# EMISSION INVENTORY CRITERIA AND GUIDELINES REPORT

#### FOR THE AIR TOXICS "HOT SPOTS" PROGRAM

Adopted: May 30, 1996 Amended: May 15, 1997 Amended: August 27, 2007

State of California
Air Resources Board
Planning and Technical Support Division

#### **EMISSION INVENTORY CRITERIA AND GUIDELINES REPORT**

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#### **APPENDICES**

Appendix A List of Substances

A-I Substances for Which Emissions Must Be Quantified
A-II Substances for Which Use, Production, or Other Presence

Must Be Reported

A-III Substances Which Need Not Be Reported Unless

Manufactured By the Facility

Appendix B Reporting Formats and Instructions

B-I Data Elements and Formats

B-II Reporting Forms and Instructions

Appendix C Facility Guideline Index (Facility "Look-Up" Table)

C-I Responsibilities of All Facilities

C-II Further Responsibilities for Specific Facility Classes

**Appendix D** Source Testing: Summary of Requirements

for Measurement and Alternatives

Appendix E Requirements for Classes of Facilities Emitting

Less Than 10 Tons Per Year of Criteria Pollutants

Appendix F Criteria for Inputs for Risk Assessment Using

**Screening Air Dispersion Modeling** 

Appendix G List of Documents Incorporated By Reference

## EMISSION INVENTORY CRITERIA AND GUIDELINES REPORT

#### Section I. Purpose and How to Use This Report

#### A. Purpose.

This report sets forth the criteria and guidelines for preparing emission inventory plans and reports to develop site-specific inventories of air emissions of toxic substances, as required by the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (the "Act": Stats. 1987, ch. 1252; Health and Safety Code section 44300-44394, as amended). The requirements in this report are enforceable as regulations because this report is incorporated by reference into title 17 of the California Code of Regulations, section 93300.5.

This Emission Inventory Criteria and Guidelines Report does the following: 1) specifies which facilities are subject to air toxics emission inventory reporting and update reporting; 2) specifies information a facility operator must include in a facility's air toxics emission inventory plan and inventory report; 3) identifies specific classes of facilities that emit less than ten tons per year of criteria pollutants that are subject to the "Hot Spots" program and specifies their emission inventory reporting requirements; 4) specifies source testing requirements, acceptable emission estimation methods, and the reporting formats to be used; 5) establishes groups of the substances to be inventoried; 6) designates facilities into levels for purposes of update reporting, based on prioritization scores, risk assessment results, or *de minimis* thresholds; 7) exempts "low level" facilities from further update reporting unless specified reinstatement criteria are met, and specifies the update reporting requirements for other facilities; 8) specifies information a facility operator must include in a facility's update to their emission inventory; and 9) includes provisions for integrating "Hot Spots" reporting with other district programs if specified criteria are met.

The 2006 amendments add a new chapter on diesel engine reporting requirements, new definitions, and other minor revisions to bring the Guidelines Regulation up to date.

Otherwise, the bulk of the Guidelines Regulation is unchanged.

#### B. How to Use This Report.

This report is organized into sections which address related requirements. Table 1 provides a guide to locating information in this report, such as requirements for new facilities and update reporting requirements for facilities which completed previous reporting. Table 2 provides a comparison of section numbers for the Emission Inventory Criteria and Guidelines Regulation (last amended January 31, 1994); the Regulatory Improvement Initiative (operative September 21, 1996); and the current Emission Inventory Criteria and Guidelines Report.

Figures 1 and 2, respectively, provide a graphical summary of the designations of facilities as "low level", "intermediate level", or "high level" facilities for purposes of update reporting, and the types of update requirements and acceptable alternatives corresponding to each of these levels. For definitions of terms, see section X.

# TABLE 1 How to Locate Information in this Regulatory Report

Refer to:

A. If you are a **new facility**....

1. Is the facility subject to "Hot Spots" reporting requirements?

Section II. Applicability.
Also see Appendix E for classes of smaller facilities.

- Do you have any diesel engines?

Section XI.

 Could a permit evaluation qualify facility for exemption as a "low level" facility? Section II. C.

 Is your facility covered by an industrywide inventory prepared by the district? Section II. C., and Section XI for diesel engines.

2. If you are required to prepare an emission inventory plan and report:

Section VI. Requirements for Preparing Emission Inventory Plans.

Section VII. Requirements for Emission Inventory Reports.

Section VIII. Other Requirements.

Is any source testing required?
 What emission factors and estimation methods are acceptable?

Appendix D and Section IX. Source Testing and Emission Factors.

- What substances are covered?

Appendix A: List of Substances.

- If you need help identifying some likely substances from your facility's operation:

Appendix C: Facility "Look-Up" Table.

 What data must be reported and in what form? Appendix B: Reporting Formats and Forms.

- Where are terms defined?

Section X. Definitions.

#### TABLE 1 (continued)

#### Refer to:

#### B. If your facility has reported at least once...

1. Has your facility changed so it no longer meets the applicability criteria?

Section III. Removal of Facilities
That No Longer Meet Applicability

Criteria.

2. Is your facility exempt from further compliance based on prioritization score?

Section II.J.

3. What is the update category of your facility?

Section IV. Update Categories and Exemptions From Update Reporting.

- "Low level": exempt from update reporting, unless changes trigger reinstatement criteria.

Section IV.A.

- "Intermediate level".

Section IV.B.

- "High level".

Section IV.C.

4. What update reporting is required?

Can other reporting programs substitute?

Section V. Update Reporting Requirements.

- "Low level" facilities: exempt from updates.

Section V.D.

"Intermediate level" facilities: track activity.
 May be able to substitute merged toxics/criteria inventory reporting for <u>"Hot Spots" update requirement.</u>

Section V.C.

 "High level" facilities: update risk-driving devices. May be able to substitute Risk Reduction Audit and Plan update (if required) for "Hot Spots" update requirement.

Section V.B.

- Facilities not yet prioritized.

Section V.E.

- Voluntary updates.

Section V.F.

 If revised emissions were used in a risk assessment. Section V.G.

5. What data must be updated and in what format? Can previous information be used?

Sections V.H. - V.M.

6. Do you have any diesel engines?

Section XI.

Table 2
Emission Inventory Criteria and Guidelines
Format/Section Changes

	Tormange Chon Change	<del></del>
EIC&G Regulation (Last	Regulatory Improvement	EIC&G Report (Adopted
Amended January 31, 1994)	Initiative (Operative Sept. 21, 1996)	<del>May 15, 1997)</del>
1001)	93300.5 (CCR)	93300.5 (CCR)
Article 1	Article 1	Section 1
93300	300	I.A
3333	300	I.B (new)
93301	<del>301</del>	Section X
Article 2	Article 2	Section II
93303 (a) – (b)	303 (a) – (b)	H. A-B
93303 (c)	303 (c)	II. F
93304 (a)	304 (a)	II. A
93304 (b)	304 (b)	II. B
93305 (a) – (b)	305 (a) – (b)	<del>II. C (1)</del>
30000 (a) (b)	000 (a) (b)	H. C (2) (new)
<del>93305.5 (a) – (c)</del>	305.5 (a) – (c)	III. A (1)- (2)
93306	<del>306</del>	<del>III. A (1)= (2)</del> <del>II. D</del>
93306.5 (a) – (c)	306.5 (a) – (c)	##. <del>B</del> (1) – (2)
93307	<del>300.3 (a) = (c)</del> <del>307</del>	<del>III. B (1) = (2)</del> <del>II. H</del>
93308 (a) – (c), (e)		
( ) ( ) ( )	308 (a) – (c), (e)	H E (1), (2)
<del>93308 (d)</del>	<del>308 (d)</del>	deleted*
00000 (5) (5)	200 (5) (5)	II. E (3) (new)
<del>93309 (a) – (c)</del>	<del>309 (a) – (c)</del>	<del>III. C (1) – (2)</del>
		II. I (new)
A :: 1 - 0	1	H. J (1) – (5) (new)
Article 2	Article 2	Section III
<del>93305.5 (a) – (c)</del>	305.5 (a) - (c)	<del>III. A (1) – (2)</del>
<del>93306.5 (a) – (c)</del>	<del>306.5 (a) – (c)</del>	<del>III. B (1) – (2)</del>
<del>93309 (a) – (c)</del>	<del>309 (a) – (c)</del>	III. C (1) – (2)
		Section IV (new)
See Article 6	See Article 6	Section V
Article 3	Article 3	Section VI
93310	310	<del>VI. A</del>
<del>93311 (a) – (f)</del>	311 (a) – (f)	<del>VI. B (1) – (6)</del>
93312	<del>312</del>	<del>VI. C</del>
93313	313	<del>VI. D</del>
93314	314	<del>VI. E</del>
<del>93315</del>	<del>315</del>	<del>VI. F</del>
Article 4	Article 4	Section VII
<del>93320</del>	<del>320</del>	<del>VII. A</del>
<del>93321 (a) (c)</del>	<del>321 (a) - (c)</del>	<del>VII. B (1) – (3)</del>
<del>93322 (a) - (e)</del>	<del>322 (a) - (c)</del>	<del>VII. C (1) – (5)</del>
<del>93323 (a) – (d)</del>	<del>323 (a) - (c)</del>	<del>VII. D (1) – (4)</del>
<del>93324</del>	<del>324</del>	<del>VII. F</del>
Article 5	Article 5	Section VIII
<del>93330 (a) - (g)</del>	<del>330 (a) - (g)</del>	<del>VII. A (1)- (7)</del>
<del>93331 (a) - (b)</del>	<del>331 (a) – (b)</del>	<del>VIII. B (1) – (2)</del>
<del>93332 (a) – (d)</del>	<del>32 (a) – (d)</del>	<del>VIII. C (1) – (4)</del>

#### Table 2 (continued)

(Last Amended January 31, 1994) 93332 (a)—(h) 93334 (a)—(e) 334 (a)—(e) 93335 (a)—(h) 93334 (a)—(e) 93335 (a)—(h) 93336 (a)—(d) 93336 (a)—(d) 93336 (a)—(d) 93336 (a)—(d) 93337 (a)—(d) 93337 (a)—(d) 93337 (a)—(d) 93338 (a)—(d) 93334 (a)—(d) 93346 (a)—(d) 93350 (a)—(d) 93351 (a)—(d)	EIC&G Regulation	Regulatory Improvement	
January 31, 1994  Sept. 21, 1996  (Adopted May 15, 1997)	•	, ,	EIC&G Report
9333-(a)—(h) 9333-(a)—(b) 9333-(a)—(b) 9333-(a)—(b) 9333-(a)—(b) 9333-(a)—(b) 9333-(a)—(b) 9333-(a)—(b) 9333-(a)—(b) 9333-(a)—(d) 933-(a)—(d) 93-(a)—(d) 93-(a)	`		(Adopted May 15, 1997)
93334 (a) - (e)   334 (a) - (e)   VIII. E (1) - (6)     93355 (A) - (f)   335 (a) - (f)   VIII. E (1) - (10)     9336 - 93347   See 336 - 347   Section IX     93336 (a) - (d)   336 (a) - (d)   IX. A (1) - (4)     93337 (a) - (d)   337 (a) - (d)   IX. A (1) - (4)     93338 (a) - (d)   338 (a) - (d)   IX. A (1) - (4)     93339 (a) - (w)   338 (a) - (w)   IX. A (1) - (4)     93340 (a) - (d)   340 (a) - (d)   IX. A (1) - (4)     93345 (a) - (c)   345 (a) - (d)   IX. A (1) - (4)     93346   346   VIII. E     93347   347   VIII. G     Article 6   Section V     93348 (a) - (g)   348 (a) - (g)   V. A - G     93349 (a) - (c)   349 (a) - (c)   V. I (1) - (d)     93351 (a) - (d)   350 (a) - (f)   V. I (1) - (6)     93351 (a) - (f)   350 (a) - (f)   V. I (1) - (6)     93352 (a) - (b)   352 (a) - (b)   V. V. (1) - (4)     93352 (a) - (b)   353 (a) - (c)   V. I (1) - (2)     93354 (a)   354 (a) - (b)   V. I (1) - (2)     93355 (a) - (c)   353 (a) - (c)   V. I (1) - (2)     93356   356   II. G   Section IX     See 93336   93347   See 336   347   Section IX     See 93304   See 3304   Section IX     See 93305   Section IX     Appendix A   Appendix A   Appendix A     Appendix B   Appendix A   Appendix B     Appendix B   Appendix B   Appendix B     Table B-II   Table B-II   Appendix B-II   Table B-II     Table B-II   Table B-II   Appendix C     Appendix C   Appendix C   Appendix C   Appendix C     Appendix C   Appendix C   Appendix C   Appendix C     Appendix E   Appendix E   Appendix E     Appendix E   Appendix E   Appendix E   Appendix E     Appendix E   Appendix E   Appendix E   Appendix E     Appendix E   Appendix E   Appendix E   Appendix E   Appendix E   Appendix E     Appendix E   Appendix E   Appendix E   Appendix E   Appendix E   Appendix E   Appendix E   Appendix E   Appendix E   Appendix E   Appendix E   Appendix E	,	,	\/II D (1) (9)
93336 (A) − (j) See 93336 − 93347 See 336 − 3347 See 336 − 3347 See 336 − 3347 See 336 − 3347 Section IX 93336 (a) − (d) 1336 (a) − (d) 1337 (a) − (d) 1337 (a) − (d) 1338 (a) − (d) 14 (a) − (d) 14 (a) − (d) 15 (a) − (d) 15 (a) − (d) 16 (a) − (d) 17 (a) − (d) 18 (a)		( ) ( )	( / ( /
See 9336 - 93347   See 336 - 347   Section IX     9336 (a) - (d)			( / ( /
93386 (a) — (d) 336 (a) — (d) IX. A (1) — (4) 93337 (a) — (d) 337 (a) — (d) IX. A (1) — (d) 1X. A (1) — (d) 1X	( ) ()	( ) ()	( / ( /
93337 (a) - (d)   337 (a) - (d)   IX. A (1) - (4)     93388 (a) - (d)   338 (a) - (d)   IX. A (1) - (4)     93389 (a) - (w)   339 (a) - (w)   IX. A (1) - (4)     93340 (a) - (w)   340 (a) - (d)   IX. A (1) - (4)     93345 (a) - (e)   345 (a) - (d)   IX. A (1) - (4)     93346   346   VIII.E     93347   347   VIII.G     Article 6   Article 6   Section V     93348 (a) - (g)   348 (a) - (g)   V. A - G     93349 (a) - (e)   349 (a) - (e)   V. H (1) - (3)     93350 (a) - (f)   350 (a) - (f)   V. H (1) - (3)     93351 (a) - (e)   352 (a) - (b)   V. K (1) - (2)     93353 (a) - (e)   353 (a) - (e)   V. L (1) - (3)     93354 (a)   354 (a) - (b)   V. L (1) - (2)     93353 (a) - (e)   353 (a) - (e)   V. L (1) - (2)     93354 (a)   354 (a) - (b)   V. M (1) - (2)     93355 (a)   355   356   II. G     See 93336   93347   See 336 - 347   Section IX     See 93330   See 3301   See 331   Section X     Appendix A   Appendix A   Appendix A   Appendix A     Appendix A   Appendix A   Appendix A   Appendix A     Appendix B   Appendix A   Appendix B   I. Table B-I     Table B-I   Table B-I   Table B-I   Appendix B-II: Table B-I     Table B-II   Table B-II   Appendix B-II: Table B-II     Table B-II   Table B-II   Appendix G-II   Appendix G-II     Appendix C   Appendix C-I   Appendix G-II     Appendix D   Appendix D   Appendix D   Appendix D     Appendix E-II   Appendix E-II   Appendix E-II   Appendix E-II     Appendix E-II   Appendix E-II   Appendix E-II   Appendix E-II     Appendix E-II   App			
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Appendix F (new)			
		1	Appendix F (new)
			Appendix G (new)

<sup>\*</sup> Section 93308 (d) and section 308 (d) specified reporting requirements for Appendix E-II facilities that no longer apply.

[Note: Figure 1 has been replaced by the following new Figure 1:]

#### Figure 1

#### **Reporting Requirements**

Facility Status	Required Reports to be Submitted
"High-Level" Facility	2588 Forms (see Appendix BII) or HotSpots Analysis and Reporting Program (HARP) Data Submittal or Risk Reduction Audit and Plan (may substitute)
"Intermediate-Level" Facility**	HARP or the 2-Page Update Summary Form (refer to Appendix BII, page 26 and page 27) or through Criteria Pollutant Reporting, or other District Reporting Program
"Low-Level" Facility	No Report Required

<sup>\*\*</sup> Includes facilities emitting specified quantities of Hazardous Air Pollutants (HAPs)

Note: If there is any inconsistency between this figure and the text of this Report, text language takes precedence.

[Note: Figure 2 has been replaced by the following new Figure 2:]

#### Figure 2

#### **Exemption and Reporting Levels**

	Prioritization Score*	Cancer Risk	Non-Cancer Hazard Index
High-Level	<u>&gt;10</u>	<u>&gt;10</u>	<u>&gt;1.0</u>
Intermediate- Level**	>1 and <10	>1 and <10	>0.1 and <1.0
Low-Level	<u>&lt;1</u>	<u>&lt;1</u>	<0.1

<sup>\*</sup> If a risk assessment was not required.

