

APPENDIX G—GLOSSARY

The definitions provided in this glossary are intended to assist you in understanding matters related to the annual emissions inventory. The information provided here does **not** supersede or replace any information in any state or federal law, regulation, or rule. In the case of any discrepancy between information provided here and information provided in a state or federal law, regulation, or rule, the information in the law, regulation, or rule takes precedence.

abatement device—A piece of equipment or recognized operational procedure that serves to limit, control, or abate emissions of certain contaminants associated with a process or processes. Examples include baghouses, flares, scrubbers, condensers, vapor recovery units and component fugitive Inspection and Maintenance programs. Synonymous with Control Device.

account—(See 30 Texas Administrative Code [TAC] Section 101.1) For those sources required to be permitted under Chapter 122 of 30 TAC (relating to Federal Operating Permits), all sources which are aggregated as a site. For all other sources, any combination of sources under common ownership or control and located on one or more contiguous properties, or properties contiguous except for intervening roads, railroads, rights-of-way, waterways, or similar divisions.

account centroid—The physical center of an account, represented in coordinate form (latitude and longitude or UTM).

account structure—The way in which an account's equipment is represented in the emissions inventory.

affected county— Any county designed as an affected county per Texas Health and Safety Code Section 386.001.

attainment county—A county in which levels of criteria air pollutants meet the national ambient air quality standards, or NAAQS for the pollutants. Attainment areas are defined using federal pollutant limits set by EPA. Reference FCAA Section 107(d) for further explanations of nonattainment and attainment designations.

CEO—Acronym for TCEQ's Chief Engineer's Office.

Chemical Abstract Service (CAS) number—A unique number assigned to a substance. Although the IEAS identifies each substance with a *contaminant code* rather than with its CAS number, you should include the CAS number when adding a new contaminant to your emissions inventory. This additional information will be used for quality assurance purposes.

CIN—See “Control Identification Number.”

compounds of interest—A group of 12 VOCs that are of particular interest for airshed modeling purposes. The compounds of interest are: propylene, ethylene, formaldehyde, acetaldehyde, isoprene, all butenes (butylenes), 1,3-butadiene, toluene, all pentenes, all trimethylbenzenes, all xylenes, and all ethyltoluenes.

contaminant—A substance emitted into the air.

contaminant code—A contaminant’s five-digit identifying code. A list of contaminant codes is available in *Contaminant and Abatement Codes for the Air Emissions Inventory*.

control device—See Abatement Device above.

control identification number (CIN)—A label that uniquely identifies an abatement device; limited to 10 alphanumeric characters. Please note that no two separate abatement devices within an account may share the same CIN.

EI—Acronym for emissions inventory.

EIQ—Acronym for emissions inventory questionnaire. See “emissions inventory questionnaire” below.

emissions—Air contaminants generated by a facility. See also Contaminant above.

emissions inventory forms—The forms used to add new structural information to an account or to supply material usage data. Blank forms are available in Appendix B of this document. Instructions for completing the forms are found in Chapter 6.

Emissions Inventory Questionnaire (EIQ) —A computer printout showing an account’s most recent emissions inventory records; used to submit data to the IEAS. For information about making changes to the EIQ, see Chapter 5.

emission point—The geographical location (point) at which emissions enter the air. An emission point is described by its group, profile and characteristics. Each emission point in the emissions inventory is uniquely identified by an Emission Point Number (EPN).

emission point number (EPN)—A label that uniquely identifies a given emission point; limited to 10 characters. Please note that no two distinct emission points in an account may share the same EPN. If your account is permitted, the EPNs on your EIQ must match those on your permit.

EPN—See “Emission Point Number.”

expected maximum capacity—The maximum capacity of a facility according to its physical and operational design or configuration and planned operation.

facility—A unit, device, structure or area capable of generating air contaminants. Each facility in the emission inventory is uniquely named by a facility identification number

(FIN). For purposes of the emissions inventory for the State of Texas, the term “facility” does not refer to the entire account, but rather to an individual process unit in the account.

facility identification number (FIN)—A label that uniquely identifies a given facility; limited to 10 alphanumeric characters. Please note that no two distinct facilities may share the same FIN. If your account is permitted, the FINs on your EIQ must match those on your permit.

FIN—See “Facility Identification Number.”

hazardous air pollutant (HAP)—An air pollutant designated a “HAP” by the EPA. All HAPs should be listed individually (speciated) in your emissions inventory.

