

# IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

## 58.01.01 – RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO

DOCKET NO. 58-0101-2401

### NOTICE OF RULEMAKING – PROPOSED RULE

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. The action is authorized by Sections 39-105 and 39-107, Idaho Code. This rulemaking updates federal regulations incorporated by reference as mandated by the U.S. Environmental Protection Agency (EPA) for approval of Idaho’s Title V Operating Permit Program pursuant to 40 CFR Part 70 and fulfilling the requirements of Idaho’s delegation agreement with EPA under Section 112(l) of the Clean Air Act. It also updates citations to other federal regulations necessary to retain state primacy of Clean Air Act (CAA) programs.

**PUBLIC HEARING SCHEDULE:** Pursuant to Section 67-5222(2), Idaho Code, a public hearing has been scheduled and will be held as follows:

<b>Tuesday, October 8, 2024, 4:00 p.m. MT</b>
<b>ATTEND IN PERSON OR VIA MICROSOFT TEAMS</b>
<b>DEQ State Office Conference Center 1410 N. Hilton Boise, ID 83706</b>
<b>The Teams meeting link is available at: <a href="https://www.deq.idaho.gov/air-quality-docket-no-58-0101-2401/">https://www.deq.idaho.gov/air-quality-docket-no-58-0101-2401/</a></b>

The meeting location will be accessible to persons with disabilities, and language translators will be made available upon request. Requests must be made no later than five (5) business days prior to the meeting date. For arrangements, contact the undersigned.

**DESCRIPTIVE SUMMARY:** The purpose of this rulemaking is to ensure that the state rules remain consistent with federal regulations. The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, are updated annually to maintain consistency with federal regulations implementing the CAA. This proposed rule updates federal regulations incorporated by reference with the July 1, 2024 Code of Federal Regulations (CFR) effective date. The July 1, 2024 CFR is a codification of federal regulations published in the Federal Register as of July 1, 2024.

This rulemaking removes the Section 332 provisions for “Emergency as an Affirmative Defense Regarding Excess Emissions.” On July 12, 2023, the EPA removed the emergency affirmative defense provisions from the CAA operating permit program regulations. DEQ is removing this section from our rules to comply with this action.

This rulemaking also adds the four following clarifying definitions: “Toxic Air Pollutant Non-carcinogenic Increments” added to Section 585, “Toxic Air Pollutant Carcinogenic Increments” added to Section 586, “CAS” added to Sections 585 and 586 Notes, and “Open Burning” added to Section 600. During negotiated rulemaking for Docket No. 58-0101-2101, these definitions were struck from Section 006 with the intention of moving them to Sections 585, 586, and 600. While the other definitions were moved to their respective sections, these definitions were inadvertently overlooked. DEQ is now adding these definitions as originally intended.

The proposed rule text is in legislative format. Language the agency proposes to add is underlined. Language the agency proposes to delete is struck out. It is these additions and deletions to which public comment should be addressed. If adopted by the Idaho Board of Environmental Quality and approved by concurrent resolution of the

2025 Idaho State Legislature, the rule will become effective on July 1, 2025, unless otherwise specified in the concurrent resolution. DEQ will submit the final rule to EPA.

**INCORPORATION BY REFERENCE:** Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary:

Adoption of federal regulations is necessary for EPA approval of Idaho's Title V Operating Permit Program and state primacy of Clean Air Act programs. Incorporation by reference allows DEQ to keep its rules up to date with federal regulation changes and simplifies compliance for the regulated community. Information for obtaining a copy of the federal regulations is included in the rule.

In compliance with Idaho Code 67-5223(4), DEQ prepared a brief synopsis detailing the substantive differences between the previously incorporated material and the latest revised edition or version of the incorporated material being proposed for incorporation by reference. The Overview of Incorporations by Reference can be obtained at <https://www.deq.idaho.gov/air-quality-docket-no-58-0101-2401/>.

**NEGOTIATED RULEMAKING:** Negotiated rulemaking was not conducted. DEQ determined that negotiated rulemaking is not feasible due to the simple nature of this rulemaking and because DEQ has no discretion with respect to adopting federal regulations that are necessary for EPA approval of Idaho's Title V Operating Permit Program and state primacy of Clean Air Act programs. Whenever possible, DEQ incorporates federal regulations by reference to ensure that the state rules are consistent with federal regulations.