Note: If there is any inconsistency between this figure and the text of this Report, text language takes precedence.

<sup>\*\*</sup> Includes facilities emitting specified quantities of Hazardous Air Pollutants (HAPs) (section IV.A.(1)(e) and IV.B.(3)).

#### Section II. Applicability: Who Must Comply and When?

A. Facilities Whose Criteria Pollutant Emissions Are 25 Tons Per Year or More and Facilities Listed in a District Air Toxics Inventory, Report, or Survey.

Except for facilities or activities exempted by Health and Safety Code sections 44324, 44325, and 44344.4, as further defined in section III and IV, this regulation applies upon its effective date to any facility which:

- (1) manufactures, formulates, uses, or releases any listed substance or any other substance which reacts to form a listed substance, and releases 25 tons per year or more of total organic gases, particulate matter, nitrogen oxides, or sulfur oxides; or
- (2) is listed in any current toxics use or toxics air emission survey, inventory, or report released or compiled by an air pollution control district or air quality management district (herein referred to as "district") and referenced in the list of "Air Pollution Control District Air Toxic Inventories, Reports, or Surveys" in Appendix A of title 17 California Code of Regulations, sections 90700 through 90705.

**Plan Submittal Date**: Every facility included in section II.A. shall submit an emission inventory plan to the appropriate district by August 1, 1989, unless the district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district in accordance with Health and Safety Code section 44323.

B. Facilities Whose Criteria Pollutant Emissions Are 10 Tons Per Year or More.

Effective July 1, 1989, this regulation applies to any facility which manufactures, formulates, uses, or releases any listed substance or any other substance which reacts to form a listed substance, and releases 10 or more but less than 25 tons per year of total organic gases, particulate matter, nitrogen oxides, or sulfur oxides.

**Plan Submittal Date**: Every facility included in section II.B. shall submit an emission inventory plan to the appropriate district by August 1, 1990, unless the district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district.

- C. New Facilities and Facilities Whose Criteria Pollutant Emissions Increase.
  - (1) Requirements for New Facilities and Facilities Whose Criteria Pollutant Emissions Increase.

This regulation applies to facilities commencing operation or increasing emissions of total organic gases, particulate matter, nitrogen oxides, or sulfur oxides after June 1, 1989 which meet the conditions specified in section II.A. or II.B.

**Plan Submittal Date**: The operator of every such facility commencing operation or increasing emissions on or before January 1 of a given year shall submit an emission inventory plan to the appropriate district by the following August 1, unless:

- (a) Covered by Industrywide: The district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district.
- (b) Earlier Submission: The facility is subject to earlier submission of an inventory plan in accordance with district requirements adopted in accordance with Health and Safety Code sections 44365(b); or
- (c) Assessed Under District Permit Program: The entire new facility, or all of the modified facility's physical changes or changes in activities or operations which cause the facility's criteria pollutant emissions to increase so that the facility's emissions are above the levels specified in section II.A. or II.B., are subject to a district permit program established in accordance with Health and Safety Code section 42300, the district conducts an assessment which meets all the criteria specified in the following subsection II.C.(2), the facility qualifies under subsection II.C.2(a) or II.C.2(b), and the district issues a permit for the physical change or change in activities or operations or, for a new facility, a permit authorizing construction or operation of the facility.

#### (2) Alternative Evaluation for Facilities Subject to District Permit Program

The following alternative may be used, at district option, to determine whether a new or modified facility included in section II.C. must submit an emission inventory plan or comply with reporting requirements for "intermediate level" or "high level" facilities under section V.

- (a) New facility: If the entire new facility is subject to a district permit program established in accordance with Health and Safety Code section 42300, and the district conducts an assessment that meets all the criteria specified in section II.C.(2)(c), below, the district designates the entire new facility a "low level" facility in accordance with section IV.A., and the district issues a permit authorizing construction or operation of the new facility, then the new facility shall not be required to submit an emission inventory plan under section II.C.(1) and shall not be required to submit an emission inventory report under section II.J. If the facility is determined by the district to meet the criteria for an "intermediate level" or 'high level" facility, then the facility must comply with reporting requirements for "intermediate level" or "high level" facilities, respectively, under section V.
- (b) Modified facility: If all of the modified facility's physical changes or changes in activities or operations which cause the facility's criteria pollutant emissions to increase above the levels specified in section II.A. or II.B. are subject to a district permit program established in accordance with Health and Safety

Code section 42300, and the district conducts an assessment which meets all the criteria specified in section II.C.(2)(c), below, the district designates the modified facility a "low level" facility in accordance with section IV.A., and the district issues a permit for all of the modified facility's physical changes or changes in activities or operations, then the modified facility shall not be required to submit an emission inventory plan under section II.C.(1) and shall not be required to submit an emission inventory report under section II.J. If the facility is determined by the district to meet the criteria for an "intermediate level" or "high level" facility, then the facility must comply with reporting requirements for "intermediate level" or "high level" facilities, respectively, under section V.

- (c) Criteria: The district assessment must include an evaluation of all the emissions and potential emissions of listed substances, or their associated risks, or both, whichever the district determines to be appropriate, from the new or modified facility. A risk assessment conducted to meet the requirements of this section shall comply with Health and Safety Code section 44360(b)(2). The district assessment must meet all of the following criteria:
  - The assessment evaluates all substances listed under Appendix A-I, herein, that are emitted or could potentially be emitted under the permitted conditions from the new or modified facility;
  - (ii) The assessment includes appropriate health effects values as specified in section (E)(7) of Appendix F;
  - (iii) The assessment evaluates the aggregate effect of changes on the entire facility, both from multiple sources within the facility, and from the aggregate effect over time of multiple changes;
  - (iv) The assessment evaluates the receptor distance for the facility;
  - (v) The assessment evaluates the total quantity of emissions of each listed substance that could potentially be allowed to be emitted under the enforceable level of the permit;
  - (vi) The district finds that the new or modified facility meets the criteria for a "low level" facility as specified in section IV.A., herein;
  - (vii) The district issues an enforceable permit or permits, which limit the emissions of listed substances for the entire facility including any emissions from the facility as modified by the physical changes or changes in activities or operations, to not exceed the levels evaluated in the assessment;
  - (viii) The assessment meets equivalent provisions for the elements of a plan as specified in Health and Safety Code sections 44340 and 44342, including but not limited to producing a comprehensive characterization of the full range of pollutants; collecting or calculating data for all

releases; ensuring that the collected data will ensure the ability to characterize risk, if needed under Health and Safety Code section 44361; that the source of all emissions is displayed or described; and that a facility diagram be available which meets the requirements of Health and Safety Code section 44342(b). A facility-total summary of the emissions may be used to comply with these provisions as long as the totals are calculated based on all releases; and

(ix) The facility operator complies with all other applicable requirements of the "Hot Spots" program specified in Health and Safety Code sections 44300 - 44394.

#### D. Facilities Added to District Surveys.

This regulation applies to facilities added to a toxics use or toxics air emission survey, inventory, or report released or complied by a district and subsequently referenced in Appendix A of title 17, California Code of Regulations, sections 90700 through 90705.

Plan Submittal Date: The operator of a facility added to Appendix A of title 17, CCR, sections 90700 through 90705 on or before April 1 of a given year shall submit an emission inventory plan to the appropriate district by the following August 1, unless the district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district.

#### E. Facilities Emitting Less Than 10 Tons Per Year of Criteria Pollutants.

#### (1) Facilities in a Class Listed in Appendix E.

This regulation applies to any facility which manufactures, formulates, uses, or releases any listed substance or any other substance which reacts to form a listed substance; and which releases less than 10 tons per year of each of total organic gases, particulate matter, nitrogen oxides, and sulfur oxides; and which belongs to any class listed in Appendix E.

The operator of any facility subject to this section which belongs to any class listed in Appendix E shall submit to the appropriate district an emission inventory plan and emission inventory report which meet all the requirements of this regulation, unless:

- (a) The district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district in accordance with Health and Safety Code section 44323;
- (b) The facility is subject to earlier submission of an inventory plan in accordance with sections II.A., II.B., II.C., or II.D., or in accordance with district requirements adopted in accordance with Health and Safety Code section 44365(b); or

(c) The facility meets the general exclusion provision for facilities as specified in Note (1) to Appendix E.

Plan and Report Submittal: The inventory plan shall be due August 1, 1994 for any facility subject to this section and in operation on or before January 31, 1994. For any facility subject to this section commencing operation after January 31, 1994 and on or before January 1 of a given year, the operator shall submit an emission inventory plan to the appropriate district by the following August 1, except as provided in section II.E.(1)(a), (b), or (c) above. The schedule specified in Health and Safety Code sections 44340(b), 44341, and 44343, and in section II.A. and section VII.G. herein shall apply to the review, approval, and implementation of the plan and submittal of the report.

#### (2) Facilities in a Class Added to Appendix E.

This regulation applies to any facility subject to this section which belongs to any class subsequently added to Appendix E of this regulation.

Plan Submittal Date: The operator of any facility which belongs to a class added to Appendix E on or before April 1 of a given year shall submit the required emission inventory plan to the appropriate district by the following August 1, unless:

- (a) Covered by Industrywide: The district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district in accordance with Health and Safety Code section 44323;
- (b) Earlier Submission: The facility is subject to earlier submission of an inventory plan in accordance with sections II.A., II.B., II.C., or II.D., or in accordance with district requirements adopted in accordance with Health and Safety Code section 44365(b);
- (c) Meets the General Exclusion Provisions in Appendix E: The facility meets the general exclusion provision for individual facilities as specified in Note (1) to Appendix E; or
- (d) Assessed Under District Permit Program: The entire facility, or all of the facility's processes which cause the facility to be subject to the requirements in Appendix E for an "Any SIC" class or a class limited to specified portions of an SIC, are subject to a district permit program established in accordance with Health and Safety Code section 42300, the district conducts an assessment which meets all the criteria specified in section II.C.(2), herein, the district designates the facility a "low level" facility in accordance with the criteria in section IV.A., and the district issues a permit for the physical change or change in activities or operations or, for a new facility, a permit authorizing construction or operation of the facility. If the facility meets the requirements under this section, II.E.(2), the facility shall not be required to submit an emission inventory plan or report under section II.E.(1).

### (3) Facilities Emitting Less Than 10 Tons per Year of Criteria Pollutants and Identified By the District As Posing Concern to Public Health.

- (a) This regulation applies to any facility which does not otherwise belong to a class of facilities listed in Appendix E, but is a facility in any SIC that is identified by the district in accordance with this section and for which the district has made an initial assessment of the emissions from the facility, and the district has made a written determination that:
  - (i) there is a reasonable basis for determining that the facility may individually or in combination with other facilities pose a potential risk to public health exceeding the levels for prioritization score, cancer or non-cancer risk, or de minimis levels specified in section IV.A. for "low level" facilities, or the district has identified the emissions from the facility as being of health concern to the community, and
  - (ii) detailed toxics emission data are needed by the district to completely evaluate potential health risk to surrounding receptors.
- (b) Plan Submittal Date: The operator of any facility identified by the district under section II.E.(3)(a) of this section, and notified by the district on or before April 1 of a given year, shall submit an emission inventory plan that meets the requirements of this regulation to the appropriate district by the following August 1, unless:
  - (i) The district notifies the facility in writing that the facility's emissions are or will be included in an industrywide emission inventory prepared by the district in accordance with Health and Safety Code section 44323; or
  - (ii) The facility is subject to earlier submission of an inventory plan in accordance with sections II.A., II.B., II.C., or II.D., or in accordance with district requirements adopted in accordance with Health and Safety Code sections 44365(b).
- (c) Any facility that meets the requirements of section II.E.(3)(a) belongs to the class of facilities listed in Appendix E as "Facilities identified by districts under section II.E.(3)(a)".

#### F. Solid Waste Disposal Facilities.

For purposes of this regulation, the phrase "in compliance with section 41805.5" as used in Health and Safety Code section 44325, regarding solid waste disposal facilities, shall refer only to those activities conducted at a solid waste disposal facility which are subject to the Calderon testing program described in Health and Safety Code section 41805.5 and which have complied with its requirements. All other activities conducted at a solid waste disposal facility are subject to the requirements of this regulation. A facility shall be deemed to have complied with the requirements of the Calderon testing program if the facility has performed the required testing or is on schedule, as determined by the district, to do so. A facility

in compliance with Health and Safety Code section 41805.5 may use information collected under the Calderon testing program to satisfy the emission inventory requirements of this regulation for pollutants and activities subject to the Calderon testing program only.

#### G. Change in Ownership or Company Name.

The update requirements in section V apply to any facility subject to this regulation under the provisions of Health and Safety Code sections 44320 and 44322, which subsequently changes ownership or company name. Change in ownership or company name does not affect update reporting requirements or schedule.

#### H. Updates to the List of Substances.

The operator of any facility which manufactures, formulates, uses, or releases any substance added to the list of substances on or before April 1 of a given year shall include such substance in any emission inventory plan required under this regulation, or in the next update of the emission inventory required under Health and Safety Code section 44344 and section V, herein, unless the district notifies the facility in writing that the facility's emissions of the added substance are or will be included in an industrywide emission inventory prepared by the district.

#### I. Submittal of Emission Inventory Reports.

The operator of any facility subject to this regulation shall implement the facility's emission inventory plan as approved by the district and prepare and submit a report to the district in accordance with Health and Safety Code section 44341.

If the operator notifies the district in writing in the report that the operator believes specified information required in the facility diagram under section VII.B. involves the release of a trade secret, the district shall protect from disclosure any trade secret designated as such by the operator, if that trade secret is not a public record. The district shall notify the state board if an operator designates information as trade secret information in writing in the report.

#### J. Exemption From Further Compliance Based on Prioritization Score.

#### (1) Conditions

Except as specified in section II.J.(3), below, if a facility has submitted an emission inventory plan and an emission inventory report in accordance with this section and the district finds, and the state board concurs, that the facility's district-approved prioritization score for cancer and non-cancer health effects, based on the facility's most recent emission inventory or emission inventory update, are both equal to or less than 1.0, the facility is exempt from further compliance with the requirements of this regulation, unless the district denies the exemption for that facility based on the following criteria:

- (a) the district has good cause to believe the facility may pose a potential threat to public health and the facility therefore does not qualify for an exemption;
   and
- (b) the district requires the facility to document the facility's emissions and health impacts and the documentation does not support an exemption.

Any exempt facility that satisfies these conditions on or before January 1 of a given year is not required to submit any report to the district or the state board under this regulation for that or any subsequent year.

#### (2) Designation

Concurrence of the state board with the designation of an exempt facility will be presumed if the state board does not respond to the district within 45 days of the state board's receipt of the district's notification of its finding.

#### (3) Reinstatement

Except as specified in section II.J.(3)(c) below, a facility exempted from further compliance under this section II.J. shall again be subject to requirements under this regulation if either of the following occurs:

- (a) A facility exempted from further compliance under this section II.J. shall, upon receipt of a notice from the district, again be subject to the requirements of this regulation and the operator shall submit an emission inventory update for those sources and substances for which a physical change in the facility or a change in activities or operations has occurred as follows:
  - (i) The facility emits a substance newly listed in Appendix A; or
  - (ii) A sensitive receptor has been established or constructed within 500 meters of the facility after the facility became exempt; or
  - (iii) The facility emits a substance for which the health effects value used for cancer or non-cancer health effects, as specified in section (E)(7) of Appendix F, has increased in potency. This includes substances for which OEHHA has adopted a new health value.
- (b) The operator of a facility exempted from further compliance under this section II.J. shall submit an emission inventory update under section V for those sources and substances for which a particular physical change in the facility or a change in activities or operations occurs, if as a result of the particular change, either of the following has occurred:
  - (i) The facility has begun emitting a substance listed in Appendix A that was not included in the facility's previous emission inventory; or

- (ii) The facility has increased its emissions of a substance listed in Appendix A to a level greater than the level previously reported for that substance, and the increase exceeds 100 percent of the previously reported level.
- (c) Notwithstanding section II.J.(3)(b), above, a physical change or change in activities or operations at a facility shall not cause the facility to again be subject to the requirements of this regulation if all of the following conditions are met:
  - (i) The physical change or change in activities or operations is subject to a district permit program established pursuant to Health and Safety Code section 42300; and
  - (ii) The district conducts an assessment of the potential changes in emissions or their associated risks, whichever the district determines to be appropriate, attributable to the physical change or change in activities or operations and finds that the changes in emissions will not result in a significant risk from the facility's total emissions. A risk assessment conducted pursuant to this paragraph shall comply with Health and Safety Code section 44360(b)(2); and
  - (iii) The district issues a permit for the physical change or change in activities or operations.

#### (4) Reinstatement Date.

An exempted facility that again becomes subject to requirements under this regulation on or before January 1 of a given year shall comply with the updating requirements of section V that would be due on or after August 1 of that year.

#### (5) Reprioritization.

For purposes of section II.J.(3), above, a district shall redetermine a facility's prioritization score, or evaluate the prioritization score as calculated and submitted by the facility, within 90 days from the date of receipt of the facility's emission inventory update submitted under section V.