IEAS—Acronym for Industrial Emissions Assessment Section, the section of TCEQ’s Chief Engineer’s Office responsible for the emissions inventory process.

near nonattainment county—Any county included in the following list: Bastrop, Bexar, Caldwell, Comal, Gregg, Guadalupe, Harrison, Hays, Nueces, Rusk, San Patricio, Smith, Travis, Upshur, Victoria, Williamson, and Wilson.

nonattainment county—A defined region within the state which is designated by EPA as failing to meet the national ambient air quality standard for a pollutant for which a standard exists. The EPA will designate the area as nonattainment under the provisions of FCAA, Section 107(d). For the official list and boundaries of nonattainment areas, see 40 Code of Federal Regulations Part 81 and pertinent Federal Register (FR) notices.

nonreactive organic compounds—A group of organic compounds that do not significantly contribute to ozone formation.

path—Formerly known as a link, a path consists of a facility (FIN) that generates emissions; an associated emission point (EPN) where emissions enter the atmosphere; and any abatement devices (CINs) with which emissions are controlled. All paths must consist of at least a FIN and an EPN. If emissions produced at a FIN are not abated before entering the atmosphere at the associated EPN, then the path consists only of a FIN and an EPN. If, however, an abatement device controls emissions between the FIN and the EPN, then the associated path consists of a FIN a CIN and an EPN.

percent max capacity—The ratio of a facility’s annual operating capacity to the facility’s maximum capacity:

$$\text{PercentMaxCapacity} = \frac{\text{Capacity}_{\text{annual}}}{\text{Capacity}_{\text{maximum}}} \times 100$$

See “expected maximum capacity” above for a definition of *Capacity_{maximum}*.

percent time offline (PTO)—The percentage of total Annual Operation time during which the abatement device did not operate or operated improperly.

$$\text{PTO} = \frac{\text{HoursOffline}}{\text{AnnualOperatingHours}} \times 100$$

Example: FLARE1, which operated on an emergency basis for an annual total of 1200 hours, was off for 288 hours and malfunctioned for 83 hours. The Percent Time Offline for FLARE1 is:

$$\text{PTO} = \frac{288+83}{1200} \times 100 = 30.92$$

potential to emit (PTE)—The maximum capacity of a facility/stationary source to emit a pollutant under its physical and operational design. Any physical or enforceable operational limitation on the capacity of the facility/ stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, should be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions, as defined in 40 CFR 51.165(a)(1)(viii), do not count in determining a stationary source’s potential to emit.

regulated pollutant—This term shall include any VOC; any pollutant subject to the Federal Clean Air Act (FCAA), Section 111; any pollutant listed as a hazardous air pollutant under FCAA, Section 112; each pollutant for which a national primary ambient air quality standard has been promulgated (including carbon monoxide); and any other air pollutant subject to requirements under commission rules, regulations, permits, orders of the commission, or court orders.

speciation—Categorization of the individual chemical substances, or species, within an emission. For speciation requirements, see Chapter 4.

STARS (State of Texas Air Reporting System)—The database in which emissions inventory data are stored.

structure—The representation, in the TCEQ database, of the paths (formerly “links”) in an account. Correct account structure, which should reflect the account processes as

shown on the site process flow diagram, is essential. For more information on proper account structure, consult the appropriate sections of this book.

TAC—Acronym for Texas Administrative Code.

TCEQ—Acronym for Texas Commission on Environmental Quality.

volatile organic compounds (VOCs)—A group of compounds that photochemically react in the atmosphere to form ozone. The official definition of a VOC as found in 30 TAC Section 101.1 is:

“Any compound of carbon or mixture of carbon compounds excluding methane; ethane; 1,1,1-trichloroethane (methyl chloroform); methylene chloride (dichloromethane); perchloroethylene (tetrachloroethylene); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro-1-fluoroethane (HCFC-141b); 1-chloro-1,1-difluoroethane (HCFC-142b); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1-chloro-1-fluoroethane (HCFC-151a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane; 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane; 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane; 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane; methyl acetate; carbon monoxide; carbon dioxide; carbonic acid; metallic carbides or carbonates; ammonium carbonate; and perfluorocarbon compounds which fall into these classes:

- (A) cyclic, branched, or linear, completely fluorinated alkanes;
- (B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- (C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (D) sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.”