**IDAHO CODE SECTION 39-107D STATEMENT:** This proposed rule does not regulate an activity not regulated by the federal government, nor is it broader in scope or more stringent than federal regulations.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state General Fund greater than ten thousand dollars (\$10,000) during the fiscal year: Not applicable.

**ASSISTANCE ON TECHNICAL QUESTIONS AND SUBMISSION OF WRITTEN COMMENTS:** For assistance on technical questions concerning this rulemaking, contact Aislinn Johns at [Aislinn.johns@deq.idaho.gov](mailto:Aislinn.johns@deq.idaho.gov) or (208) 373-0185.

**SUBMISSION OF WRITTEN COMMENTS:** Anyone may submit written comments regarding this proposed rule. The Department will consider all written comments received on or before October 8, 2024. Submit comments to:

Aislinn Johns  
Department of Environmental Quality  
1410 N. Hilton Street  
Boise, Idaho 83706  
[Aislinn.johns@deq.idaho.gov](mailto:Aislinn.johns@deq.idaho.gov)

Dated this 4th day of September, 2024.

Janeena White  
Senior Operations Analyst  
Department of Environmental Quality  
1410 N. Hilton Street  
Boise, Idaho 83706  
Phone: (208)373-0502  
[janeena.white@deq.idaho.gov](mailto:janeena.white@deq.idaho.gov)

THE FOLLOWING IS THE PROPOSED TEXT OF DOCKET NO. 58-0101-2401  
(Only Those Sections With Amendments Are Shown.)

58.01.01 – RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO

107. INCORPORATIONS BY REFERENCE.

01. **Requirements for Preparation, Adoption, and Submittal of Implementation Plans.** 40 CFR Part 51 revised as of July 1, ~~2023~~2024. All sections included in 40 CFR Part 51, Subpart P, Protection of Visibility, are excluded from incorporation except 51.301, 51.304(a), 51.307, and 51.308 are incorporated by reference into these rules. (7-1-24)( )
02. **National Primary and Secondary Ambient Air Quality Standards.** 40 CFR Part 50, revised as of July 1, ~~2023~~2024. (7-1-24)( )
03. **Approval and Promulgation of Implementation Plans.** 40 CFR Part 52, Subparts A and N and Appendices D and E, revised as of July 1, ~~2023~~2024. (7-1-24)( )
04. **Ambient Air Monitoring Reference and Equivalent Methods.** 40 CFR Part 53, revised as of July 1, ~~2023~~2024. (7-1-24)( )
05. **Ambient Air Quality Surveillance.** 40 CFR Part 58, revised as of July 1, ~~2023~~2024. (7-1-24)( )
06. **Standards of Performance for New Stationary Sources.** 40 CFR Part 60, revised as of July 1, ~~2023~~2024. (7-1-24)( )
07. **National Emission Standards for Hazardous Air Pollutants.** 40 CFR Part 61, revised as of July 1, ~~2023~~2024. (7-1-24)( )
08. **Federal Plan Requirements for Hospital/Medical/Infectious Waste Incinerators Constructed on or Before December 1, 2008.** 40 CFR Part 62, Subpart HHH, revised as of July 1, ~~2023~~2024. (7-1-24)( )
09. **Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014.** 40 CFR Part 62, Subpart OOO, revised as of July 1, ~~2023~~2024. (7-1-24)( )
10. **National Emission Standards for Hazardous Air Pollutants for Source Categories.** 40 CFR Part 63, revised as of July 1, ~~2023~~2024. (7-1-24)( )
11. **Compliance Assurance Monitoring.** 40 CFR Part 64, revised as of July 1, ~~2023~~2024. (7-1-24)( )
12. **State Operating Permit Programs.** 40 CFR Part 70, revised as of July 1, ~~2023~~2024. (7-1-24)( )
13. **Permits.** 40 CFR Part 72, revised as of July 1, ~~2023~~2024. (7-1-24)( )
14. **Sulfur Dioxide Allowance System.** 40 CFR Part 73, revised as of July 1, ~~2023~~2024. (7-1-24)( )
15. **Protection of Stratospheric Ozone.** 40 CFR Part 82, revised as of July 1, ~~2023~~2024.

