C):

(A) Conduct a source test as required under section (3) and demonstrate that the emission control device does not emit particulate matter in excess of 0.005 grains per dry standard cubic foot as measured by EPA Method 5 or an equivalent method approved by DEQ.

(B) If the emission control system is a fabric filter (baghouse), install a bag leak detection system that meets the requirements of section (4).

(C) If the emission control system is a fabric filter (baghouse), install an afterfilter that meets the requirements of section (5).

(b) Tier 2 CAGMs must:

(A) Conduct a source test as required under section (3) and demonstrate that the emission control device does not emit particulate matter in excess of 0.005 grains per dry standard cubic foot as measured by EPA Method 5 or an equivalent method approved by DEQ; and

(B) If a fabric filter (baghouse) is used, install either a bag leak detection system that meets the requirements of section (4) or an afterfilter that meets the requirements of section (5).

(2) Emission control device requirements:

(a) A CAGM must obtain DEQ approval of the design of all emission control devices before installation, as provided in this rule.

(b) A CAGM must submit a Notice of Intent to Construct as required by OAR 340-210-0205 through 340-210-0250 no later than 15 days before the date installation begins. If DEQ does not deny or approve the Notice of Intent to Construct within 10 days after receiving the Notice, the Notice will be deemed to be approved.

(c) Emission control devices may control emissions from more than one glassmaking furnace.

(d) Each emission control device must be equipped with the following monitoring equipment:

(A) An inlet temperature monitoring device;

(B) A differential pressure monitoring device if the emission control device is a baghouse; and

(C) Any other monitoring device or devices specified in DEQ's approval of the Notice of Intent to Construct.

(e) Each emission control device must be equipped with inlet ducting that provides the following:

(A) Sufficient cooling of exhaust gases to no more than the maximum design inlet temperature under worst-case conditions; and

(B) Provision for inlet emissions testing, including sufficient duct diameter, sample ports, undisturbed flow conditions, and access for testing.

(f) Each emission control device must be equipped with outlet ducting that provides for outlet emissions testing, including sufficient duct diameter, sample ports, undisturbed flow conditions, and access for testing.

(g) After commencing operation of any emission control device, the CAGM must monitor the emission control device as required by OAR 340-245-9080.

(3) If source testing is conducted under section (1), the CAGM must perform the following source testing on at least one emission control device.

(a) Within 60 days of commencing operation of the emission control devices, test control device outlet for particulate matter using DEQ Method 5 or equivalent method;

(b) The emission control device to be tested must be approved by DEQ;

(c) A source test plan must be submitted at least 30 days before conducting the source test; and

(d) The source test plan must be approved by DEQ before conducting the source test.

(4) If a bag leak detection system is installed under section (1), the requirements for the bag leak detection system are:

(a) The bag leak detection system must be installed and operational as soon as possible but not more than 90 days after the baghouse becomes operational or 90 days after the effective date of the rule, whichever is later.

(b) Each bag leak detection system must meet the specifications and requirements in paragraphs (A) through (H).

(A) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.

(B) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator must continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).

(C) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (D), and the alarm must be located such that it can be heard by the appropriate plant personnel.

(D) In the initial adjustment of the bag leak detection system, the CAGM must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(E) Following initial adjustment, the CAGM may not adjust the averaging period, alarm set point, or alarm delay time without approval from DEQ except as provided in paragraph (F).

(F) Once per quarter, the CAGM may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by OAR 340-224-9080(4).

(G) The CAGM must install the bag leak detection sensor downstream of the fabric filter.

(H) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

(5) If an afterfilter is installed under section (1), the requirements for the afterfilter are:

(a) The afterfilter must be installed and operational as soon as possible but not more than 120 days after the baghouse becomes operational or 120 days after the effective date of the rule, whichever is later;

(b) The afterfilter must filter the entire exhaust flow from the fabric filter (baghouse); and

(c) The afterfilter must be equipped with:

(A) HEPA filters that have a Minimum Efficiency Reporting Value of 17 (MERV 17) or higher per American National Standards Institute (ANSI) Standard 52.2; and

(B) A differential pressure monitoring device.

**NOTE:** This rule was moved verbatim from OAR 340-244-9070 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 6-2016(Temp), f. & cert. ef. 5-6-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9070

### **340-245-9080**

#### **Colored Art Glass Manufacturing Facility Rules; Emission Control Device Monitoring**

(1) Each Tier 1 CAGM must perform the following monitoring on each emission control device it uses to comply with this rule:

(a) At least once each week, observe and record the inlet temperature and the fabric filter (baghouse) differential pressure and afterfilter differential pressure (as applicable); and

(b) At least once every 12 months:

(A) Inspect the ductwork and emission control device housing for leakage;

(B) Inspect the interior of the emission control device for structural integrity and, if a fabric filter (baghouse) is used, to determine the condition of the fabric filter; and

(C) Record the date, time and results of the inspection.

(2) Each Tier 2 CAGM must perform the following monitoring on each emission control device used to comply with this rule:

(a) At least once each day, observe and record the inlet temperature and the fabric filter (baghouse) differential pressure and afterfilter differential pressure (as applicable); and

(b) At least once every 12 months:

(A) Inspect the ductwork and emission control device housing for leakage;

(B) Inspect the interior of the emission control device for structural integrity and, and if a fabric filter (baghouse) is used, to determine the condition of the fabric filter; and

(C) Record the date, time and results of the inspection.

(3) CAGMs must observe and record any parameters specified in a DEQ approval of the Notice of Intent to Construct applicable to a control device.

(4) If a bag leak detection system is used, the CAGM must develop and submit to DEQ for approval a site-specific monitoring plan for each bag leak detection system. The CAGM must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in subsections (a) through (f).

(a) Installation of the bag leak detection system;

(b) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(c) Operation of the bag leak detection system, including quality assurance procedures;

(d) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(e) How the bag leak detection system output will be recorded and stored; and

(f) Corrective action procedures as specified in section (5). In approving the site-specific monitoring plan, DEQ may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and

demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(5) For each bag leak detection system, the CAGM must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in subsection (4)(f), the CAGM must alleviate the cause of the alarm within 3 hours of the alarm by taking all necessary corrective actions. Corrective actions may include, but are not limited to the following:

- (a) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;
- (b) Sealing off defective bags or filter media;
- (c) Replacing defective bags or filter media or otherwise repairing the control device;
- (d) Sealing off a defective fabric filter compartment;
- (e) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and
- (f) Shutting down the process producing the PM emissions.

(6) For each bag leak detection system, the CAGM must keep the following records:

- (a) Records of the bag leak detection system output;
- (b) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and
- (c) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the alarm was alleviated within 3 hours of the alarm.

**NOTE:** This rule was moved verbatim from OAR 340-244-9080 and renumbered.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9080

**NOTE: OAR 340-244-9090 was not moved to this division. This note to be deleted in the version that goes to the Secretary of State.**