

## MENDOCINO COUNTY AIR QUALITY MANAGEMENT DISTRICT

### RULE 130 - DEFINITIONS

*Except as otherwise specifically provided in these rules and regulations, words used in these rules and regulations are used in exactly the same sense as the same words are used in the Health and Safety Code of the State of California, the Clean Air Act of 1977, and the Code of Federal Regulations 40 CFR 52.21 (August 7, 1980). Where the federal regulations of 40 CFR 52.21 refer to the responsibilities of the Administrator of the U.S. Environmental Protection Agency, the term Administrator shall be construed to mean Control Officer.*

**(a1) AGRICULTURAL OPERATION:** The growing and harvesting of crops, or the raising of fowl, animals or bees as a gainful occupation, or forest management, or range improvement or in the improvement of land for wildlife and game habitat, or disease or pest prevention.

**(a2) AIR CONTAMINANT:** Any discharge, release, or other propagation into the atmosphere directly, or indirectly, caused by man and includes, but is not limited to, smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acid, or any combination thereof.

**(a3) AIR POLLUTION ABATEMENT OPERATION:** Any operation which has as its essential purpose a significant reduction in the emission of air contaminants or the effect of such emission.

**(a4) AMBIENT AIR QUALITY STANDARD:** The specific concentrations and durations of air pollutants which reflect the relationship between intensity and composition of pollution to undesirable effects.

**(a5) APPROVED COMBUSTIBLES:** Paper, cardboard, brush, trees, native vegetation or other materials as approved by the Control Officer.

**(b1) BASELINE CONCENTRATION:** In Mendocino County District only, those baseline concentrations which have not been established as of January 1, 1988, are air quality increment consumption and ambient concentrations were as of January 1, 1988. Such modeling shall be based on recent air established as of January 1, 1988, pending Environmental Protection Agency approval. An Environmental Protection Agency approved air quality model shall be used to calculate what the monitoring data covering a continuous twelve month period and sufficient meteorological data from the impact area of a proposed project.

If circumstances provide the Control Officer with reason to assume that the ambient concentration for a given pollutant has decreased since 1-1-88, the baseline concentration for that pollutant shall be reset to a lower amount as determined by preconstruction monitoring. The baseline concentration for each pollutant may be redefined (1) only once within the impact area of any proposed source with significant emissions constructed after 1-1-88, and (2) only if there is no resulting reduction of available increment.

**(b2) BEST AVAILABLE CONTROL TECHNOLOGY (BACT):** An emission limitation based on the maximum degree of reduction of each air contaminant subject to regulation under the Clean Air Act of 1977 emitted from or which results from any stationary source or

modification, which the Control Officer, on a case by case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such stationary source through application of production processes and available methods, systems, and techniques for control of such air contaminants. Said BACT determinations may include a design standard, operational equipment specifications, fuel restrictions, work practice or combination thereof. In no event shall application of BACT result in emissions of any pollutants which will exceed the emissions allowed under Rules 490 and 492 of this regulation. If the reviewing authority determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirements for the application of BACT (52.21(b)(12)).

(aa) The BACT process shall be applied to any air contaminants which have been identified as toxic air contaminants (TAC) by the U.S. Environmental Protection Agency, the California Air Resources Board or the District Board.

**(c1) COMBUSTION CONTAMINANTS:** Matter discharged into the atmosphere from the burning of any kind of material, excluding carbon dioxide and water.

**(c2) CONTROL OFFICER:** The Air Pollution Control Officer of the District

**(c3) CONTROL STRATEGY:**

A combination of measures designed to reduce air contaminant emissions in accordance with the State Implementation Plan for the California North Coast Air Basin.

**(d1) DISTRICT:** The County Air Pollution Control District as required by Section 40002 of the California Health and Safety Code or a multi-county unified district authorized by Chapter 3, Part 3, Division 26 of said code.

**(d2) DUST:** Minute solid particles released into the air by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, bagging, sweeping, etc.

**(e1) EMISSION:** The act of passing into the atmosphere an air contaminant or gas stream which contains an air contaminant, or the air contaminant so passed into the atmosphere.

**(e2) EPISODE ALERT:** A condition in an air basin whenever the concentration of any air contaminant in that air basin has been verified to have reached a predetermined level which threatens the ambient air quality standard as defined in Rule 160 depending upon the particular topography and meteorology of the air basin. "Verified" means the pertinent measuring instrument has been checked over the following fifteen-minute period and found to be operating correctly.

**(f1) FUMES:** "Fumes" means vapors, mists, and airborne liquid or solid particulate matter or any combination including these. *[adopted September 8, 1992]*

**(g1) GEOTHERMAL OPERATIONS:** Those activities related to the extraction, transmission, and utilization of geothermal steam which may directly, or indirectly, result in air contaminant emissions.

**(h1) HEARING BOARD:** The appellate review board of the District as provided for by Section 40800 of the California Health and Safety Code.