(7-1-24)( )

16. Clean Air Act. 42 U.S.C. Sections 7401 through 7671g (1997). (7-1-24)

**(BREAK IN CONTINUITY OF SECTIONS)**

**~~332. EMERGENCY AS AN AFFIRMATIVE DEFENSE REGARDING EXCESS EMISSIONS.~~**

~~01. General. An emergency, defined as any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator, including acts of God, which situation requires immediate corrective action to restore normal operation and that causes the Tier I source to exceed a technology-based emission limitation under the Tier I operating permit due to unavoidable increases in emissions attributable to the emergency, constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitation if the conditions of Subsection 332.02 are met. An emergency will not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. (3-28-23)~~

~~02. Demonstration of Emergency. The affirmative defense of emergency must be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that: (3-28-23)~~

~~a. An emergency occurred and that the permittee can identify the cause(s) of the emergency; (3-28-23)~~

~~b. The permitted facility was at the time being properly operated; (3-28-23)~~

~~c. During the period of the emergency, the permittee took all reasonable steps, as determined by the Department, to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and (3-28-23)~~

~~d. The permittee submitted written notice of the emergency to the Department within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. Compliance with this section satisfies the written reporting requirements under Section 135 and Subsection 322.15.g. (3-28-23)~~

~~03. Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (3-28-23)~~

~~04. Applicability. Section 332 is in addition to any emergency or upset provision contained in any applicable requirement. (3-28-23)~~

Break

~~332.~~ -- 334. (RESERVED)

**(BREAK IN CONTINUITY OF SECTIONS)**

**585. TOXIC AIR POLLUTANTS NON-CARCINOGENIC INCREMENTS.**

**01. Toxic Air Pollutant Non-carcinogenic Increments.** Those ambient air quality increments based on occupational exposure limits for airborne toxic chemicals expressed in terms of a screening emission level or an acceptable ambient concentration for a non-carcinogenic toxic air pollutant. ( )

**02. Non-carcinogens Table.** The screening emissions levels (EL) and acceptable ambient

concentrations (AAC) for non-carcinogens are as provided in the following table. The AAC in this section are twenty-four (24) hour averages. (3-28-23)( )

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
60-35-5	Acetamide (NY)	--	0.002	0.0003
64-19-7	Acetic acid	25	1.67	1.25
108-24-7	Acetic anhydride	20	1.33	1
67-64-1	Acetone	1780	119	89
75-05-8	Acetonitrile	67	4.47	3.35
540-59-0	Acetylene dichloride, See 1,2-Dichloroethylene			
79-27-6	Acetylene tetrabromide	15	1	.75
107-02-8	Acrolein	0.25	0.017	0.0125
79-10-7	Acrylic acid	30	2	1.5
107-18-6	Allyl alcohol	5	0.333	.25
106-92-3	Allyl glycidyl ether	22	1.47	1.1
2179-59-1	Allyl propyl disulfide	12	0.8	0.6
7429-90-5	Aluminum Including:			
NA	Metal & Oxide	10	0.667	0.5
NA	Pyro powders	5	0.333	0.25
NA	Soluble salts	2	0.133	0.10
NA	Alkyls not otherwise classified	2	0.133	0.10
141-43-5	2-Aminoethanol, See Ethanolamine			
504-29-0	2-Aminopyridine	2	0.133	0.10
7664-41-7	Ammonia	18	1.2	0.9
12125-02-9	Ammonium chloride fume	10	0.667	0.5
3825-26-1	Ammonium perfluoro-octanoate	0.1	0.007	0.05
7773-06-0	Ammonium sulfamate	10	0.667	0.5
628-63-7	n-Amyl acetate	530	35.3	26.5
626-38-0	Sec-Amyl acetate	665	44.3	33.25
7440-36-0	Antimony & compounds, as Sb (handling & use)	0.5	0.033	0.025
86-88-4	ANTU	0.3	0.02	0.015
7784-42-1	Arsine	0.2	0.013	0.01
86-50-0	Azinphos-methyl	0.2	0.013	0.01
7440-39-3	Barium, soluble compounds, as Ba	0.5	0.033	0.025
17804-35-2	Benomyl	10	0.67	0.5
7106-51-4	p-Benzoquinone, See Quinone			