# Section III. Removal of Facilities That No Longer Meet Applicability Criteria

### A. Facilities Whose Emissions Decrease Below 10 Tons Per Year of Criteria Pollutants.

#### (1) Conditions.

This regulation shall cease to apply to any facility whose emissions of total organic gases, particulate matter, nitrogen oxides, or sulfur oxides are reduced to the extent that the facility no longer satisfies the conditions specified in section II.A. and II.B. [these sections address facilities emitting 25 or more, or 10 or more, tons per year, respectively, of criteria pollutants], if the facility demonstrates to the district, and the district finds and the state board concurs that the following criteria are satisfied.

- (a) The facility does not satisfy the conditions specified in section II.A.(2) or II.E. [these sections address, respectively, facilities on district toxics survey lists and facilities emitting less than 10 tons per year of criteria pollutants];
- (b) The emission reductions are permanent and enforceable; and
- (c) The facility poses no significant risk to public health.

Concurrence of the state board will be presumed if the state board does not respond to the district within 45 days of the state board's receipt of the district's notification of its finding.

The operator of any facility that satisfies these criteria and obtains the district's findings thereof and the state board's concurrence thereof on or before January 1 of a given year, shall not be required to comply with update requirements under section V. for that or any subsequent year.

#### (2) Reinstatement.

If at any time a facility ceases to satisfy any of the criteria specified in section III.A.(1), the facility is subject to the requirements of this regulation, including update requirements. The operator of a facility shall notify the district immediately if the facility ceases to satisfy any of the criteria specified in section III.A.(1).

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NOTE: Explanatory notes in italic type and enclosed in brackets ("[]") are included to assist the reader in following section cross-references. If there is any inconsistency or incompleteness between the main text and an italicized note, the main text takes precedence.

#### B. Facilities Removed from District Surveys.

#### (1) Conditions.

This regulation shall cease to apply to any facility removed from a district's toxics use or toxics air emission survey, inventory, or report referenced in Appendix A of title 17 California Code of Regulations, section 90700 through 90705, if the facility demonstrates to the district, and the district finds and the state board concurs that the following criteria are satisfied.

- (a) The facility does not satisfy the conditions specified in sections II.A., B, or E [these sections address facilities emitting 25 or more, 10 or more, or less than 10 tons per year of criteria pollutants, respectively]; and
- (b) The facility poses no significant risk to public health.

Concurrence of the state board will be presumed if the state board does not respond to the district within 45 days of the state board's receipt of the district's notification of its finding.

The operator of any facility that satisfies these criteria and is deleted from a reference in Appendix A of title 17 California Code of Regulations, section 90700 through 90705, on or before April 1 of a given year shall not be required to comply with update requirements under section V for that or any subsequent year.

#### (2) Reinstatement.

If at any time a facility ceases to satisfy any of the criteria specified in section III.B.(1), the facility is subject to the requirements of this regulation, including update requirements. The operator of a facility shall notify the district immediately if the facility fails to satisfy the criteria specified in section III.B.(1).

### C. Facilities Emitting Less Than 10 Tons Per Year of Criteria Pollutants And No Longer Falling Within An "Any SIC" Class Description Listed in Appendix E.

#### (1) Conditions.

This regulation shall cease to apply to any facility at which a process is discontinued such that the facility no longer belongs to an "any SIC" class listed in Appendix E, if the facility demonstrates to the district, and the district finds and the state board concurs that the following criteria are satisfied.

- (a) the facility does not satisfy the conditions specified in section II.A., II.B., or any other condition specified in section II.E. [these sections address facilities emitting 25 or more, 10 or more, or less than 10 tons per year of criteria pollutants, respectively];
- (b) the process is discontinued permanently; and

(c) the facility poses no significant risk to public health.

Concurrence of the state board will be presumed if the state board does not respond to the district within 45 days of the state board's receipt of the district's notification of its finding.

The operator of any facility that satisfies these and obtains the district's findings thereof and the state board's concurrence thereof on or before January 1 of a given year, shall not be required to comply with update requirements under section V for that or any subsequent year.

#### (2) Reinstatement.

If at any time a facility ceases to satisfy any of the criteria specified in section III.C.(1), the facility is subject to the requirements of this regulation, including update requirements. The operator of a facility shall notify the district immediately if the facility ceases to satisfy the criteria specified in section III.C.(1).

# Section IV. Update Categories and Exemptions From Update Reporting

The update categories of facilities meeting the criteria specified in this section, as designated by the district, are "low level", "intermediate level", "high level", or "not yet prioritized".

#### A. "Low Level" Facilities Exempted From Update Reporting.

#### (1) Conditions.

Facilities exempt from further compliance with this regulation under section II.J. are exempt from update requirements under section V. Facilities that are not exempt under section II.J. may qualify to be designated "low level" facilities for update reporting purposes if they meet the following conditions.

Except as specified in section IV.A.(1)(e), for facilities which emit federal Hazardous Air Pollutants (HAPs) and section IV.A.(5), a facility that has completed and obtained district approval of its emission inventory, and that has completed all other applicable requirements, will be excluded from update reporting requirements under this regulation, if the district finds and the state board concurs that any of the following criteria are satisfied:

- (a) Prioritization Score: the facility was not required to conduct a risk assessment under Health and Safety Code section 44360(b), and the facility has been prioritized by its district in accordance with Health and Safety Code section 44360(a) using procedures that have undergone public review, and, based on the most recent district-approved toxics emission inventory, the facility's prioritization score is equal to or less than 1.0 for cancer health effects and is equal to or less than 1.0 for non-cancer health effects. Some appropriate procedures for estimating prioritization scores are presented in the California Air Pollution Control Officers' Association (CAPCOA) "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines, July 1990", which is incorporated by reference herein; or
- (b) Approved Risk Assessment Result: the facility was required to conduct a risk assessment under Health and Safety Code section 44360(a), and the facility has had its risk assessment approved by the district in accordance with Health and Safety Code section 44362 and has been notified in writing by the district that the risk assessment results show a total potential cancer risk at an actual receptor, summed across all pathways of exposure and all compounds, of less than one (1.0) case per one million persons and a total hazard index (H.I.) for each toxicological endpoint of less than 0.1. Some appropriate procedures for determining potential cancer risk and total hazard index are presented in the CAPCOAOEHHA "Air Toxics 'Hot Spots' Program Revised 1992-Risk Assessment Guidelines, October 19932003", which is incorporated by reference herein; or

- (c) De Minimis Thresholds For Specified Classes of Facilities: the facility's primary activity falls into one of the following classes and the facility meets the specified criteria:
  - (i) the facility primarily performs printing as described by Standard Industrial Classification (SIC) Codes 2711 through 2771 or 2782, and the facility uses an annual average of two gallons per day or less (or 17 pounds per day or less) of all graphic arts materials (deducting the amount of any water or acetone), unless the district required a health risk assessment and results show the facility would not qualify under section IV.A.(1)(b); or
  - (ii) the facility is a wastewater treatment plant as described by SIC Code 4952 which does not have a sludge incinerator, and the facility's maximum throughput does not exceed 10,000,000 gallons per day, unless the district required a health risk assessment and results show the facility would not qualify under section IV.A.(1)(b); or
  - (iii) the facility is a crematorium for humans or animals, as described by SIC Code 7261 or any SIC Code that describes a facility using an incinerator to burn biomedical waste (animals), the facility uses only propane or natural gas as fuel, and the facility annually cremates no more than 300 human bodies or 43,200 pounds of remains (human or animal). Facilities using incinerators that burn biomedical waste other than cremating humans or animals do not qualify for this exemption.
  - (iv) the facility is primarily a boat building and repair facility or the facility is primarily a ship building and repair facility, as described by SIC Codes 3731 or 3732, respectively, and the facility uses 10 gallons per year or less of coatings or is a coating operation using hand-held nonrefillable aerosol cans only, unless the district required a health risk assessment and results show the facility would not qualify under section IV.A.(1)(b); or
  - (v) the facility is a hospital or veterinary clinic building that is in compliance with the control requirements specified in the Ethylene Oxide Control Measure for Sterilizers and Aerators, section 93108 of title 17, California Code of Regulations, and has an annual usage of ethylene oxide of less than 100 pounds per year if it is housed in a single story building, or has an annual usage of ethylene oxide of less than 600 pounds per year if it is housed in a multi-story building, unless the district required a health risk assessment and results show the facility would not qualify under section IV.A.(1)(b).
- (d) Results of Approved Screening Risk Assessment: the facility was not required to conduct a risk assessment under Health and Safety Code section 44360(b), and if the facility's prioritization score is greater than or equal to 1.0, the district, or the facility with the concurrence of the district, conducted, at district option, a worst-case, health conservative risk assessment using screening air dispersion modeling, as described below, to demonstrate that

the facility's screening risk levels qualify the facility for a "low level" exemption under this section.

- (i) Screening Criteria: the facility must use a worst-case, health conservative methodology, and must obtain written concurrence from the district and the Office of Environmental Health Hazard Assessment (OEHHA) that the methodology meets all of the criteria specified in Appendix F of this regulation, and conforms to acceptable procedures for calculating cancer risk and hazard index. Some appropriate procedures for determining potential cancer risk and total hazard index are presented in the CAPCOAOEHHA "Air Toxics 'Hot Spots' Program Revised 1992-Risk Assessment Guidelines, October 1993-2003", which is incorporated by reference herein.
- (ii) Approval Process: upon receipt of a proposal for use of a screening risk assessment, the district shall ensure that all components of information required under this section are included and that the methodology meets all state and district criteria for appropriate procedures. If the district determines that the proposal is not complete, the district will identify components that need to be included and will notify the facility. The facility may revise its proposal and resubmit it to the district. Once the proposal and risk assessment are complete, the district shall immediately submit the assessment to OEHHA for technical review and comment. To the extent practicable, OEHHA will determine whether the proposed screening risk assessment is acceptable and will note any deficiencies in the assessment, and will respond within 45 days of receipt of the assessment. OEHHA's approval of the assessment will be presumed if OEHHA does not respond to the district within 45 days of OEHHA's receipt of the assessment. The facility operator shall correct any deficiencies identified by OEHHA. The district may approve the assessment only if both the district and OEHHA find the assessment acceptable.
- (iii) Screening Threshold: the facility qualifies as a "low level" facility for purposes of this section and is exempted from update reporting requirements under section V, if the approved screening risk assessment shows a total potential cancer risk at the point of maximum off-site impact, summed across all pathways of exposure and all compounds, of less than one (1.0) case per one million persons and a total hazard index for each toxicological endpoint of less than 0.1.
- (iv) Screening Assessment Date: if the screening risk assessment is completed and approved on or before April 1 of a given year, the results may be used to qualify the facility for an exemption from update reporting requirements under section V that would be due in August of that year.
- (e) Exemption Does Not Apply to Facilities Emitting Specified Quantities of HAPs: Notwithstanding sections IV.(1)(a) through (d), above, a facility that emits the following quantities of any listed substances which are designated

by the United State Environmental Protection Agency as a Hazardous Air Pollutants (federal HAP, or HAP) under title III of the federal Clean Air Act Amendments of 1990 (42 U.S. 7412(b)), shall not be designated a "low level" facility for purposes of this section and shall not be exempted from update reporting under section V:

- (i) Five or more tons per year of any individual HAP substance, or
- (ii) A combined total of 12.5 or more tons per year of HAP substances.
- (f) Facilities with Diesel Engines: a "Diesel Engine-Only" facility may use screening health risk assessment tables provided by ARB or the district that are consistent with OEHHA risk assessment methodology.

#### (2) Designation.

Concurrence of the state board with the designation of a "low level" facility will be presumed if the state board does not respond to the district within 45 days of the state board's receipt of the district's notification of its finding.

A facility designated by the district as "low level" on or before April 1 of a given year shall be exempt from update requirements under section V that would be due in August of that year.

#### (3) Reinstatement.

- (a) A facility exempted from update reporting under section IV.A.(1) shall, upon receipt of a notice from the district, again be subject to the update requirements in section V of this regulation and the operator shall submit an emission inventory update, within 180 days or on an alternative schedule specified in writing by the district, for those sources and substances for which a physical change affecting the facility, a change in facility activities or operations, or a change in other factors has occurred, as follows:
  - (i) The facility emits a substance which has been added to the list of substances in accordance with Health and Safety Code section 44321 and for which there is an appropriate health effects value as specified in section (E)(7) of Appendix F; or
  - (ii) The district determines that a sensitive receptor has been established or constructed within 500 meters of the facility after the facility became exempt; or
  - (iii) The facility emits a substance for which there is an appropriate health effects value as specified in section (E)(7) of Appendix F and the district determines the health effects value indicates the facility no longer qualifies as a "low level" facility under section IV.A.(1); or

- (iv) The district determines that the approved source test method or emission estimation method used by the facility to calculate its emissions changed after the district determined the facility's prioritization score or risk, to such an extent that the facility no longer qualifies for an exemption as a "low level" facility under section IV.A.(1) using the new method to estimate or calculate the facility's emissions; or
- (v) The district determines there is good cause to expect the facility no longer qualifies for an exemption as a "low level" facility under section IV.A.(1).

At district option, in making the determination, the district may take into account any of the following factors: estimates of the quantity of toxic emissions from the facility; potency or toxicity of the substances released from the facility; nature of the release characteristics of the emissions; proximity of receptors; level of uncertainty in the estimated quantity or toxicity of the emissions; presence of one or more substances for which there is no approved, quantitative health effects value but for which there is quantitative or qualitative data indicating adverse health effects; control equipment affecting the emissions; anticipated or permitted levels of operation of the facility; comparison of anticipated operations and releases from the facility relative to other facilities which have been found to exceed the criteria for "low level" facilities, as specified in section IV; proximity of other facilities and sources of toxic emissions; other factors affecting the release, toxicity, dispersion, or potential risk of the likely emissions from the facility; and any other factor the district considers relevant.

- (b) A facility exempted from update reporting under section IV.A.(1) shall again be subject to update requirements of section V, as follows. If a physical change or a change in facility activities or operations affecting the facility has occurred so that the facility no longer satisfies the exemption criteria of section IV.A.(1) that qualified the facility to be a "low level" facility, the operator shall submit an emission inventory update within 180 days, or on an alternative schedule specified in writing by the district.
- (c) If a substantial decrease in the receptor distance occurred for the facility, and the facility operator could reasonably be expected to estimate the decreased distance, so that the facility no longer qualifies for an exemption as a "low level" facility under section IV.A.(1), the facility operator shall notify the district immediately unless the facility has received a notice from the district in accordance with section IV.A.(3)(a)(ii), above.

#### (4) Alternative Evaluation for Facilities Subject to District Permit Program.

Notwithstanding section IV.A.(2), a physical change affecting the facility or a change in facility activities or operations shall not cause the facility to again be subject to the update reporting requirements in section V if the district determines that all the following conditions are met:

- (a) The physical change or change in activities or operations is subject to a district permit program established in accordance with Health and Safety Code section 42300;
- (b) The district conducts an assessment of the potential changes in toxics emissions or their associated risks, whichever the district determines to be appropriate, attributable to the physical change or change in activities or operations of the facility, and finds that the changes in emissions will not cause the facility to cease to satisfy the exemption criteria specified in section IV.A.(1) which qualify the facility to be a "low level" facility;
- (c) The district assessment meets all of the following criteria:
  - (i) The assessment evaluates all substances listed under Appendix A;
  - (ii) The assessment evaluates appropriate health effects values as specified in section (E)(7) of Appendix F;
  - (iii) The assessment evaluates the aggregate effect of changes on the entire facility, both from multiple sources within the facility, and from the aggregate effect over time of multiple changes;
  - (iv) The assessment evaluates any decreases in receptor distance;
  - (v) The assessment evaluates any significant improvements in emission quantification methods applicable to the substances emitted from the facility;
  - (vi) The assessment evaluates the total quantity of emissions of each listed substance that could potentially be allowed to be emitted under the enforceable level of the permit; and
  - (vii) If the proposed modification is only for replacement of existing equipment with identical newer equipment, the district may streamline the evaluation to make only the following determinations: that the new equipment will have emissions of listed toxic substances equivalent to those emitted by the existing equipment; that the substances have had no changes in health effects values and no significant improvements in quantification method since the facility's most recent district assessment; and the receptor distance has not decreased since the facility's most recent district assessment.
- (d) The district issues an enforceable permit for the physical change or change in facility activities or operations, which limits the toxic emissions to within the levels included in the evaluation; and
- (e) The facility operator complies with all other applicable requirements of the Hot Spots program specified in Health and Safety Code sections 44300 44394,

- including but not limited to health risk assessment, public notification, and risk reduction audit and plan requirements if applicable to the facility.
- (f) Update of emission data: If, as a result of the evaluation for the permitted change, a previously "low level" or "intermediate level" facility still qualifies as a "low level" or "intermediate level" facility, respectively, then the district need not transmit updated emission data to the state board. If, as a result of the evaluation for the permitted change, a facility meets the criteria for an "intermediate level" or a "high level" facility, as specified in sections IV.B. and C., the facility shall, within 180 days of district request or from the commencement of operation under the permit, whichever is later, submit to the district the updated emission data in the applicable format for "intermediate level" or "high level" facilities, in the applicable format for updates as specified in section V or in an alternative format approved by the district. The district shall transmit the data for the updated emissions to the state board, in the format for updates specified in section V, or an alternative format approved by the state board.