**(i1) INDIRECT SOURCE:** A facility, building, structure or installation, or combination thereof, which indirectly results in emissions of an air contaminant as a result of traffic greater than 20,000 or more vehicles per day within 10 years of construction; any new or modified facility which provides in excess of 1,000 new parking spaces; or any new or modified airport with more than 50,000 operations per year by regularly scheduled air carriers, or used by 1,600,000 or more passengers per year.

**(i1a) IMPACT/BASELINE AREA:** That area where the concentration of emissions from a proposed source is predicted to be 1 ug/m<sup>3</sup> or greater, using an Environmental Protection Agency approved ambient air quality model.

**(i2) INSTALLATION:** The placement, assemblage or construction of equipment or control apparatus at the premises where the equipment or control apparatus will be used, and includes all preparatory work at such premises.

**(k1) KRAFT PULP MILL:** Any industrial operation which uses for a cooking liquor an alkaline sulfide solution containing sodium sulfide in its pulping process.

**(k2) KRAFT PULP MILL NON-CONDENSIBLES:** The TRS portion of any gases and vapors released in a kraft pulp mill from the digester flash steam condensers, blow tanks, multiple effect evaporator vacuum seal tanks, multiple effect evaporator condensers, and condensate strippers.

**(k3) KRAFT PULP MILL PRODUCTION:** Tons of air-dried unbleached kraft pulp produced by a kraft pulp mill, or equivalent. A value equal to 50 percent of the weight of dry wood charged into the kraft cooking process may be substituted for those mills where a value of air-dried unbleached kraft pulp is not readily obtainable

**(k4) KRAFT RECOVERY FURNACE:** The combustion device in which pulping chemicals are converted to a molten smelt and wood solids are incinerated. For these regulations, and where present, this term shall include the direct contact evaporator.

**(l1) LIME KILN:** Any production device in which calcium carbonate is thermally converted to calcium oxide.

**(m1) MODELING:** A procedure for estimating the ambient air concentration of air contaminants based upon emission profiles, dispersion simulations or other techniques approved by the Environmental Protection Agency, California Air Resources Board and the Control Officer. (52.21(l))

**(m2) MODIFICATION:** "Modification" means any change in the structure, location, operation, conditions of operation, process materials or fuel of any stationary source which may increase or decrease the amount of any air contaminant emitted into the atmosphere by that source, and which is not already specifically allowed by a permit to operate issued by the District. An increase in production rate or in hours of operation beyond limits set in the permit to operate from the District is a modification. Otherwise, an increase or decrease in production rate or in hours of operation is not a modification. *[amended September 8, 1992]*

**(m3) MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT):**

An emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions that the permitting authority, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the source.

**(n1) NET INCREASE IN EMISSIONS:** The amount by which the sum of any increase in actual emissions from a particular physical change or change in method of operation at a stationary source, and any other increases and decreases in actual emissions at the source that are creditable in accordance with 40 CFR 52.21(b)(3) and (21), exceeds zero.

**(o1) OPERATION:** Any physical action resulting in a change in the location, form or physical properties of a material, or any chemical action resulting in a change in the chemical composition or the chemical or physical properties of a material.

**(o2) ORCHARD, VINEYARD, OR CITRUS GROVE HEATER:** Any article, machine, equipment or other contrivance, burning any type of fuel or material capable of emitting air contaminants, used or capable of being used for the purpose of giving protection from frost damage.

**(o3) ORGANIC GAS:** Any gas containing carbon and hydrogen, or carbon and hydrogen in combination with any other element.

**(o4) OTHER KRAFT MILL SOURCES:** Sources of TRS emissions in a kraft mill other than recovery furnaces and lime kilns, including but not limited to: vents from knotters, brown stock washers, smelt tanks, black liquor oxidation systems, tall oil recovery operations, and any other vent which contributes over 1 percent of the total kraft mill TRS emissions.

**(o5) OWNER:** Includes, but is not limited to, any person who leases, supervises or operates equipment, in addition to the normal meaning of ownership.

**(p1) PARTICULATE MATTER:** Any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.

**(p2) PERMIT:** Refers to either an authority to construct, temporary permit to operate or permit to operate, whichever is legally in effect. For purposes of prevention of significant deterioration enforceability, the permit to operate will be considered a modified authority to construct.

**(p3) PERSON OR PERSONS:** An individual, public or private corporation, political

subdivision, agency, board, department or bureau of the state, municipality, partnership, co-partnership, firm, association, trust or estate, or any other legal entity whatsoever which is recognized in law as the subject of rights and duties.

**(p4) POTENTIAL TO EMIT:** The maximum capacity of a stationary source to emit an air contaminant under its physical and operational design, after considering physical and operational limitations that are enforceable by conditions imposed by the district in both the Authority to Construct and Permit to Operate. (52.21(b)(4))

**(p5) PPM:** Parts per million by volume expressed on a dry gas basis.

**(p6) PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT:** The maximum allowable increase of ambient air quality above baseline concentration in the three classified areas.