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
94-36-0	Benzoyl peroxide	5	0.333	0.25
92-52-4	Biphenyl	1.5	0.1	0.075
1304-82-1	Bismuth telluride undoped	10	0.667	0.05
NA	Bismuth telluride if selenium doped	5	0.333	0.25
1303-96-4	Borates, tetra odium salts - Including:			
NA	Anhydrous	1	0.067	0.05
NA	Decahydrate	5	0.333	0.25
NA	Pentahydrate	1	0.067	0.05
1303-86-2	Boron oxide	10	0.667	0.5
10294-33-4	Boron tribromide	10	0.667	0.5
7637-07-2	Boron trifluoride	3	0.2	0.25
314-40-9	Bromacil	10	0.667	0.5
7726-95-6	Bromine	0.7	0.047	0.035
7789-30-2	Bromine penta-fluoride	0.7	0.047	0.035
75-25-2	Bromoform	5	0.333	0.25
109-79-5	Butanethiol, see Butyl mercaptan			
78-93-3	2-Butanone, see Methyl ethyl ketone			
112-07-2	2-butoxyethyl acetate	---	8.33	1.25
111-76-2	2-Butoxyethanol (EGBG)	120	8	6
123-86-4	n-Butyl acetate	710	47.3	35.5
105-46-4	sec-Butyl acetate	950	63.3	47.5
540-88-5	tert-Butyl acetate	950	63.3	47.5
141-32-2	Butyl acrylate	55	3.67	2.75
71-36-3	n-Butyl alcohol	150	10	7.5
78-92-2	Sec-Butyl alcohol	305	20.3	15.25
75-65-0	tert-Butyl alcohol	300	20	15
109-73-9	Butylamine	15	1	.75
124-17-4	Butyl carbitol acetate (ID)	---	0.846	.625
1189-85-1	tert-Butyl chromate, as CrO3	0.1	0.007	.005
2426-08-6	n-Butyl glycidyl ether	135	9	6.75
138-22-7	n-Butyl lactate	25	1.67	1.25
109-79-5	Butyl mercaptan	1.8	0.12	0.09
89-72-5	o-sec-Butylphenol	30	2	1.5
98-51-1	p-tert-Butyltoluene	60	4	3

<b>CAS NUMBER</b>	<b>SUBSTANCE</b>	<b>OEL (mg/m3)</b>	<b>EL (lb/hr)</b>	<b>AAC (mg/m3)</b>
1317-65-3	Calcium carbonate	10	0.667	0.5
156-62-7	Calcium cyanamide	0.5	0.033	0.025
1305-62-0	Calcium hydroxide	5	0.333	0.25
1305-78-8	Calcium oxide	2	0.133	0.1
1344-95-2	Calcium silicate (synthetic)	10	0.667	0.5
13397-24-5	Calcium sulfate	10	0.667	0.5
76-22-2	Camphor, synthetic	12	0.8	0.6
105-60-2	Caprolactam - Including:			
	Dust	1	0.067	0.05
	Vapor	20	1.33	1.0
1333-86-4	Carbon black	3.5	0.23	0.175
2425-06-1	Captafol	0.1	0.007	0.005
133-06-2	Captan	5	0.333	0.25
463-58-1	Carbonyl sulfide	0.4	0.027	0.02
63-25-2	Carbaryl	5	0.333	0.25
1563-66-2	Carbofuran	0.1	0.007	0.005
75-15-0	Carbon disulfide	30	2	1.5
558-13-4	Carbon tetrabromide	1.4	0.093	0.07
75-44-5	Carbonyl chloride, See Phosgene			
353-50-4	Carbonyl fluoride	5	0.333	0.25
120-80-9	Catechol	20	1.33	1.0
21351-79-1	Cesium hydroxide	2	0.133	0.10
133-90-4	Chloramben (PL)	---	887	133
8001-35-2	Chlorinated camphene	0.5	0.0333	0.025
31242-93-0	Chlorinated diphenyl oxide	0.5	0.033	0.025
7782-50-5	Chlorine	3	0.2	0.15
10049-04-4	Chlorine dioxide	0.3	0.02	0.015
7790-91-2	Chlorine trifluoride (CL)	0.38	0.025	0.002
107-20-0	Chloroacetaldehyde	0.32	0.021	0.015
78-95-5	Chloroacetone	0.38	0.0253	0.019
532-27-4	a-Chloroacetophenone	0.32	0.021	0.016
79-04-9	Chloroacetyl chloride	0.2	0.013	0.01
108-90-7	Chlorobenzene	350	23.3	17.5
510-15-6	Chlorobenzilate (PL1)	---	0.047	0.035