#### (5) District Determination Regarding Exemption.

If a district has good cause to believe that a facility may individually or in combination with other facilities pose a potential threat to public health and that a facility therefore does not qualify for an exemption claimed by the facility from the reporting requirements of this regulation, the district may require the facility to document, in a format specified by the district, the facility's emissions and impacts, or the changes in emissions expected to occur as a result of a particular physical change, a change in activities or operations at the facility, or a change in other factors. The district may deny the exemption if the documentation does not support the claim for exemption.

At district option, in making the determination, the district may take into account any of the following factors: estimates of the quantity of toxic emissions from the facility; potency or toxicity of the substances released from the facility; nature of the release characteristics of the emissions; proximity of receptors; level of uncertainty in the estimated quantity or toxicity of the emissions; presence of one or more substances for which there is no approved, quantitative health effects value but for which there is quantitative or qualitative data indicating adverse health effects; control equipment affecting the emissions; anticipated or permitted levels of operation of the facility; comparison of anticipated operations and releases from the facility relative to other facilities which have been found to exceed the criteria for "low level" facilities, as specified in section IV; proximity of other facilities and sources of toxic emissions; other factors affecting the release, toxicity, dispersion, or potential risk of the likely emissions from the facility; and any other factor the district considers relevant.

#### B. "Intermediate Level" Facilities For Update Reporting.

#### (1) Conditions.

If a facility has completed and obtained district approval of its emission inventory and completed all other applicable requirements, and the facility does not qualify as a "low level" facility under section IV.A.(1), and meets any one or more of the criteria of this section IV.B.(1), the facility shall be designated as an "intermediate level" facility for update reporting purposes. The facility shall comply with the update requirements for "intermediate level" facilities as specified in section V.C., if the district finds and the state board concurs that the following criteria are satisfied.

- (a) Prioritization Score: the facility was not required to conduct a risk assessment under Health and Safety Code section 44360(b), and the facility has been prioritized by its district in accordance with Health and Safety Code section 44360(a) using procedures as described in section IV.A.(1), and the facility's prioritization score is less or equal to 10 for cancer health effects and is less than or equal to 10 for non-cancer health effects; or
- (b) Approved Risk Assessment Result: the facility was required to conduct a risk assessment under Health and Safety Code section 44360(b), and the facility has had its risk assessment approved by the district in accordance with Health and Safety Code section 44362, as described in section IV.A.(1), and has been notified in writing by the district that the risk assessment results show a total potential cancer risk at an actual receptor, summed across all pathways of exposure and all compounds, of less than ten (10) cases per one million persons and a total hazard index (H.I.) for each toxicological endpoint of less than or equal to 1.0; or
- (c) Results of Approved Screening Risk Assessment: if the facility was not required to conduct a risk assessment under Health and Safety Code section 44360(b), and the facility's prioritization score is greater than or equal to 10, the district, or the facility with the concurrence of the district, may conduct a worst-case, health conservative risk assessment using screening air dispersion modeling, as described below, to demonstrate that the facility's screening risk levels qualify the facility for the "intermediate level" for purposes of update reporting.
  - (i) Screening Criteria: the facility must use a worst-case, health conservative methodology, and must obtain written concurrence from the district and the Office of Environmental Health Hazard Assessment (OEHHA) that the methodology meets all of the criteria specified in Appendix F of this regulation, and conforms to acceptable procedures for calculating cancer risk and hazard index. Some appropriate procedures for determining potential cancer risk and total hazard index are presented in the CAPCOAOEHHA "Air Toxics 'Hot Spots' Program Revised 1992Risk Assessment Guidelines, October 19932003", which is incorporated by reference herein.

- (ii) Approval Process: upon receipt of a proposal for use of a screening risk assessment, the district shall ensure that all required components of information are included and that the methodology meets all state and district criteria for appropriate procedures. If the district determines that the proposal is not complete, the district will identify components that need to be included and will notify the facility. The facility may revise its proposal and resubmit it to the district. Once the proposal and assessment are complete, the district shall immediately submit the assessment to OEHHA for technical review and comment. To the extent practicable, OEHHA will determine whether the proposed screening risk assessment is acceptable and will note any deficiencies in the assessment, and will respond within 45 days of receipt of the assessment. OEHHA's approval of the assessment will be presumed if OEHHA does not respond to the district within 45 days of OEHHA's receipt of the assessment. The facility operator shall correct any deficiencies identified by OEHHA. The district may approve the assessment only if both the district and OEHHA find the assessment acceptable.
- (iii) Screening Threshold: the facility qualifies as an "intermediate level" facility for purposes of update reporting requirements, if the approved screening risk assessment results show a total potential cancer risk at the point of maximum off-site impact, summed across all pathways of exposure and all compounds, of less than ten (10) cases per one million persons and a total hazard index for each toxicological endpoint of less than or equal to 1.0.
- (iv) Screening Assessment Date: if the screening risk assessment is completed and approved on or before April 1 of a given year, the results may be used to qualify the facility as an "intermediate level" facility regarding update requirements under section V that would be due in August of that year.

#### (2) Designation.

Concurrence of the state board with the designation of an "intermediate facility" will be presumed if the state board does not respond to the district within 45 days of the state board's receipt of the district's notification of its finding.

A facility designated by the district as "intermediate level" on or before April 1 of a given year shall comply with update requirements for "intermediate level" facilities that would be due on or after August 1 of that year.

#### (3) Facilities Emitting Specified Quantities of HAPs.

If, based on the most recent district-approved toxics emission inventory report, a facility's prioritization score is greater than 1.0 for either cancer or non-cancer health effects and the facility emits the following quantities of any listed substances which are designated by the United States Environmental Protection Agency (U.S. EPA) as a Hazardous Air Pollutant (HAP):

- (a) Five or more tons per year of any individual HAP substance, or
- (b) A combined total of 12.5 or more tons per year of HAP substances,

the facility shall be designated an "intermediate level" facility and shall comply with the update reporting requirements specified in section V for "intermediate level" facilities, unless the facility exceeds any of the criteria in section IV.B.(1). A facility exceeding the criteria specified in section IV.B.(1) shall be designated a "high level" facility and shall comply with the update reporting requirements specified in section V for "high level" facilities.

#### C. "High Level" Facilities For Update Reporting.

#### (1) Conditions.

All facilities exceeding any one of the criteria specified in section IV.B. shall be designated by the district, with the concurrence of the state board, as "high level" facilities for update reporting purposes and shall comply with the update requirements specified in section V for "high level" facilities.

#### (2) Designation.

Concurrence of the state board with the designation of a "high level" facility will be presumed if the state board does not respond to the district within 45 days of the state board's receipt of the district's notification of its designation.

A facility designated by the district as "high level" on or before April 1 of a given year shall comply with update reporting requirements 'high level" facilities that would be due on of after August 1 of that year.

#### D. Facilities Not Yet Prioritized.

The operator of any facility that has not been prioritized by the district in accordance with Health and Safety Code section 44360(a) shall comply with the update reporting requirements specified in section V.E.

#### E. Timing for Designation of Update Categories.

If a facility has completed all applicable requirements and has been designated by the district into the appropriate update category on or before April 1 of a given year, the results of the district's categorization may be applied to the facility's applicable update reporting requirements under section V that would be due on or after August 1 of that year.

#### F. Redesignation If Facility is Reprioritized.

The district shall reevaluate and may redesignate a facility's update category if the district re-prioritizes a facility subsequent to the original designation of the facility's update category. If a facility has been re-designated by the district on or before April 1 of a given year, the results of the district's categorization may be applied to the facility's applicable update reporting requirements under section V that would be due for any update requirement due on or after August 1 of that year.

The district may redesignate a facility to a lower update category than previously only if the facility demonstrates to the district, and the district finds and the state board concurs that the following criteria are satisfied.

- (1) The redesignation must be based on the most recent district-approved emission inventory;
- (2) The emission and risk reductions are permanent and enforceable;
- (3) The facility meets the criteria specified in section IV for the applicable update category;
- (4) The facility poses no significant risk to public health; and
- (5) If the facility was required to conduct a risk assessment under Health and Safety Code section 44360(a) based on a previous emission inventory report, the facility must demonstrate to the satisfaction of the district and the state board that using the most recent district-approved emission inventory results in revised risk assessment values which meet the risk assessment criteria specified in section IV for the applicable update category.

Concurrence of the state board will be presumed if the state board does not respond to the district within 45 days of the state board's receipt of the district's notification of its finding.

# Section V. Update Reporting Requirements

# A. General Update Reporting Requirements.

Facility operators required to report under section II are subject to update reporting requirements as specified in section V, unless: (1) the facility is exempted under section II.J. or III, (2) the facility is designated as a "low level" facility and exempted from update reporting requirements under section IV.A., or (3) the district notifies the facility in advance in writing that the facility's emissions will be included in an industrywide emission inventory prepared by the district in accordance with Health and Safety Code section 44323.

Every facility operator subject to update reporting requirements shall submit either an Update Summary Form or an update plan and report, as specified in sections V.B. through V.M., below. Facility operators shall comply with these requirements in accordance with the schedule specified in section V.L. In sections V.B. through V.M. the terms "high level", "intermediate level", and "low level" mean the same as specified in section IV of this regulation, and shall be based on emissions from the most recent facility emission inventory approved by the district.

## B. Update Reporting Requirements for "High Level" Facilities.

# (1) Continue to Update Reports on the Risk-Driving Devices or All Devices.

Every four years the operator of any facility which is categorized by the district as a "high level" facility under section IV.C., shall submit to the district an update plan and report, as specified in section V.I., unless the facility meets the criteria for alternative update reporting as specified in section V.B.(2). Operators subject to this section shall identify and report all changes in emissions for those devices which constitute, at a minimum, the upper 80 percent of the facility's risk, such that the aggregated risk of devices not identified does not exceed either one cancer in a million or a noncancer hazard index of 0.1, in the judgment of the district. Devices shall be identified with the concurrence of the district. Alternatively, facility operators subject to this section may, at their option, submit update plans and reports which show all changes to all devices at the facility.

# (2) Alternative: Update Reporting Through Risk Reduction Audit and Plan.

If the facility is required to prepare a risk reduction audit and plan under Health and Safety Code section 44391, and the facility submits an emission inventory update in accordance with Health and Safety Code section 44391(h) which the district determines to contain equivalent information as required for update reporting for "high level" facilities under section V.B.(1), the facility may submit the risk reduction emission inventory update to the district to comply with the update requirement for "high level" facilities. The district shall redetermine the facility's prioritization score, or evaluate the prioritization score as calculated and submitted by the facility, within 90 days from the date of receiving notice that the

facility has completed the implementation of a risk reduction plan prepared pursuant to Health and Safety Code section 44392. The district shall transmit the updated emission inventory data to the state board in a format approved by the state board as specified in section VII.C.

## C. Update Reporting Requirements for "Intermediate Level" Facilities.

(1) Track Activity Changes and Update Reports if Significant Increases.

Every four years the operator of any facility which is categorized by a district as an "intermediate level" facility under section IV.B., shall complete and submit to the district for review the Update Summary Form in Appendix B, as specified in section V.H. Based on data reported on Part C of the Update Summary Form, any facility that experienced a significant increase in facility activity since the facility's previous emission inventory report was submitted shall submit an update plan and report, as specified in section V.I. The update plan and report shall include updated information for devices that experience significant increases in activity.

- (a) Significant Increases. For facility operators subject to section C.(1), significant increases in facility activity shall be defined as a 10 percent or greater increase in device activity. Devices may be identified as described in either section V.C.(1)(a)(i) or (ii) below:
  - (i) Any Devices. Any device whose activity (as measured by increases in throughput, fuel usage or type, feed rates, emissions, or process rates) has increased by 10 percent or greater since the facility's previous emission inventory report was submitted; or
  - (ii) Substantial Risk Devices. Those devices which constitute, at a minimum, the upper 80 percent of the facility's risk, such that the aggregated risk of devices not identified does not exceed either one cancer in a million or a noncancer hazard index of 0.1, in the judgment of the district. Devices shall be identified with the concurrence of the district. Facility operators shall provide updated data in an update plan and report for any of the identified devices with activity increases of 10 percent or more (as measured by increases in throughput, fuel usage or type, feed rates, emissions, or process rates).
- (b) Consolidated Device Data: At their option, facility operators may consolidate devices for the purpose of quantifying increases in device activity when reporting on the Update Summary Form in Appendix B. All devices, so consolidated, must be within the same Source Classification Code (SCC). Increases shall be in comparison to the activity for comparable devices as reported in the facility's most recently submitted and approved emission inventory report. When the sum of the changes in activity for all consolidated devices within an SCC exceeds a 10 percent increase, an updated Process Information and Emission Information Form must be submitted by the facility

- operator for any individual device or grouped devices (reported on the same Process Information Form) whose activity increases by 10 percent or more.
- (c) Other Criteria: Based upon data reported in Part B of the Update Summary Form or other information required by the district, districts may require a facility operator to submit an emission inventory update plan and report for the facility as specified in section V.I.

# (2) Alternative: Track Through Combined Criteria/Toxics Inventory Reporting.

The facility shall be exempted from the activity tracking and update requirements in section V.C.(1) if the district notifies the facility in advance in writing that the facility's toxics emissions are included by the district in a combined district emission inventory program that includes criteria pollutants and toxic substances, and if the facility provides throughput and other data requested by the district in accordance with the combined program. The district shall report the updated emission inventory to the state board with its combined emission inventory updates.

# D. Update Reporting Requirements for "Low Level" Facilities.

Facilities categorized by the district as "low level" facilities under section IV.A. are not subject to the update reporting requirements of this section.

# E. Update Reporting Requirements for Facilities Not Yet Prioritized.

# (1) If the Facility's Emission Inventory Report Has Been Approved.

If a facility whose emission inventory report has been approved by the district has not been prioritized by the district under Health and Safety Code section 44360(a), the facility is an "intermediate level" facility for purposes of update reporting, and the facility shall comply with the activity tracking and update requirements in section V.C. for "intermediate level" facilities, unless one or more of the following occurs:

- (a) If the facility operator requests in writing that the district, within 90 days of receipt of the request, prioritize the facility and designate its update category in accordance with section IV herein, the district shall, within 90 days of receipt of the request, prioritize the facility in accordance with Health and Safety Code section 44360(a) using procedures that have undergone public review, and designate the facility's update category. The district shall notify the facility operator of the prioritization results, if requested by the operator to do so.
- (b) If the district prioritizes and designates the update category of the facility within 90 days of the request or within 90 days following the effective date of this regulation, whichever comes later, the facility shall comply with the applicable update reporting requirements specified in this section for "low level", "intermediate level", or "high level" facilities.

(c) If the district does not prioritize and designate the update category of the facility within 90 days as specified in section V.E.(1)(b), above, the facility must complete Part A of the Update Summary Form in Appendix B, as specified in section V.H.

For any facility prioritized by August 1 of a given year, section V.E.(1) no longer applies to the facility for that year or for any subsequent year.

# (2) If the Facility's Emission Inventory Report Has Not Been Approved.

If a facility with an emission inventory plan (or update plan) approved by the district has submitted a complete emission inventory report (or update report) within 180 days after district approval of the plan, but has not been prioritized by the district in accordance with Health and Safety Code section 44360(a), and has not been notified by the district regarding either (a) approval of the report, (b) the need for corrections or modifications to the report, or (c) that the facility will be included in an industrywide inventory prepared by the district, then the facility is an "intermediate level" facility for purposes of update reporting, and shall comply with the activity tracking and update requirements in section V.C. for "intermediate level" facilities, unless one or more of the following criteria are satisfied:

- (a) If the facility operator requests in writing that the district, within 120 days of receipt of the request, review and approve its emission inventory report, or notify the facility of needed corrections, the district shall, within 120 days of receipt, either (i) approve the report and provide the facility's prioritization and update categorization results, (ii) notify the facility of needed corrections to the report, or (iii) notify the facility that it will be included in an industrywide inventory prepared by the district.
- (b) If the district notifies the facility within 120 days of the request or within 120 days of the effective date of this regulation, whichever comes later, that corrections are needed to the emission inventory report, the facility shall revise the report according to the timeframe specified by the district and return it to the district for review and approval. If corrections are not needed to the emission inventory report and the district prioritizes and designates the update category of the facility within 120 days, the facility shall comply with the applicable update reporting requirements specified in section V for "low level", "intermediate level", or "high level" facilities as appropriate.
- (c) If the district does not prioritize the facility or notify the facility operator of needed corrections within 120 days as specified in section V.E.(2)(b), above, the facility shall comply with the following update reporting requirements: the operator shall complete and submit to the district Part A of the Update Summary Form in Appendix B, as specified in section V.H.

For any facility prioritized by August 1 of a given year, section V.E.(2) no longer applies to the facility for that year or for any subsequent year. Districts shall redetermine a facility's prioritization score, or evaluate the prioritization score as

calculated by the facility, within 90 days from the date of receipt of an emission inventory update submitted under section V.