	<b>Allowable PSD Increment</b>	
	<b>Class I</b>	<b>Class II</b>
<b>Sulfur Dioxide</b>		
annual arithmetic mean	2	20
24-hour maximum*	5	91
3-hour maximum	25	512
<b>Total Suspended Particulate</b>		
annual geometric mean	5	19
24-hour maximum*	10	37
<b>Nitrogen Dioxide</b>		
Annual average	2.5	25

\* Not to be exceeded more than once a year.

[amended April 6, 1993]

**(p7) PROCESS WEIGHT PER HOUR:** The total weight, including contained moisture of all materials introduced into any specific process which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. The "process weight per hour" will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For continuous processes, the average hourly total weight of materials introduced into the process will be used in calculations.

**(p8) PRECURSOR:** A substance that, when released to the atmosphere, forms or causes to be formed or contributes to the formation of another or secondary air pollutant for which a national ambient air quality standard has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more national ambient air quality standards. Presently identified precursors and secondary pollutants are:

**PRECURSORS**

Reactive organic gases

Nitrogen Oxides (NOx)

Sulphur oxides (SOx)

**SECONDARY POLLUTANTS**

a) Photochemical oxidants

b) Organic fraction of particulate matter

a) Nitrogen dioxide (NO<sub>2</sub>)

a) Sulfur dioxide (SO<sub>2</sub>)

**(s1) SECTION:** Refers to a section of the Health and Safety Code of the State of California unless some other statute is specifically mentioned.

**(s2) SIGNIFICANT:**

The potential of a new or modified source to emit air contaminants which would equal or exceed any of the following rates, calculated on the basis of 24-hour emission profiles:

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<b>Air Contaminant</b>	<b>Significant Emission Rate</b>
<b><u>For BACT determination:</u></b>	
Carbon monoxide	550 lbs. per day
Nitrogen oxides	220 lbs. per day
Sulfur dioxide	220 lbs. per day
Particulate matter	135 lbs. per day
PM-10	80 lbs. per day
Ozone	220 lbs. per day of volatile organic compounds*
Lead	3 lbs. per day
Asbestos	.038 lbs. per day
Beryllium	.002 lbs. per day
Mercury	0.5 lbs. per day
Vinyl chloride	5.4 lbs. per day
Fluorides	16 lbs. per day
Sulfuric acid mist	38 lbs. per day
Hydrogen sulfide (H2S)	54 lbs. per day
Total reduced sulfur (including H2S)	54 lbs. per day

**For MACT determination:**

Hazardous Air Pollutant (HAP) listed 10 tons per year of any one HAP  
pursuant to Section 112(g) of the Clean Air Act Amendments of 1990  
25 tons per year for two or more HAPs

**\* Except for ethanol sources below the EPA yearly threshold (40 tons per year).**

Notwithstanding the above significant emission rates for various air contaminants, significant also means any net emission increase from any new or modified stationary source which would be constructed within 10 kilometers of a Class I area and have an air quality impact on such area equal to or greater than 1 microgram per cubic meter (24 hour average).(52.21(b)(23)(iii))

**(s3) SMELT DISSOLVING TANK:** A vessel used for dissolving the molten salts (smelt) recovered from the kraft recovery furnace.

**(s4) STACKING:** The venting of geothermal steam from associated unit steam supply transmission line into the atmosphere during associated power plant shutdowns (outages), startups or load curtailments.

**(s5) STANDARD CONDITIONS:**As used in these regulations, refers to a gas temperature of 20 degrees Centigrade (68 degrees Fahrenheit) and a gas pressure of 760 millimeters of mercury absolute (14.7 pounds per square inch absolute).

**(s6) STANDARD CUBIC METER OF GAS (STANDARD CUBIC FOOT OF GAS):** The amount of gas that would occupy the specified cubic measure, if free of combined water, at standard conditions.

**(s7) STATIONARY SOURCE:** All units of air contaminant emitting articles, machines, equipment or other contrivances, which are located on adjacent or contiguous properties under the control of the same person (or persons under common control) and all of which are determined by the Control Officer to be related to one another through a similar product, raw material or function and are included in the same standard industrial classification.

**(s8) STEAM GENERATING UNIT:** Any furnace or boiler used in the process of burning fuel for the purpose of producing steam by heat transfer.

**(t1) TOTAL REDUCED SULFUR (TRS):** "TRS" means total reduced sulfur contained in hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide or other organic sulfide compounds, all expressed as hydrogen sulfide. Sulfur dioxide, sulfur trioxide, or sulfuric acid mist are not to be included in the determination of TRS.

**(t2) TOXIC AIR CONTAMINANT:** "Toxic air contaminant" means any substance identified by the Air Resources Board as a toxic air contaminant pursuant to California Health and Safety Code Section 39650 et seq., or listed as a hazardous air pollutant pursuant to Subsection (b) of Section 112 of the federal Clean Air Act(42 U.S.C. Sec.7412(b)). [amended April 6, 1993]

**(t3) TRADE SECRETS:** As used in these rules and regulations, Trade Secrets include, but are not limited to, any formula, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or to perform a service having commercial value, and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it.