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
2698-41-1	O-Chlorobenzylidene malononitrile (CL)	0.4	0.0027	0.03
126-99-8	2-Chloro-1,3-butadiene, see B-Chloroprene			
107-07-3	2-Chloroethanol, see Ethylene chlorohydrin			
600-25-9	1-Chloro-1-nitro propane	10	0.667	0.5
95-57-8	2-Chlorophenol (and all isomers) (ID)	---	0.033	0.025
76-06-2	Chloropicrin	0.7	0.047	0.037
126-99-8	B-chloroprene	36	2.4	1.8
2039-87-4	o-Chlorostyrene	285	19	14.25
95-49-8	o-Chlorotoluene	250	16.7	12.5
1929-82-4	2-Chloro-6-(tri-chloromethyl) pyridine, see Nitrapyrin			
2921-88-2	Chlorpyrifos	0.2	0.013	0.01
7440-47-3	Chromium metal - Including:	0.5	0.033	0.025
7440-47-3	Chromium (II) compounds, as Cr	0.5	0.033	0.025
16065-83-1	Chromium (III) compounds, as Cr	0.5	0.033	0.025
2971-90-6	Clopidol	10	0.667	0.5
NA	Coal dust (<5% silica)	2	0.133	0.1
10210-68-1	Cobalt carbonyl as Co	0.1	0.007	0.005
16842-03-8	Cobalt hydrocarbonyl as Co	0.1	0.007	0.005
7440-48-4	Cobalt metal, dust, and fume	0.05	0.0033	0.0025
7440-50-8	Copper:			
7440-50-8	Fume	0.2	0.013	0.01
7440-50-8	Dusts & mists, as Cu	1	0.067	0.05
95-48-7	o-Cresol	22	1.47	1.1
108-39-4	m-Cresol	22	1.47	1.1
106-44-5	p-Cresol	22	1.47	1.1
1319-77-3	Cresols/Cresylic Acid (isomers and mixtures)	22	1.47	1.1
123-73-9	Crotonaldehyde	5.7	0.38	0.285
299-86-5	Cruformate	5	0.333	0.25
98-82-8	Cumene	245	16.3	12.25
420-04-2	Cyanamide	2	0.133	0.1
592-01-8	Cyanide and compounds as CN	5	0.333	0.25
110-82-7	Cyclohexane	1050	70	52.5
108-93-0	Cyclohexanol	200	13.3	10
108-94-1	Cyclohexanone	100	6.67	5



<b>CAS NUMBER</b>	<b>SUBSTANCE</b>	<b>OEL (mg/m3)</b>	<b>EL (lb/hr)</b>	<b>AAC (mg/m3)</b>
110-83-8	Cyclohexene	1015	67.7	50.75
108-91-8	Cyclohexylamine	41	2.73	2.05
121-82-4	Cyclonite	1.5	0.1	0.075
542-92-7	Cyclopentadiene	200	13.3	10
287-92-3	Cyclopentane	1720	114.667	86
94-75-7	2,4-D	10	0.667	0.5
17702-41-9	Decaborane	0.3	0.02	0.015
8065-48-3	Demeton	0.1	0.007	0.005
123-42-2	Diacetone alcohol	240	16	12
39393-37-8	Dialkyl phthalate (ID)	---	16.4	2.46
107-15-3	1,2-Diaminoethane, See Ethylenediamine			
333-41-5	Diazinon	0.1	0.007	0.005
334-88-3	Diazomethane	0.34	0.023	0.017
19287-45-7	Diborane	0.1	0.007	0.005
102-81-8	2-N-Dibutylamino ethanol	14	0.933	0.7
2528-36-1	Dibutyl phenyl phosphate	3.5	0.233	0.175
107-66-4	Dibutyl phosphate	8.6	0.573	0.43
84-74-2	Dibutyl phthalate	5	0.333	0.25
7572-29-4	Dichloroacetylene	0.39	0.0026	0.0195
95-50-1	o-Dichlorobenzene	300	20	15
106-46-7	1,4-Dichlorobenzene	450	30	22.5
118-52-5	1,3-Dichloro-5, 5-dimethyl hydantoin	0.2	0.013	0.025
75-34-3	Dichloroethane	405	27	20.25
540-59-0	1,2-Dichloroethylene	790	52.7	39.5
111-44-4	Dichloroethyl ether	30	2	1.5
75-43-4	Dichlorofluoromethane	40	2.67	2
594-72-9	1, 1-Dichloro-1-nitroethane	10	0.667	0.5
78-87-5	1,2-Dichloropropane, see Propylene dichloride			
75-99-0	2,2-Dichloropropionic acid	6	0.4	0.3
62-73-7	Dichlorvos	1	0.067	0.05
141-66-2	Dicrotophos	0.25	0.017	0.125
77-73-6	Dicyclopentadiene	30	2	1.5
102-54-5	Dicyclopentadienyl iron	10	0.667	0.5
111-42-2	Diethanolamine	15	1	0.75