# F. Voluntary Updates.

Any facility operator may voluntarily submit an update plan and report to satisfy the requirements of section V, following approval and scheduling by the district.

## G. Data Revised for Prioritizations or Risk Assessments.

If a facility's previous emission inventory report has been approved by the district and the facility operator requests, and a district allows, a facility operator to use revised inventory data for prioritization or risk assessment, the facility operator shall submit an update report to the district which reflects any changes from the previously submitted and approved emission inventory report. The district shall submit this updated inventory to the state board.

# H. Update Summary Form

- (1) Operators of facilities identified in sections V.C., V.E.(1)(c), and V.E.(2)(c) shall complete and submit the Update Summary Form, included in Appendix B, for the applicable update reporting year based on the schedule specified in section V.L.
- (2) Districts shall review the Update Summary Form and respond to the facility operator as specified in section V.M. The Update Summary Form shall satisfy a facility's update requirements for facilities specified in section V.C., V.E.(1)(c), and V.E.(2)(c) unless the operator is notified by the district that an update plan and report is required as specified in section V.
- (3) In reviewing Update Summary Form to determine whether to require the facility to submit an update plan and report, districts may take into account factors including, but not necessarily limited to:
  - (a) increases in throughput, fuel usage, process rate changes, or emissions;
  - (b) changes in types of fuels or substances used at the facility:
  - (c) determinations that previous source test data are inadequate;
  - (d) addition of new processes or equipment to the facility which cause increases in emissions;
  - (e) issuance of new permits or changes in permit conditions:
  - (f) emissions of any listed substances not previously reported, including newly listed substances, that may cause the facility to exceed the criteria specified in section IV for the facility's current update category;
  - (g) emissions of listed substances for which there is an appropriate health effects value as specified in section (E)(7) of Appendix F, such that the facility may exceed the criteria specified in section IV for the current update category:
  - (h) facility status as it pertains to current or future air pollution control measures;
  - (i) reductions in the distance from the facility to the nearest receptor;
  - (i) changes in emission factors;
  - (k) other factors the district considers relevant.

# I. Update Plans and Update Reports.

- (1) The operator of any facility subject to the plan and report update requirements of this section shall submit to the district any required update plan and update report according to the schedules specified in section V.L. The update plan and report need only update changes in information contained in the previously submitted emission inventory plan and emission inventory report for the facility in order to represent the most current values of the information required under sections VI through IX and Appendices A through F. Such information includes but is not limited to any applicable substances added to Appendix A in accordance with section II.H., which have not previously been addressed in the plan or report.
- (2) Except as provided in section V.J., at least the following updated information shall be submitted as part of the update plan and report:
  - (a) For those facilities subject to section V.I. under section V.B., updated information shall be submitted for all components of the plan and report as may be necessary to reflect any change in any parameter which affects the nature or quantity of emissions of a listed substance from the facility for all devices identified under section V.B.
  - (b) For facilities subject to section V.I. under section V.C., updated information shall be submitted for those components of the plan and report which may be necessary to describe emission increases (including emissions of previously unreported listed substances) for all devices identified under section V.C.
- (3) Updated information, when required, may include but is not limited to: the effects of changes in the emission controls affecting the process, changes in input materials used, changes in the nature or quantity of any emitting process, and changes in the proposed method of quantifying emissions. A revised process flow diagram and facility diagram shall only be submitted when new components or processes not reflected in the prior diagrams have been added at the facility. Each such change shall be clearly marked.
- (4) As required, updated information shall be provided for each applicable component of a plan and report to address any new operation, process, or listed substance at the facility, and to account for any revised or additional requirements under this subchapter which apply to the facility, including but not limited to any applicable substances added to Appendix A under section II.H.
- (5) For any revision proposed in an update plan which reflects a reduction in emissions, the facility operator shall include in the update plan adequate documentation to demonstrate to the district the basis and magnitude of the reduction.
- (6) An update report shall include all applicable report components as required under section VII, except that only the reporting forms which reflect revised information shall be submitted, with each addition, deletion, and change indicated

as specified in Appendix B. The report shall include the results of any additional source test(s) and any other supporting documentation for updates, as specified in section VII.D., including any new or updated source test results under section VII.D.(2) where such tests have been performed prior to the date of submittal of the update report.

# J. Use of Previously Submitted Information.

- (1) Except as specified for previous source test results in section V.J.(2), J.(3), and J.(4), the facility operator may propose in an update plan to use an applicable component of a previously submitted plan or report to satisfy the update requirement for that component, and the district may approve the proposal, if the facility operator provides adequate documentation to demonstrate to the district that:
  - (a) no change has occurred since the last update which would affect the accuracy of the previously reported information; or
  - (b) the previously reported information characterizes the current emissions to within the required degree of accuracy.
- (2) Except as specified in section V.J.(3), the facility operator may propose in the update plan to use the results of a previous source test conducted in accordance with section IX. to fulfill the update requirements for a source test required under section IX.A. and Appendix D provided that:
  - (a) the test meets the requirements for use of previous source tests specified in section IX.A.(4); and
  - (b) the test meets all other applicable requirements specified in sections IX.A. through IX.D.

Such a proposal to use the "results of a previous source test" may include a proposal to calculate a revised emission result by applying the site-specific emission factor developed under section IX.F., together with current values of the applicable "usage units" as specified in section IX.F., provided that the current values of the relevant process parameters do not exceed the range of values characterized by the previous source test and that all applicable provisions in section V.J.(2) and J.(3) are met.

- (3) Unless exempted by the district, the results of a previous source test shall not be used to fulfill update requirements for a source test required under section IX.A. and Appendix D if:
  - (a) a major change, including but not limited to: long-term shutdown of equipment, startup of new or modified equipment, change in air pollution control equipment, or change in the input materials affecting listed substances, has occurred in the operation of the facility which affects the emitting process for which testing is required; or,

- (b) the facility has been cited by the district for a violation of any rule limiting or controlling a listed substance associated with the emitting process for which testing is required; or
- (c) the previous source test data submitted by the facility has been determined by the district or the Executive Officer of the Air Resources Board to be invalid or inadequate to accurately assess emissions for the tested process(es).
- (4) The district may approve a proposal to use the results of a previous source test to fulfill an update of a required source test if the district determines that the requirements specified in subsections J.(2) and J.(3) are met. The district may require a new test to update a previous source test if the district has reason to believe that conditions affecting the emissions of listed substances have changed or if the district determines that significantly improved emission quantification is technologically feasible and appropriate for the particular facility.

# K. Update Reporting Year.

- (1) Information required on the Update Summary Form shall reflect facility operations for the calendar year (the update year) prior to the year the Update Summary Form is due. Information required on the Update Summary Form which describes changes at a facility shall be referenced to either the previously submitted emissions inventory report or to the previous update year, as specified for individual questions on the form.
- (2) Emissions data in any update plan and update report shall reflect facility operations during the calendar year (the update year) prior to the year in which the plan is due.

#### L. Schedule for Update Submittal.

- (1) Update submittals shall be due according to the following schedule unless the district specifies in writing in advance an alternative schedule within the required four-year update period.
  - (a) For any facility subject to the requirements of this regulation under sections II.A. and V.B., the update plan shall be due by August 1, 1994, and every four years thereafter.
  - (b) For any facility subject to the requirements of this regulation under sections II.A. and either V.C. or V.E., the Update Summary Form shall be due by February 1, 1994, and every four years thereafter. If the district requires that the facility prepare an update plan, such plan shall be due August 1 of the year the Update Summary Form is due.
  - (c) For any facility subject to the requirements of this regulation under sections II.B. and V.B., the update plan shall be due by August 1, 1995, and every four years thereafter.

- (d) For any facility subject to the requirements of this regulation under sections II.B. and either V.C. or V.E., the Update Summary Form shall be due by February 1, 1995, and every four years thereafter. If the district requires that the facility prepare an update plan, such plan shall be due August 1 of the year the Update Summary Form is due.
- (e) For any facility subject to the requirements of this regulation under either section II.C. or II.D. and section V.B., the update plan shall be due by August 1 of the year which is four years after the year the initial plan submittal was required, and every four years thereafter.
- (f) For any facility subject to the requirements of this regulation under either section II.C. or II.D. and either section V.C. or V.E., the Update Summary Form shall be due by February 1 of the year which is four years after the year the initial plan submittal was required and every four years thereafter. If the Update Summary Form indicates that the facility must prepare an update plan, such plan shall be due August 1 of the same year the Update Summary Form is due.
- (g) For any facility subject to the requirements of this regulation under any of section II.E.(1)(a) or II.E.(2) or II.E.(3) and section V.B., the update plan shall be due by August 1, 1994 and every four years thereafter.
- (h) For any facility subject to the requirements of this regulation under any of section II.E.(1)(a) or II.E.(2) or II.E.(3) and either section V.C. or V.E., the Update Summary Form shall be due by February 1, 1994, and every four years thereafter. If the district requires that the facility prepare an update plan, such plan shall be due August 1 of the year the Update Summary Form is due.
- (i) For any "diesel engine-only" facility, the requirements in section XI shall apply.
- (2) Except as provided in section V.L.(3), the schedule specified for the inventory plan and report in Health and Safety Code sections 44340(b), 44341, and 44343, and in section VII.A. and VII.G. of this regulation shall apply to the review, approval, and implementation of the update plan and update report.
- (3) Nothing in subsection V.L.(2) shall preclude an operator from submitting a proposed update report at the same time as the update plan provided that all applicable revisions are included in the update report and that no new source testing was required for the facility. If upon review of the update plan, the district requires the operator to revise the update plan, the operator shall implement the revised plan and incorporate all applicable revisions to the update report.

# M. Schedule for Update Summary Form Review.

- (1) Districts shall review facility Update Summary Forms. Following review, districts shall notify facility operators in writing if the facility operator must submit an emissions inventory update plan and report as specified in section V.I. Districts shall notify facilities of the requirement to perform an update by May 1 of the year the Update Summary Form was submitted, or within 90 days of receipt of the form if an alternative submittal schedule was specified by the district.
- (2) If the district does not respond to the facility operator as specified in section V.M.(1), the Update Summary Form shall meet the facility's update requirements for the update year. However, failure of the district to respond does not prevent the district from requiring updated information if the district determines that information provided on the Update Summary Form is erroneous, incomplete, or the existing facility emissions inventory does not adequately characterize facility emissions.

# Section VI. Requirements for Preparing Emission Inventory Plans

#### A. General.

The emission inventory plan submitted in accordance with the requirements of section II shall provide a comprehensive and detailed description of the methods that will be used to quantify air releases or potential air releases of listed substances from all points of release. The plan shall include quantification methods which shall result in an accurate and comprehensive characterization of releases and shall comply with all other applicable requirements in this regulation.

# B. Flow Diagram.

Each inventory plan shall include a flow diagram consisting of a comprehensive schematic drawing of the process flows that affect the nature or quantity of emissions of listed substances. If necessary, a reference document shall be attached to the drawing to include any information needed to fulfill the flow diagram requirements that cannot be included on the drawing. An existing diagram which meets the requirements of this section may be submitted. The diagram shall indicate the following:

- (1) All devices associated with an emitting process within a facility, including but not limited to:
  - (a) Boilers
  - (b) IC Engines
  - (c) Incinerators
  - (d) Flares
  - (e) Furnaces
  - (f) Kilns
  - (g) Process Heaters
  - (h) Control Devices (including hoods)
  - (i) Storage or Process Tanks or Enclosures
  - (j) Cooling Towers

Each device shall be represented by a block labeled with the name and number of the device it represents.

For purposes of this section, similar small devices which are substantially equivalent may be aggregated and considered for reporting purposes as one device. The number of such devices which are so aggregated shall be reported.

(2) Specific emitting processes, each associated with a device number and numbered sequentially as an emitting process within that device number. Emittents which always occur simultaneously from the same point of release shall be considered to result from a single emitting process. Each fuel burned at a combustion device shall be reported as a separate emitting process. Each air pollution control device and process shall be reported.

For purposes of this section, similar small emitting processes which are substantially equivalent may be aggregated and considered for reporting purposes as one emitting process. The number of such emitting processes which are so aggregated shall be reported.

- (3) An estimate of the numbers of valves, vents, flanges, seals, and gaskets associated with each listed substance at the general locations of fugitive emissions. The estimate shall be sufficiently accurate so calculations of emissions based on the estimate meet the degree of accuracy required in section VIII.E. The estimate of such components may be indicated as an aggregation at a general location.
- (4) All stacks, vents, ducted building exhaust sites, and other sites of exhaust or fugitive release of a listed substance.
- (5) Interconnections showing functional relationships that affect emissions or their reportable characteristics, sufficient to support evaluation of the completeness and representativeness of each required source test protocol and inventory plan, including but not limited to connections between devices, stacks, emitting processes, and control equipment. Interconnections shall be indicated by arrows labeled to identify the listed substances associated with each discrete emission point or general fugitive location.
- (6) All major modifications to existing processes or devices anticipated to result in a significant change in the amount or nature of emissions which are expected to occur during the reporting period.

#### C. Trade Secrets.

Information claimed to be a trade secret shall be denoted by use of a "black box" block on the flow diagram which is labeled with the non-proprietary name(s) of the operation(s) therein. All devices and emitting processes within the "black box" shall be identified by name and by number. Fugitive emissions of listed substances located within the black box shall be indicated.

# D. Numbering.

Numbering of devices and stacks shall be consistent throughout all parts of the plan, report, and reporting forms and with existing device and stack numbers currently used by the district to characterize the facility. For devices and stacks for which the district has not assigned numbers, the facility operator shall number the devices and stacks in a manner compatible with the existing numbering convention. In cases where a facility has one or more substantially identical activities, repetitions may be indicated with an appropriately labeled box or boxes.

# E. Specification of Emission Quantification Methods.

For each emission point on the flow diagram, including the general location of fugitive emissions, the facility operator shall identify the listed substances being emitted and specify in detail the estimation method, source test method or other measurement method that will be used to quantify the air releases of the listed substances as required by section IX, as appropriate. Each method shall result in an accurate and comprehensive characterization of releases.

#### F. Source Test Protocol and Other Required Information.

The emission inventory plan shall include a source test protocol which describes how each source test method will be applied to each emission point where source testing is required under section IX.A. and Appendix D. The emission inventory plan shall propose values for the effectiveness of air pollution control equipment in accordance with the requirements of section IX.G.(3) and shall include any other documentation required to be cited under section VIII.

# Section VII. Requirements for Emission Inventory Reports

#### A. General.

The emission inventory report shall be submitted to the district within 180 days after approval of the emission inventory plan submitted under section II. The emission inventory reports shall include a facility diagram; the results of all source tests, material analysis and other measurements performed; and completed copies of the necessary multiples of the four core reporting forms and the S-UP Form, which are included in Appendix B, or the required information in an alternative format if so required by the district. Any deficiencies or errors noted by the district, or by the state board where applicable, shall be corrected.

# B. Facility Diagram.

- (1) The facility diagram shall include all the information presented in the flow diagram and in the equivalent format. The emission inventory report shall identify any specific required information which the facility chooses to designate as trade secret.
- (2) Only the necessary data used to calculate emissions which are required in the facility diagram may be designated trade secret. For purposes of this regulation, "necessary data to calculate emissions" shall include the following data fields: annual process rate, maximum hourly process rate, controlled and uncontrolled emission factors, method of estimation code, process description field, and the following data fields which are not required to be reported under this regulation but which may be reported under combined toxics and criteria pollutant inventory reporting: equipment size, maximum design rate, percent sulfur content, and emission factor origin code.

"Necessary data to calculate emissions" which may be designated trade secret shall not include (a) information previously disclosed or easily discernable; (b) all information which the district requires any applicant to provide before such applicant builds, alters, replaces, or operates a facility, device, or emitting process; (c) information on the facility information Form or the stack information Form in Appendix B; and (d) all other information on the device Information Form, process Information Form, and emission information Form in Appendix B that was not defined in the preceding paragraph as "necessary data to calculate emissions."

(3) For standardization purposes, information claimed to be a trade secret should be included on the facility diagram and reference document with a box around such information, using dashed lines and a bold letter "C" in the upper right corner of the dashed box. Any information claimed to be a trade secret in writing in the report will be protected from disclosure by the district as specified in section II.I.

# C. Reporting Formats and Forms.

# (1) Required Data Elements and Formats.

The operator of each facility subject to the emission inventory report requirements of this regulation shall provide complete information for each required core and supplemental data element in the specified field formats. The data elements (or data fields) that are required to be reported, and the associated field formats for each, are specified in Appendix B-I, for each of the five **core** components of the emission inventory report: Facility Information, Stack Information, Device Information, Process Information, and Emission Information, and for the supplemental component, the Supplemental Use and Production (S-UP) Information. The operator shall complete one entry for Facility Information, one entry of Stack Information for each stack or vent from which a listed substance may be released, one entry of Device Information for each device associated with a release of a listed substance, one entry of Process Information for each emitting process associated with the release of a listed substance within each device, and one entry of Emission Information for each listed substance within each process. The operator shall submit one entry of S-UP information for each substance for which it is required.