<b>CAS NUMBER</b>	<b>SUBSTANCE</b>	<b>OEL (mg/m3)</b>	<b>EL (lb/hr)</b>	<b>AAC (mg/m3)</b>
109-89-7	Diethylamine	30	2	1.5
100-37-8	2-Diethylamino-ethanol	50	3.33	2.5
111-40-0	Diethylene triamine	4	0.267	0.2
60-29-7	Diethyl ether	1200	80	60
96-22-0	Diethyl Ketone	705	47	35.25
84-66-2	Diethyl phthalate	5	0.333	0.25
2238-07-5	Diglycidyl ether (DGE)	0.53	0.035	0.0265
123-31-9	Dihydroxybenzene, see Hydroquinone			
108-83-8	Diisobutyl ketone	145	9.67	7.25
108-18-9	Diisopropylamine	20	1.33	1
127-19-5	Dimethyl acetamide	35	2.33	1.75
124-40-3	Dimethylamine	9.2	0.613	0.46
60-11-7	Dimethyl aminoazo-benzene (NY)	---	0.002	0.0003
1300-73-8	Dimethylamino-benzene, see Xylidine			
121-69-7	Dimethylaniline (N,N-Dimethylaniline)	25	1.67	1.25
1330-20-7	Dimethylbenzene, see Xylene			
300-76-5	Dimethyl-1,2-dibromo-2-dichloroethyl phosphate, see Naled			
68-12-2	Dimethylformamide	30	2	1.5
108-83-8	2,6-Dimethyl-4-heptanone, see Diisobutyl ketone			
131-11-3	Dimethylphthalate	5	0.333	0.25
148-01-6	Dinitolmide	5	0.333	0.25
528-29-0	Dinitrobenzene	1	0.067	0.05
99-65-0	m (or) 1,3-Dinitrobenzene	1	0.067	0.05
100-25-4	p (or) 1,4-Dinitrobenzene	1	0.067	0.05
534-52-1	Dinitro-o-cresol	0.2	0.013	0.01
148-01-6	3,5-Dinitro-o-toluamide, see Dinitolmide			
117-84-0	N-Dioctyl Phthalate	5	0.333	0.25
78-34-2	Dioxathion	0.2	0.013	0.01
92-52-4	Diphenyl, see Biphenyl			
122-39-4	Diphenylamine	10	0.667	0.5
	Diphenyl methane diisocyanate, see Methylene diphenyl diisocyanate			
34590-94-8	Dipropylene glycol methyl ether	600	40	30