The Update Summary Form (US Form) required under section V.C. and V.E. for update summary information is also included in Appendix B.

# (2) Acceptable Forms.

The operator of each facility subject to emission inventory report requirements of section II shall submit the required **core** and **S-UP** data elements, in the formats specified in section VII.C.(1), above, via electronic or paper media, using the state board's reporting forms and instructions, as specified in Appendix B-II to this regulation, except that the required information shall be submitted in an alternative format as approved by the district and which meets the state board's specifications in Appendix B-I.

The Update Summary Form information shall be submitted using the US Form and instructions in Appendix B, except that the required information may be submitted in an alternative format as approved by the district and which meets the state board's specifications in Appendix B-I.

# (3) General Reporting Form Procedures.

(a) Core Forms: The operator of each facility submitting an emission inventory report in accordance with subsection C.(2), shall complete the following: one Facility Information Form, an entry on a Stack information Form for each stack or vent from which a listed substance may be released, an entry on a Device information Form for each device associated with a release of a listed substance, a Process information Form for each emitting process within each device, and an Emission information Form for each listed substance which is emitted from each process. A Device Information Form,

a **Process Information Form**, and an **Emission Information Form** shall be completed for each general location of fugitive emissions.

# (b) Form S-Up.

- (i) Form S-UP shall be completed for all substances listed in Appendix A-II which are: 1) used as ingredients in any activity or process at the facility; 2) manufactured or produced as a result of any activity or process at the facility; or 3) otherwise associated with an activity or process, including but not limited to presence in a formulation operation or presence as a by-product or a reaction intermediate which appears temporarily during processing.
- (ii) Form S-UP shall also be completed for all substances listed in Appendix A-I when required under section VIII.E.(5).
- (c) Designation of Trade Secrets: Information designated as trade secret on the facility diagram or in the emission inventory report should be identified on the reporting forms according to the instructions set forth in Appendix B.
- (d) Availability of Forms: The state board's reporting forms, or the alternative forms as approved by the district, shall be available at the district office and shall be provided to facility operators upon request. <u>Availability of HARP: the HotSpots Analysis and Reporting Program (HARP) is available for download from ARB's internet web site at: http://arb.ca.gov/toxics/harp/harp.htm. Data may also be submitted using a format specified by the district.</u>

## D. Other Required Data.

- (1) Each emission inventory report shall include the results of each required source test and source test protocol, each fuel or material analysis, and any other documentation required to be submitted under section VIII and section IX.
- (2) The emission inventory report shall include the results of any source tests performed in accordance with district regulations implementing an airborne toxic control measure which was adopted under Health and Safety Code section 39666 for the control of toxic air contaminants, where such source tests have been performed prior to the date of submittal of the emission inventory report.
- (3) If so required by the district, the facility operator shall include with the emission inventory report a facility-wide emissions summary which lists for each reported substance the total of the annual emissions and maximum hourly emissions from the facility. The totals for each reported substance shall match the sums of the annual and maximum hourly emissions, respectively, which are reported for the substance on the process Information Form and emission information Form for all applicable emitting processes at the facility. If such a summary is required by the district, the district shall, upon the facility operator's request, specify a standardized format for the summary data.

(4) If so required by the district, the facility operator shall include, in the emission inventory report, information on the proximity of the source to potential receptors, including but not limited to the distance to the nearest hospital, school, daycare center, worksite, and residence. If such information is required by the district, the district shall, upon the facility operator's request, specify a standardized format for the information.

# E. Format for Reports and Presentation of Data.

The core Facility Information Form shall be the first page of the emission inventory report. Other core and supplemental forms shall be in sequence by device number. The required source test report and other documentation supporting the emission calculations shall be attached after the core reporting forms and submitted to the district in an order corresponding to the core reporting forms for the applicable devices, stacks, or emitting processes as specified by the district.

#### F. Plot Plan.

If so required by the district, the inventory report shall include a plot plan which shall show a plan view of the facility site and structure(s). The plot plan shall indicate the direction of north and shall be drawn to scale on one sheet of paper, unless an alternative scaling is authorized by the district. All stacks shall be shown and referenced by stack number. The height of any buildings greater than two stories shall be noted. General locations of fugitive emissions shall be noted. The devices and operations situated in each separate building shall be designated by the corresponding name or number used on the flow diagram.

#### G. Other Procedures.

Within 90 days of approval of the inventory report, <u>or on a schedule agreed upon</u> <u>with ARB</u>, the district shall transmit to the ARB staff all data required on the core and S-UP forms in a format approved by the ARB staff for transmittals via paper or electronic media. The electronic HARP transaction format is the preferred format for inventory data submittals.

# **Section VIII. Other Requirements**

# A. Instructions for Record Keeping.

The facility operator shall retain copies of the following records and documentation for a period of five years from the date of submission of the emission inventory report or the date of each subsequent update required under Health and Safety Code section 44344:

- (1) Each emission inventory plan.
- (2) Each emission inventory report.
- (3) All documentation and results of source tests and other measurement procedures.
- (4) Purchase records of all listed substances or mixtures containing listed substances used at the facility, if information regarding the purchase of such substances was used to calculate emissions of any listed substance or to determine the production, use, or other presence of any substance reported on Form S-UP.
- (5) All Material Safety Data Sheets and Technical Data Sheets used to prepare the emission inventory report.
- (6) Receipts and manifests associated with the transfer of each listed substance in waste to off-site locations, if information regarding such transfer was used to calculate emissions of any listed substance.
- (7) All other documentation supporting the calculation or estimates of emissions, including control equipment efficiency; of amounts present of each listed substance, including information used to evaluate exempted uses and degree of accuracy requirements; and of amounts used for mass balance calculations, including amounts removed or transferred to an off-site location in finished product, by-product, waste, or any other form.

# B. Specification of Reporting Period and Averaging Intervals for Each Substance.

- (1) The calendar reporting period (reporting year) for which emissions are to be representative shall be from January through December of the specified year, commencing January 1, 1989 for facilities required to submit inventory plans by August 1, 1989 and commencing January 1, 1990 for facilities required to submit inventory plans by August 1, 1990, and in like manner for subsequent submittal of inventory plans.
- (2) Emissions of substances listed in Appendix A-I shall be reported both as maximum one-hour emissions and as annual average emissions.

# C. Specifications for Identifying Emission Points and Substances Emitted.

- (1) The facility operator shall identify and report in the emission inventory plan and the emission inventory report as a distinct emitting process or device each occurrence within the facility of the emitting processes and devices set forth in Appendices C-I and C-II (the Facility Guidelines Index, herein referred to as the "Facility Look-up Table"), and shall determine whether any listed substance is present, including but not limited to those indicated in Appendices C-I and C-II.
- (2) For the devices, emitting processes, and fugitive sources set forth for all facility classes in Appendix C-I and for the applicable facility class(es) set forth in Appendix C-II, the operator shall report all emissions of substances listed in Appendix A-I, and shall report the production, use, or other presence of substances listed in Appendix A-II. The operator shall also report the production, use, or presence of substances listed in Appendix A-III if the substance is manufactured by the facility and is released to the air.
- (3) The facility operator shall use and cite available technical guidance as needed to identify the presence of any listed substances and to quantify and report emissions in accordance with the requirements set forth in section VIII.E.
- (4) Nothing in sections VIII.C.(1) through (3), above, shall be construed as requiring that source testing be conducted for substances set forth in Appendix C. Further, in cases where a substance set forth in Appendix C is not in fact present at a particular facility, the facility operator shall not attempt to quantify the emissions of such substance, but shall provide adequate documentation to demonstrate to the district that the possible presence of the substance at the facility has been addressed and that there are no emissions of the substance for specified reasons.

#### D. Exempted Uses.

The following uses of listed substances shall not be subject to this regulation:

- (1) Use as a structural component of the facility.
- (2) Personal use by employees or other persons of foods, drugs, cosmetics, tobacco products, and other personal items, including supplies of such products within the facility in an on-site cafeteria, store, or infirmary.
- (3) Office and administrative use of products including ink, marking pens, ink pads, correction fluid, correction fluid thinner, and glue.
- (4) Use of products for routine janitorial or facility grounds maintenance.
- (5) Use of products for structural maintenance and repair, including WD-40 and other lubricants, sealants, touch-up paints, spray paints, and varnishes. Structural maintenance does not include maintenance and repair of process and industrial equipment.

- (6) Use of products for minor maintenance and repair of process and industrial equipment, including WD-40 and other lubricants, sealants, touch-up paints, spray paints, and varnishes. Minor maintenance and repair shall not include maintenance and repair which is routinely scheduled or which is due to predictable process upsets.
- (7) Use of products for the purpose of maintaining motor vehicles operated by the facility, unless vehicle maintenance is a significant function of the facility, such as in an auto repair facility or in a trucking or other business where a fleet of vehicles is maintained.
- (8) Use of process water or non-contact cooling water which is drawn from municipal water supplies or from other local ground or surface water sources but is not drawn from activities at the facility.

# E. Emission Quantification and Degree of Accuracy.

- (1) For all substances listed in Appendix A-I, the emission inventory report shall identify and quantify emissions from the use, manufacture, formulation, and release of the substance at all primary locations of actual or potential release.
- (2) For each process for which source testing is required to quantify emissions of a listed substance under section IX.A. and Appendix D, the measured concentrations shall meet the practical quantification limit in the applicable ARB-adopted source test method. All other parameters needed to calculate emissions shall be reported to within plus or minus 10 per cent of their total values. The emission results of each source test shall be reported to the degree of accuracy consistent with the detection and accuracy limits achievable using the applicable source test method, whether or not such emissions are below the lowest applicable degree of accuracy set forth in section VIII.E.(3) below.

The sampling frequency shall provide the best practicable characterization of emissions at the facility representative of the reporting year and shall be specified in the source test protocol submitted with the emission inventory plan.

In cases where source testing is required to quantify emissions of a listed substance from some but not all emitting processes at the facility, total emissions from the processes for which source testing is not required shall meet the applicable limits set forth in section VIII.E.(3).

(3) For each substance listed in Appendix A-I, the total facility emissions from processes for which source testing is not required shall be reported to within plus or minus 10 per cent of the total emissions of the substance, or to within plus or minus the applicable degree of accuracy value in Appendix A-I for that substance, whichever is greater, in accordance with the instructions in Appendix B.

The degree of accuracy values shall be applied on a facilitywide basis, not at the level of each process. For reporting, the total facility emissions of substances

shall be rounded to the nearest unit of the applicable degree of accuracy to determine whether they must be reported on Emission Information Forms. If facility emissions of a substance exceed one-half of the applicable degree of accuracy unit for the substance, the substance emissions shall be reported on Emission Information Forms.

- (4) For all substances listed in Appendix A-II, the facility operator shall identify and report each substance produced, used, or otherwise present at all primary locations of use, manufacture, formulation, or release.
- (5) For all substances listed in Appendix A-I which are manufactured, formulated, used, or released but for which total facility emissions are below the applicable limits for degree of accuracy required by subsection E.(3) and listed in Appendix A-I, the facility operator shall submit the data required for Supplemental Use and Production Information specified in Appendix B to indicate the presence of such substances, unless a numeric estimate of such emissions is reported on an Emission Information Form for the appropriate emitting process.
- (6) For all substances listed in Appendix A-III, the facility operator shall be required to report the production, use, or other presence of the substance only if the substance is manufactured by the facility and the substance is released to the air. If required to report the substance, the operator shall submit the data required for Supplemental Use and Production Information specified in Appendix B.

# F. Reporting Mixtures and Trade Name Products.

- (1) Except as provided in sections VIII.F.(3) through F.(8), the emissions of each listed substance contained in any mixture shall be individually reported to the degree of accuracy required in section VIII.E. and Appendix A.
- (2) Mixtures Without Emittent Identification Numbers: Except as required in sections VIII.F.(3) through F.(8), the emissions from any mixture or substance group header listed in Appendix A but for which an emittent identification number is not included shall be reported as emissions of the component listed substances.
- (3) **Mixtures With Emittent Identification Numbers:** Except as required in sections VIII.F.(4) through F.(8), the emissions of any listed mixture or group heading for which an emittent identification number is included in Appendix A-I shall be reported as follows:
  - (a) Emissions of individual substances listed under the mixture or group heading shall be reported individually. Other, unspecified substances in the mixture or group must be summed and reported under the emittent identification number for the mixture or group heading.
  - (b) If no individual substances are listed under the mixture or group heading, the emissions of the mixture or group heading shall be reported as total

emissions of the aggregated mixture using the applicable emittent identification number. The listed mixture shall not be divided into constituent listed substances for purposes of reporting emissions on the reporting forms in Appendix B. Rather, the facility operator shall provide all reasonably obtainable information on the composition and variability of the mixture as it pertains to constituents which are listed substances, including at a minimum, each applicable Material Safety Data Sheet, Technical Data Sheet, and other data on batch composition.

- (4) Metal Compounds: Emissions of individually listed metal compounds shall be reported as total emissions of the compound using the emittent identification number for that compound. Emissions of metal compounds for which an emittent identification number is not included in Appendix A-I, but which contains one or more listed metals, shall be reported as each listed metal's atom equivalent, using the emittent identification number for each metal or applicable metal compound group header.
- (5) **Diesel and Gasoline Engine Exhaust:** Emissions of diesel engine exhaust and gasoline engine exhaust shall be reported as emissions of total particulate matter and total organic gas using the emittent identification numbers specified in Appendix A. Individually listed substances from diesel and gasoline combustion shall also be reported using the applicable emittent identification numbers.

  Emissions of diesel engine exhaust particulate matter (diesel PM) shall be reported using emittent ID 9901 (see Appendix AI).
- (6) Gasoline Vapors: Total gasoline vapor emissions shall be reported using the applicable emittent identification number. Emissions of individual components of gasoline vapors which are listed substances shall also be reported.
- (7) Source test results for polycyclic aromatic hydrocarbons (PAHs) shall include measurement of total PAHs and each of the component substances which are listed substances and to which the ARB-adopted source test method pertains. Each individual substance and total PAHs shall be reported in accordance with the instructions set forth in Appendix B.
- (8) Source test results for dioxins and furans (polychlorinated dibenzodioxins, PCDD, and polychlorinated dibenzofurans, PCDF) shall include measurement of total dioxins and furans and each of the component substances which are listed substances and to which the ARB-adopted source test method pertains. The results shall include the determination of total tetra-, penta-, hexa-, hepta-, and octa- PCDD/PCDF homologue groups and all the 2,3,7,8-substituted PCDD/PCDF isomers listed in the method. Each individual substance and total dioxins and furans shall be reported in accordance with the instructions set forth in Appendix B-I.
- (9) Trade name products shall be treated as mixtures.
- (10) A Material Safety Data Sheet (MSDS) or Technical Data Sheet (TDS) shall be considered sufficient to identify listed substances in a mixture or trade name

product only if all listed substances can be identified to the degree of accuracy required by section VIII.E. and Appendix A unless the district concurs that the presence of a particular substance in the mixture is highly unlikely. An MSDS or TDS shall not be acceptable for purposes of this regulation if trade secret information has been omitted or if it includes a mixture or a category of substances (such as "petroleum process oil") that may reasonably be expected to contain a listed substance (such as benzene), unless, by consulting the manufacturer or performing a laboratory analysis of the material, the facility operator demonstrates to the satisfaction of the district that no listed substances are included in the mixture or the facility operator establishes the amounts of listed substances that are present.

# Section IX. Source Testing and Emission Factors

# A. Source Testing and Measurement.

- (1) Source testing shall be required for sources set forth in Appendix D for the substances specified and in accordance with the measurement methods set forth therein. Exemptions and alternatives are set forth in the third column of Appendix D.
- (2) The ARB-adopted test methods shall be used to fulfill the source test requirements in section IX.A.(1) when the specified conditions exist, except that:
  - (a) To determine quantities of trace elements in fuel, waste, or material samples, the following methods shall be used: EPA Method 7196A for chromium (hexavalent), EPA Method 7471A dated September 1994 for mercury, EPA Method 7740 dated September 1986 for selenium, and EPA Method 6010A dated July 1992 for all other trace elements, all of which are set forth in SW-846, <u>Test Methods for Evaluating Solid Waste</u>, Third Edition, November 1986, and all of which are incorporated by reference herein; and
  - (b) To determine chlorine content and sulfur content of coal and coke fuel samples, ASTM Methods D\_2361\_-\_9195 (Reapproved 2002) amended as of 1991 and D\_3177\_-\_8902 reapproved as of 1993, both of which are incorporated by reference herein, shall be used, respectively.
  - (c) To determine chlorine content and sulfur content in wood, refuse-derived, and other solid fuel, waste, or material samples, ASTM Methods E\_776\_-\_87 (Reapproved as of 1992 2004) and E\_775\_-\_87 (Reapproved 2004) as of 1992, both of which are incorporated by reference herein, shall be used, respectively.
  - (d) To determine chlorine content and sulfur content in other fuel or material samples, ASTM Methods D<sub>808</sub>–9105 amended as of 1991 and D<sub>129</sub>–9100 amended as of 1991, both of which are incorporated by reference herein, shall be used, respectively.
- (3) The facility operator may propose in the emission inventory plan, and the district may approve, equivalent sampling and analysis methods to accomplish the required source testing only if the facility operator includes in the emission inventory plan sufficient information to enable the Executive Officer of the state board to determine in writing that the alternative method is substantially equivalent to the ARB-adopted method for that facility for purposes of complying with this regulation.
- (4) The emission inventory plan may include a proposal for the use of existing source test data from the facility to satisfy the source testing requirement. The district may approve the proposal only if all conditions affecting emissions of listed substances are substantially the same, and the source test methods used

are determined by the Air Pollution Control Officer or Executive Officer of the district to be substantially equivalent to the ARB-adopted test methods. The proposal must be approved in writing by the district prior to use.

# **B. Pooled Source Testing.**

- (1) The operators of a group of related facilities may propose in each of their respective emission inventory plans to satisfy any source testing requirement under section IX.A. by performing a limited number of representative source tests and applying the results to each of their respective facilities. Such a proposal shall be submitted for district review and approval with the source test protocol in the emission inventory plan.
- (2) Upon receipt of a proposal for pooled source testing, the district shall ensure that all components of information required under section IX are included. Once the proposal is complete, the district shall immediately submit the proposal to the Executive Officer of the state board for technical review and comment. To the extent practicable, the Executive Officer of the state board will indicate whether the proposal is acceptable. If the proposal is unacceptable, the Executive Officer will identify those areas of the proposal which are deficient. The proposal will be presumed acceptable to the state board if the Executive Officer does not respond to the district within 45 days of receipt of the proposal.
- (3) The district may approve the proposal for participating facilities which were not source tested but to which the results are proposed to be applied only if:
  - (a) The facility operator includes in the emission inventory plan sufficient information regarding operating conditions, input and output streams, equipment characteristics, control equipment, and other parameters affecting emission characteristics of the operator's facility and the facility tested to enable the district to make a determination that sufficient similarity in all parameters affecting emissions of listed substances exists between the facility tested and the facility to which the results are proposed to be applied, such that emissions can be calculated to yield representative emission results to the required degree of accuracy; and
  - (b) If applicable, the facility operator corrects any deficiencies identified by the Executive Officer of the state board.
- (4) If the proposal is not approved by the district or the state board, each facility shall undertake individual source testing as required.

#### C. Alternatives to Required Source Testing.

(1) As a substitute for a required source test as set forth in Appendix D or the alternatives to it as set forth in sections IX.A. and IX.B. and Appendix D, the emission inventory plan may include a proposal for the use of an alternative method to quantify emissions if the facility operator provides adequate

documentation to demonstrate that the alternative method will result in the best technologically feasible characterization of the facility's emissions, and:
(a) the proposed alternative method:

- (i) has been demonstrated in actual practice to result in a characterization of emissions which is as accurate or more accurate than that achievable by the ARB-adopted source test method, and
- (ii) is not to be used instead of the required source testing for combustion or incineration processes or for other processes where the mechanisms that result in emissions and the parameters which are necessary to determine the emissions cannot be quantified sufficiently to allow emissions to be estimated to meet the applicable degrees of accuracy set forth in section VIII.E.; or
- (b) use of the required source testing is not technologically feasible because of physical circumstances at the facility, but the ARB-adopted source test method may be modified for use at the facility, in which case such modified method shall be used; or
- (c) use of the required source testing is not technologically feasible because of physical circumstances at the facility and the ARB-adopted source test method cannot be modified in accordance with section IX.C.(1)(b), in which case the best technologically feasible non-testing alternative may be proposed.
- (2) Upon receipt of a proposal for the use of such an alternative method, the district shall ensure that all components of information required under section IX are included. Once the proposal is complete, the district shall immediately submit the proposal to the Executive Officer of the state board for technical review and comment. To the extent practicable, the Executive Officer of the state board will determine whether the required source test is feasible and shall note any deficiencies in the proposal. The proposal will be presumed acceptable to the state board if the Executive Officer does not respond to the district within 45 days of receipt of the proposal.
- (3) If the proposed alternative method is to determine emissions of arsenic or arsenic compounds, beryllium or beryllium compounds, cadmium or cadmium compounds, chromium (hexavalent), benzo(a)pyrene, or chlorinated dioxins and dibenzofurans, the district may approve the proposed alternative only if both the district and the state board concur that the proposed alternative method complies with section IX.C.(1). If the proposal is not approved, the facility shall undertake source testing as required or shall use an alternative method which is determined by the district and the state board to meet the requirements of section IX.C.(1).
- (4) If the proposed alternative method is to determine emissions of a substance other than those identified in section IX.C.(3), the district may approve the proposed alternative only if, after considering any comments by the Executive Officer of the state board, the district determines that the proposed alternative

method complies with section IX.C.(1). If the proposal is not approved, the facility shall undertake and complete source testing as required or shall use an alternative method which is determined by the district to meet the requirements of section IX.C.(1).

# D. ARB-Approved Emission Factors Derived From "Hot Spots" Source Tests.

(1) Proposal to Use ARB-Approved Emission Factors.

As a substitute for a required source test as set forth in Appendix D or the alternatives to a required source test as set forth in sections IX.A. and IX.B. and Appendix D, the emission inventory plan or update plan may include a proposal to use ARB-approved emission factors which have been derived from analysis of source tests conducted in accordance with the requirements of Health and Safety Code section 44340 and 44342. The ARB-approved emission factors are those which are compiled in the data system "California Air Toxics Emission Factors (CATEF): A CARB Database", Version 1.2, May 1996, which is incorporated by reference herein. The emission factors in CATEF include the mean (average) values, as well as the minimum and maximum values of the emission factor range for each substance and source type for which an emission factor is presented.

The district may approve the proposal for a facility to use CATEF emission factors subject to the following conditions:

(a) If the use of either the **average** value or the **maximum** value of the applicable emission factor range published in CATEF would result in calculated total emissions for the facility (defined below) that cause the facility to meet the criteria for a "high level" facility under section IV, the operator must use the maximum values of the emission factor ranges, except as specified below.

"Total emissions for the facility" shall be determined by including all listed substances and source types for which emission factors are proposed to be used, along with all other substances and sources at the facility quantified by other approved methods.

**Exception:** The operator may propose to use the average value of the emission factor range, and the district may approve the proposal, only if the operator can demonstrate to the satisfaction of both the district and the state board that the emissions from the operator's facility could not exceed the levels calculated to result from the use of the average value for specified reasons. The operator shall include in the emission inventory plan sufficient information regarding operating conditions, input and output streams, equipment characteristics, control equipment, and other parameters that affect emission characteristics of the operator's facility and the tested facility (or facilities) to demonstrate that the operator's facility could not exceed the average value of the emission factor range.

(b) For purposes of evaluating whether a facility can be exempted as a "low level" facility under section IV, the facility operator must use the **maximum** value of the applicable emission factor range published in CATEF, and the use of these values must not result in calculated total emissions for the facility, as defined in section (a), above, that cause the facility to exceed the criteria for a "low level" facility under section IV, except as follows.

**Exception**: If the use of maximum values would result in emissions exceeding the "low level" criteria, but use of average values would not exceed the "low level" criteria, the operator may propose to use the average value of the emission factor range, and the district may approve the proposal, only if the operator can demonstrate to the satisfaction of both the district and the state board that the emissions from the operator's facility could not exceed the levels calculated to result from the use of the average value for specified reasons. The operator shall include in the emission inventory plan sufficient information regarding operating conditions, input and output streams, equipment characteristics, control equipment, and other parameters that affect emission characteristics of the operator's facility and the tested facility (or facilities) to demonstrate that the operator's facility could not exceed the average value of the emission factor range.

- (c) The district determines that the proposed emission factor(s) will result in a characterization of the facility's emissions as accurate as that achievable in practice by the ARB-adopted source test method or a pooled source test;
- (d) The facility operator includes in the emission inventory plan sufficient information regarding operating conditions, input and output streams, equipment characteristics, control equipment, and other parameters affecting emission characteristics of the operator's facility and the tested facility (or facilities) from which the ARB-approved emission factor was derived to demonstrate to the satisfaction of the district and the state board that:
  - (i) the operator's facility and the tested facility (or facilities), from which the emission factors are derived, are substantially equivalent in all parameters affecting emissions of listed substances from the sources for which emission factors are proposed to be used; and
  - (ii) sufficient similarity in all parameters affecting emissions of listed substances exists between the tested facility (or facilities) and the operator's facility to which the emission factor is proposed to be applied, such that emissions can be calculated to yield representative emission results to the required degree of accuracy;
- (e) If applicable, the facility operator corrects any deficiencies identified by the Executive Officer of the state board.
- (2) Review Process.

Upon receipt of a proposal for the use of ARB-approved emission factors to satisfy a required source test, the district shall ensure that all components of information required under section IX are included. Once the proposal is complete, the district shall immediately submit the proposal to the Executive Officer of the state board for technical review and comment. To the extent practicable, the Executive Officer of the state board will determine whether the required source test would provide a substantially more accurate quantification of emissions and shall note any deficiencies in the proposal. The proposal will be presumed acceptable to the state board if the Executive Officer does not respond to the district within 45 days of the state board's receipt of the proposal from the district.

# (3) Approval Involving Potent Substances.

If ARB-approved emission factors are proposed to satisfy a required source test for arsenic or arsenic compounds, beryllium or beryllium compounds, cadmium or cadmium compounds, chromium (hexavalent), benzo(a)pyrene, or polychlorinated dioxins and dibenzofurans, the district may approve the proposal only if both the district and the state board concur that the proposal complies with section IX.D.(1). If the proposal is not approved by both the district and the state board, the facility shall undertake source testing as required or shall use an alternative method or emission factor which is determined by the district and the state board to meet the requirements of section IX.D.(1).

# (4) Approval Involving Other Substances.

If the proposed use of ARB-approved emission factors is to satisfy a required source test for a substance other than those identified in section IX.D.(3), the district may approve the proposal only if, after considering any comments by the Executive Officer of the state board, the district determines that the proposal complies with section IX.D.(1). If the proposal is not approved, the facility shall undertake source testing as required or shall use an alternative method or emission factor which is determined by the district to meet the requirements of section IX.D.(1).

# E. Source Test Protocol and Source Test Report.

For each required source test, including pooled source tests conducted under section IX.B., a proposed source test protocol shall be submitted with the emission inventory plan. The proposed protocol shall include the information set forth in sections IX.E.(1) through E.(24), responding to language in brackets to indicate future intent or anticipated values, and excluding information claimed to be trade secret.

For each required source test, a source test report shall be submitted with the inventory report. The source test report shall include the actual test values for the information required in sections IX.E.(1) through E.(24). Information denoted as trade secret on the facility diagram or elsewhere in the emission inventory report should be so denoted in the source test report according to the procedure set forth in

section VII.B.(3). Facilities participating in pooled source tests conducted under section IX.B. need only reference the source test report in their inventory report if the district already possesses a copy of the report and the facility obtains the district's findings that a further copy of the source test report is not needed.

- (1) Date on which the source test was [will be] performed.
- (2) Name and qualifications of companies and/or persons who conducted [will conduct] the source test and analyzed [will analyze] the samples.
- (3) Name of contractor.
- (4) Process description.
- (5) Process reactant composition and rates [approximate values or range of values for composition and rates].
- (6) Fuel analysis and firing rates for combustion processes [approximate values or range of values for fuel composition and firing rates].
- (7) Source test and analysis methods for all listed substances for which source testing is required [commitment to source test and analysis methods as required by sections IX.A. and Appendix D].
- (8) Equipment specifications and drawings as needed to plan and interpret source test results, including but not limited to stack dimensions (including diameter and height) and port configuration.
- (9) ARB independent tester Executive Order, provided in accordance with section 91207, title 17, California Code of Regulations, if the tester has been certified by the ARB for the proposed source test method.
- (10) Typical values and allowable ranges of operating parameters (including pressure and feed rate) of the process [approximate values or range of values for operating parameters].
- (11) Process operating conditions during test [approximate values or range of values anticipated during test].
- (12) Stack temperature [approximate value anticipated].
- (13) Concentration of any listed substances in the exhaust stream [approximate values or range of values anticipated].
- (14) Mass emission rate of any listed substances [approximate values or range of values anticipated].
- (15) Composition and rate of waste streams, including scrubber effluent, ash, fly ash [approximate values or range of values anticipated].
- (16) Oxygen, carbon dioxide and moisture content of exhaust gas [approximate values or range of values anticipated].
- (17) Exhaust gas velocity and volumetric flow rate at the point where testing is conducted [approximate values or range of values anticipated].
- (18) Sampling points and number of samples [proposed points and number].
- (19) Calibration data, including certification that the accuracy of calibration gases is traceable to the National Institute of Standards and Technology (NIST).
- (20) Quality assurance and quality control data including analysis audit, zero and span drift, blank and spiked samples [proposed].
- (21) Chain of custody document, where appropriate [proposal for provision of document].
- (22) Applicable emission standards or other permit conditions affecting emissions of listed substances.
- (23) The estimated limit of detection, the proposed number of test runs, and any other pretest calculations for the source test method that is used.

(24) A table summarizing the results of the test, with emissions and emission factors expressed, respectively, in pounds per hour and pounds per process unit appropriate for the SCC describing the process.

If any of the emissions are derived from source test results with some or all of the test runs below the limit of detection, the operator shall report the emissions in accordance with the procedures in Appendix B for reporting emissions derived from below the limit of detection source test results.

# F. Converting Source Test Results to Emission Rates.

- (1) Source testing shall be performed under representative operating conditions for the reporting year. Representative operating conditions shall be developed in consultation with the appropriate district and specified in the emission inventory plan.
- (2) In consultation with the district, and in accordance with the procedures set forth in the ARB-adopted source test methods where applicable, the facility operator shall calculate and report a site-specific emission factor for the listed substance based on the mass emission rate for the listed substance measured during the source test and expressed in terms of the most representative "usage unit". The usage unit shall be the measure of operating conditions which best characterizes the dependence of the emissions of the listed substance on operating conditions. The most appropriate usage unit shall be hours of operation only when the operation undergoes very limited variation over time during the reporting year.
- (3) The facility operator shall calculate annual average emissions, in pounds per year, from the site-specific emission factor and the average value of the usage unit during the reporting year.
- (4) The facility operator shall calculate maximum hourly emissions, in pounds per hour, from the site-specific emission factor and the maximum value of the usage unit that can reasonably be expected in a one hour period. The maximum value shall be the best possible representation of the process conditions that produce the maximum emissions within the range of allowable conditions, under routine operation or predictable upset, but not including conditions reflecting atypical shut-down of control equipment.

# G. Specifications for Acceptable Estimation Methods and Emission Factors.

- (1) Where emissions of substances are required to be quantified but where measurement is not required under section IX.A., the emission inventory plan may propose an estimation method to quantify such emissions at all primary locations of release to the degree of accuracy required by section VIII.E. The district may approve a proposed method only if all of the following criteria are met:
  - (a) The district determines that the method is effective and reflects the best available methods and data, and will produce an accurate representation of the types and quantities of air releases at a facility;

- (b) The proposed method accounts for all facets of the applicable emitting process and is based on sufficient data about the air toxics emission characteristics under the full range of relevant conditions to characterize the emissions to the degree of accuracy required by section VIII.E.; and
- (c) Standard calculations for mass balance, emission factor application, and engineering calculations and models comply with the following requirements:
  - (i) Mass balance calculations are acceptable when no adequate emission factors are available or when a more accurate estimate will be obtained by the use of a mass balance than by the use of available emission factors. All mass balance calculations must account for all routes of inflow and outflow and all accumulations sufficiently to characterize air releases to the degree required.
  - (ii) Proposed emission factors must have been generated under substantially similar conditions for substantially similar facilities or equipment as those to which the emission factors will be applied, to the extent technologically feasible. For purposes of this section, if the state board has published, in accordance with Health and Safety Code sections 39650 - 39675, an emission factor for a listed substance which is applicable to the emitting process at the facility, the most recent such emission factor shall be used to estimate emissions of the substance.
  - (iii) Engineering calculations and emission estimation models shall be based on sufficient data about the air toxics emission characteristics at all relevant conditions to characterize the emissions to the degree of accuracy required by section VIII.E.
- (2) The estimation method included in the inventory plan may include a proposal to use available data and data from substantially similar facilities or equipment. The district shall not approve the proposal unless the criteria set forth in sections IX.G.(1)(a) and (b) are met.
- (3) The effects of all air pollution control equipment or process conditions that are adjusted to control air pollution shall be quantified for each listed substance affected by the equipment or process. The facility operator shall propose in the emission inventory plan a value for the effectiveness of each air pollution control device affecting the emissions of each listed substance and shall cite the justification for the value of control effectiveness for each listed substance under actual operating conditions.

## Section X. Definitions.

For the purposes of this regulation the following definitions apply:

- (1) "Agricultural Operations" means the growing or harvesting of crops or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. Agricultural operations do not include activities involving the processing or distribution of crops or fowl.
- (42) "Air emission", "emission", "air release", or "release" has the same meaning as defined in Health and Safety Code section 44303.
- (3) "Approach Light System with Sequenced Flasher Lights in Category 1 and Category 2 Configurations (ALSF-1 and ALSF-2)" means the same as specified in Health and Safety Code section 93115.
- "ARB-adopted source test method" or "ARB-adopted method" means a procedure for performing source testing as set forth in title 17 California Code of Regulations, section 94100 et seq.
- (35) "**Device**" means any article, machine, equipment or other contrivance (whether or not operated under a permit from an air pollution control district or air quality management district) which may cause the emission of a listed substance.
- (6) "Diesel Engine" or "Compression Ignition (CI) Engine" means an internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a compression ignition engine.
- (7) "Diesel Engine-Only" Facility means a facility where the district has determined that the only potentially significant source of toxic emissions subject to this regulation is diesel engines.
- (8) "Diesel Particulate Matter" (Diesel PM) means the particles found in the exhaust of diesel-fueled CI engines as determined in accordance with the test methods identified in the stationary diesel engine ATCM.
- (9) "Emergency Operations" means an activity that cannot be reasonably foreseen by the facility, and the district has determined is not part of routine and predictable operations, and is therefore not part of "Hot Spots" reporting.
- (10) "Emergency Use" means providing electrical power or mechanical work
  during any of the following events and subject to the following conditions:

  (a) the failure or loss of all or part of normal electrical power service or normal
  natural gas supply to the facility:
  - (i) which is caused by any reason other than the enforcement of a contractual obligation the owner or operator has with a third party or any other party; and

- (ii) which is demonstrated by the owner or operator to the district air pollution control officer's satisfaction to have been beyond the reasonable control of the owner or operator;
- (b) the failure of a facility's internal power distribution system:
  - (i) which is caused by any reason other than the enforcement of a contractual obligation the owner or operator has with a third party or any other party; and
  - (ii) which is demonstrated by the owner or operator to the district air pollution control officer's satisfaction to have been beyond the reasonable control of the owner or operator;
- (c) the pumping of water or sewage to prevent or mitigate a flood or sewage overflow;
- (d) the pumping of water for fire suppression or protection;
- (e) the powering of ALSF-1 and ALSF-2 airport runway lights under category II or III weather conditions, as determined by the district;
- (f) the pumping of water to maintain pressure in the water distribution system for the following reasons:
  - (i) a pipe break that substantially reduces water pressure; or
  - (ii) high demand on the water supply system due to high use of water for fire suppression; or
  - (iii) the breakdown of electric-powered pumping equipment at sewage treatment facilities or water delivery facilities.; or
- (g) the day-of-launch system checks and initial launch tracking performed (in parallel with grid power) by the United States Department of Defense at Command Destruct sites (also known as "CT" sites, which is defined in section 93115, title 17, California Code of Regulations) that occur within the 24-hour time period associated with the scheduled time of the launch.
- (4<u>11</u>) **"Emission inventory plan", "inventory plan", or "plan"** means the emission inventory plan required by Health and Safety Code sections 44340 and 44342.
- (512) "Emission inventory report", "inventory report", or "report" means the emission inventory report required by Health and Safety Code section 44341.
- (613) "Emittent identification number" or "Emittent ID" means the number code for each listed substance in Appendix A, which is the Chemical Abstract Service (CAS) registry number for the chemical where available, or a 4-digit code number assigned by the staff of the state board.
- (713.5) **"Emitting process"** means any fugitive source or any operation within a device that involves the manufacture, formulation, use, or release of one or more of the listed substances, when the substance is present in any capacity whatsoever, including but not limited to an ingredient, product, auxiliary, or catalyst.
- (8<u>14</u>) "Facility" means the same as defined in Health and Safety Code section 44304. "Facility" shall not include any motor vehicle as defined in section 415 of the Vehicle Code.

- (a) Except for the oil production operations defined in section X.8<u>14(b)</u>, for purposes of this regulation, the phrase "every structure, appurtenance, installation" shall mean all equipment, buildings, and other stationary items, or aggregations thereof, (A) which are associated with a source of air emission or potential air emission of a listed substance; (B) which involve activities that belong to the same two-digit Standard Industrial Classification code, or are part of a common operation; (C) which are located on a single site or on contiguous or adjacent sites; and (D) which are under common ownership, operation, or control, or which are owned or operated by entities which are under common ownership, operation, or control.
- (b) For oil production operations in the counties of Kern and Fresno, the phrase "every structure, appurtenance, installation" shall mean the same as "stationary source" defined in section 3.29, "Definitions" in San Joaquin Valley Unified Air Pollution Control District Rule 2201 "New and Modified Stationary Source Review Rule" as amended June 15, 1995, which is incorporated by reference herein.
- (915) **"Facility diagram"** means a diagram submitted with the emission inventory report that shows all points of actual or potential air release of a listed substance, including fugitive emissions.
- (1016) "Federal Hazardous Air Pollutant" or "Federal HAP" or "HAP" mean a substance identified by the United States Environmental Protection Agency under section 112 subsection (b) of the federal Clean Air Act Amendments of 1990 (42 U.S. Code, section 7412(b)).
- (41<u>17</u>) **"Fugitive emissions"** means those emissions which do not pass through a stack, chimney, vent, or other functionally equivalent opening.
- (1218) "Hazard Index" means a facility's numerical ratio value for assessing non-cancer health effects, as reviewed by the Office of Environmental Health Hazard Assessment (OEHHA) and approved by the district, in accordance with Health and Safety Code section 44360 and in a manner consistent with the OEHHA "Air Toxics 'Hot Spots' Risk Assessment Guidelines, October 19932003", which is incorporated by reference herein.
- (1319) "List of substances" means the list of chemical substances which may pose a threat to public health when present in the ambient air as set forth in Appendices A-I, A-II, and A-III of this regulation; a "listed substance" is a substance included on this list.
- (20) "Maintenance and Testing" means operating an emergency standby CI engine to:
  - (a) evaluate the ability of the engine or its supported equipment to perform during an emergency. "Supported Equipment" includes, but is not limited to, generators, pumps, transformers, switchgear, and breakers; or
  - (b) facilitate the training of personnel on emergency activities; or

- (c) provide electric power for the facility when the utility distribution company takes its power distribution equipment offline to service that equipment for any reason that does not qualify as an emergency use; or
- (d) provide additional hours of operation to perform testing on an engine that has experienced a breakdown or failure during maintenance.
- (4421) "Material Safety Data Sheet" ("MSDS") means printed material concerning a hazardous substance which is prepared by manufacturers and importers in accordance with section 5194(g) of title 8, California Code of Regulations, "Hazard Communication".
- (4522) "Operator" or "facility operator" means the same as defined in Health and Safety Code section 44307.
- (23) "Portable Diesel Engine" means any engine that is not a stationary engine, and that does not propel a motor vehicle, and is a compression ignition (CI) engine designed and capable of being carried or moved from one location to another. Indicators of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.
- (4624) "Prioritization score" means a facility's numerical score for cancer health effects or non-cancer health effects, as determined by the district in accordance with Health and Safety Code section 44360 in a manner consistent with the California Air Pollution Control Officers Association (CAPCOA) "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines, July 1990", which is incorporated by reference herein.
- (25) "Routine and Predictable" is determined by the district, and means all of the regular operations at the facility. Emergency or catastrophic releases at a facility are not "routine and predictable" and are not included in a facility's emission inventory.
- (1726) "Small business" means the same as defined in Government Code section 11342(e).
- (4827) "Source" or "point of release" means the location of a facility activity, device or emitting process, including locations of fugitive emissions, which may be associated with air emissions of a listed substance or other air pollutant; or the location of any substance which may be associated with emissions of a listed substance or other air pollutant.
- (1928) "Source Classification Codes" or "SCCs" means number codes created by the United States Environmental Protection Agency used to identify processes associated with point sources that contribute emissions to the atmosphere.
- (2029) "Standard Industrial Classification Code" or "SIC Code" means the Standard Industrial Classification Code that classifies establishments by the type of business activity in which they are engaged as defined by the Standard Industrial Classification Manual, 1987, published by the Executive Officer of the

- President, Office of Management and Budget, 1987, which is incorporated by reference herein.
- (30) "Stationary Diesel Engine" or <u>"Stationary CI Engine"</u> means a CI engine that is designed to stay in one location, or remains in one location.
- (31) "Stationary Diesel Engine ATCM" means section 93115, title 17, California Code or Regulations (CCR).
- (2132) **"Total organic gases (TOG)"** means all gases consisting of substances containing carbon, except carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.
- (2233) "Trade secrets" means the same as defined under Health and Safety Code section 44346(h).
- (2334) "**Update Category**" means the facility category designated by a district based on the facility's prioritization score, risk assessment results, *de minimis* level, or emissions of federal Hazardous Air Pollutants. Update categories are "low level", "intermediate level", "high level", and "not yet prioritized".
- (2435) **"Update plan"** means an emission inventory plan which is revised and updated as required by Health and Safety Code section 44344.
- (2536) "Update report" means an emission inventory report which is revised and updated as required by Health and Safety Code section 44344.
- (2637) **"Use"** means any application, whether primary or secondary to the main facility operation, which may result in an air release of a listed substance, unless exempted under section VIII.D.

# Section XI. Diesel Engine Reporting Requirements

#### A. General.

In 1998, ARB identified diesel exhaust particulate matter (diesel PM) as a toxic air contaminant. As part of that process, the California Office of Environmental Health Hazard Assessment (OEHHA) adopted a cancer potency factor for public exposure to diesel PM. Application of the diesel PM cancer potency factor to emissions at facilities with diesel engines indicated that many of these facilities had the potential to pose a significant risk to the public.

Due to the large number of facilities with diesel engines and the toxicity of diesel PM, special reporting procedures apply to facilities with diesel engines. The special diesel reporting procedures were developed in part to integrate the AB 2588 "Hot Spots" process for facilities with diesel engines with the Stationary Diesel Engine Air Toxic Control Measure (ATCM; section 93115, title 17, California Code erof Regulations) to eliminate duplicative reporting requirements.

# B. Applicability.

- (1) A facility with a diesel engine is subject to section XI of this regulation if the facility meets the following criteria.
  - (i) The facility operates any number of diesel engines for more than 20 hours per year combined total at the facility for non-emergency operations; and
  - (ii) The use of any number of diesel engines is a routine and predictable operation of the facility; and
  - (iii) The diesel engine is not a "vehicle" or "motor vehicle" as defined in Vehicle
    Code sections 670 or 415, which is referenced in Health and Safety Code
    section 39039.
- (2) The requirements of this section do not apply to portable diesel engines until January 1, 2010.
- (3) The requirements of this section do not apply to agricultural diesel engines until January 1, 2012. The district may use emissions inventory information collected pursuant to other district programs to satisfy the reporting requirements in section XI.(C)(2).
- (4) The requirements of this section do not apply until January 1, 2012, to a stationary emergency standby diesel engine at a hospital provided all of the following are met:
  - a. The hospital meets the definition of "hospital building" in Health and Safety Code section 129725,
  - b. The owner of the hospital submitted a plan and compliance schedule to the Office of Statewide Health Planning and Development in accordance with Health and Safety Code section 130050,

- c. The plan and compliance schedule identifies the stationary emergency standby diesel engine to be replaced, retrofitted, or removed from service,
- d. The stationary emergency standby diesel engine is replaced, retrofitted, or removed from service concurrent with seismic upgrades required pursuant to the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983, as amended (Chapter 1 (commencing with Section 129675) of Part 7 of Division 107 of the Health and Safety Code), and
- e. The owner of the hospital submits a plan and compliance schedule, consistent with the information provided in subparagraphs b and c, to the district that identifies the stationary emergency standby diesel engine to be replaced, retrofitted, or removed from service.
- (5) A facility is not subject to this regulation if a facility prioritization score is less than one, or a screening health risk assessment or a health risk assessment is equal to or less than one per million.

# C. Diesel PM Inventory Reporting Requirements for Facilities with Diesel Engines.

# (1) Reporting Schedule

# (a) Existing Facilities with Diesel Engines

The operator of a facility with any number of diesel engines shall submit a diesel PM inventory to the district that includes all of the information listed in section XI.C.(2) upon request by the district.

## (b) Additional Diesel Engine or Equipment Installed at a Facility

The operator of any facility that intends to install a diesel engine must submit sufficient information to the district in order for the district to calculate a prioritization score or screening health risk assessment.

## (c) Previously Submitted and Updated Diesel Engine Information

The district may exempt the facility from providing all or part of the information identified in XI.C(2) if there is a current record of the information in the facility's permit to operate, permit application, district registration program, or other district records. The district may also consider updated information from the facility.

#### (d) Submittal of Diesel Engine Information from the District to ARB

The district shall submit the diesel PM inventory from facilities with diesel engines subject to this regulation to ARB during the next applicable inventory submittal, and as part of the inventory report for the other toxics at the facility during the regular quadrennial reporting schedule thereafter. The district shall also submit a list of facilities with diesel engines and their risk

assessment scores and status in the "Hot Spots" Program upon request by ARB.

# (2) Reporting Requirements

# (a) Stationary Diesel Engines Greater than 50 Horsepower

The operator of a facility shall submit the following information to the district for each diesel engine, unless the information is already available to the district.

- Engine owner or company name
- Address/location of each diesel engine
- Contact name, phone number, address, and e-mail
- Rated brake horsepower
- Make, model, engine family, and serial number of engine
- Year of manufacture (or approximate age)
- Exhaust stack height from ground
- Control equipment (turbo, aftercooler, injection timing retard, catalyst, diesel particulate filter, other)
- Fuel used (CARB diesel, jet fuel, diesel, alternative diesel fuel, alternative fuel, combination-dual fuel, other)
- General description of how engine is used
- Typical load (% of bhp rating)
- Typical annual hours of operation
- Fuel usage rate
- Distance to nearest offsite receptor location (commercial / residential)
- Is engine already included in an existing ARB "Hot Spots" emission inventory?
- Emission factor for PM
- Diameter and direction (horizontal or vertical) of stack outlet
- End of stack (open or capped)
- Compliance plan describing how the facility is complying with the stationary diesel engine ATCM.

The district may request that additional or more detailed information be submitted in order to describe the relative locations of engines, buildings, and receptors.

## (b) Stationary Diesel Engines Equal to or Less than 50 Horsepower

The operator of a facility is not required to submit the information in section XI.C.(2)(a) for diesel engines equal to or less than 50 horsepower ifunless the district determines there is good cause to expect that the routine and predictable emissions from the engines at the facility have the potential to pose a significant risk.

## (c) Portable Diesel Engines of Any Size

The operator of a facility is not required to submit the information in section XI.C.(2)(a) for portable diesel engines unless the district determines there is good cause to expect that the routine and predictable emissions from the portable diesel engines used at the facility have the potential to pose a significant risk.

# D. "Diesel Engine-Only" Facility Classification.

The district may classify a facility as a diesel engine-only facility if the district determines that diesel engine emissions are the only air pollutants released from the facility that have the potential to impact public health. A diesel engine-only facility is eligible for modified requirements, as described in sections XI.E through XI.G.

A facility designated as "Low-Level" (prioritization score less than or equal to one, or a screening risk assessment or health risk assessment less than one per million) may request that the district include the facility in the diesel engine-only facility classification if the facility has submitted the information in section XI.C.(2) to the district. An "Intermediate-Level" or "High-Level" facility is not eligible to be classified as a diesel engine-only facility.

# E. Risk Analysis Procedures for Facilities with Diesel Engines.

# (1) Screening Risk Assessment for "Diesel Engine-Only" Facilities

The district may evaluate the diesel PM risk from a facility with diesel engines using screening health risk assessment tables approved by the district that are consistent with the OEHHA Risk Assessment Guidelines. Based on the results of the screening risk assessment or prioritization score, the district shall determine if a full health risk assessment is necessary. A facility with a screening health risk assessment less than one per million is not subject to this regulation.

# (2) Health Risk Assessment Update for an Existing Facility with a Diesel Engine

A facility operator may request that the district recalculate the facility risk by adding a screening health risk assessment score for diesel PM to the current health risk assessment for the facility, or the operator may submit an updated health risk assessment to the district.

If the combined risk indicates that the facility is a potential significant risk, the district may require the facility to conduct a full health risk assessment.

If the combined risk indicates that the facility is not a significant risk, the health risk assessment shall be updated by the district to reflect the diesel risk, the facility shall be classified as an "Intermediate-Level" facility, and is subject to the reporting requirements specified in section IV.B.

If the combined risk is less than one per million, and the non-cancer health index is less than 0.1, the facility is not subject to this regulation.

#### F. "Diesel Engine-Only" Facilities That Reduce Their Operating Hours.

Any diesel engine-only facility that reduces their total operating hours for their diesel engines to 20 hours per year or less for all engines (for non-emergency operations) is not subject to this regulation. However, if the district determines that there is good cause to expect the engines at the facility may pose a significant risk, the facility shall again be subject to this regulation.

#### G. Redesignation.

#### (1) Facilities That Increase Their Emissions

If a facility that the district has designated as a diesel engine-only facility increases emissions of any listed substance, the facility must submit an inventory update to the district.

#### (2) District Requirements

The district shall reevaluate and shall redesignate a facility's update category within 180 days of the facility submitting an updated inventory report pursuant to section XI.G.(1), and transmit this information to ARB.