<b>CAS NUMBER</b>	<b>SUBSTANCE</b>	<b>OEL (mg/m3)</b>	<b>EL (lb/hr)</b>	<b>AAC (mg/m3)</b>
123-19-3	Dipropyl ketone	235	15.7	11.75
85-00-7	Diquat	0.5	0.033	0.01
97-77-8	Disulfiram	2	0.133	0.1
298-04-4	Disulfoton	0.1	0.007	0.005
128-37-0	2,6-Ditert. butyl-p-cresol	10	0.667	0.5
330-54-1	Diuron	10	0.667	0.5
108-57-6	Divinyl benzene	50	3.33	2.5
1302-74-5	Emery (corundum) total dust (> 1% silica)	10	0.667	0.5
115-29-7	Endosulfan	0.1	0.007	0.005
72-20-8	Endrin	0.1	0.007	0.005
13838-16-9	Enflurane	566	37.7	28.3
1395-21-7	Enzymes, see Subtilisins			
2104-64-5	EPN (Ethoxy-4-Nitro-phenoxy phenylphosphine)	0.5	0.033	0.025
106-88-7	1,2-Epoxybutane (MI)	---	0.8	0.6
75-56-9	1,2-Epoxypropane, see Propylene oxide			
556-52-5	2,3-Epoxy-1-propanol, see Glycidol			
75-08-1	Ethanethiol, see Ethyl mercaptan			
141-43-5	Ethanolamine	8	0.533	0.4
563-12-2	Ethion	0.4	0.027	0.02
110-80-5	2-Ethoxyethanol	19	1.27	0.95
111-15-9	2-Ethoxyethyl acetate (EGEEA)	27	1.8	1.35
141-78-6	Ethyl acetate	1400	93.3	70
64-17-5	Ethyl alcohol	1880	125	94
75-04-7	Ethylamine	18	1.2	0.9
541-85-5	Ethyl amyl ketone	130	8.67	6.5
100-41-4	Ethyl benzene	435	29	21.75
74-96-4	Ethyl bromide	22	1.47	1.1
106-35-4	Ethyl butyl ketone	230	15.3	11.5
51-79-6	Ethyl carbamate (Urethane) (WA)	---	0.002	0.0015
75-00-3	Ethyl chloride	2640	176	132
107-07-3	Ethylene chlorohydrin	3	0.2	0.15
107-15-3	Ethylenediamine	25	1.67	1.25
107-06-2	Ethylene dichloride	40	2.667	2
107-21-1	Ethylene glycol vapor (CL)	127	0.846	6.35

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
628-96-6	Ethylene glycol denigrate	0.31	0.021	0.016
110-49-6	Ethylene glycol methyl ether acetate, see 2-Methoxyethyl acetate			
96-45-7	Ethylene thiourea (PL2)	---	0.047	0.035
109-94-4	Ethyl formate	300	20	15
16219-75-3	Ethylidene norbornene (CL)	25	0.167	1.25
75-08-1	Ethyl mercaptan	1	0.067	0.05
100-74-3	N-Ethylmorpholine	23	1.53	1.15
78-10-4	Ethyl silicate	85	5.67	4.25
22224-92-6	Fenamiphos	0.1	0.007	0.005
115-90-2	Fensulfothion	0.1	0.007	0.005
55-38-9	Fenthion	0.2	0.013	0.01
14484-64-1	Ferbam	10	0.667	0.5
12604-58-9	Ferrovandium dust	1	0.067	0.05
NA	Fibrous glass dust	10	0.667	0.5
NA	Fine Mineral Fibers - Including: mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less. (ID)	--	0.661	0.5
NA	Fluorides, as F	2.5	0.167	0.125
7782-41-4	Fluorine	2	0.133	0.1
944-22-9	Fonofos	0.1	0.007	0.005
75-12-7	Formamide	30	2	1.5
64-18-6	Formic acid	9.4	0.627	0.47
98-01-1	Furfural	8	0.533	0.4
98-00-0	Furfuryl alcohol	40	2.67	2
7782-65-2	Germanium tetrahydride	0.6	0.04	0.03
NA	Glass, Fibrous or dust, see Fibrous glass dust			
111-30-8	Glutaraldehyde (CL)	0.82	0.0047	0.041
556-52-5	Glycidol	75	5	3.75
110-80-5	Glycol monoethyl ether, see 2-Ethoxyethanol			
7440-58-6	Hafnium	0.5	0.033	0.025
110-43-0	2-Heptanone, see Methyl n-amyl ketone			
106-35-4	3-Heptanone, see Ethyl butyl ketone			
151-67-7	Halothane	404	26.9	20.2

<b>CAS NUMBER</b>	<b>SUBSTANCE</b>	<b>OEL (mg/m3)</b>	<b>EL (lb/hr)</b>	<b>AAC (mg/m3)</b>
142-82-5	Heptane (n-Heptane)	1640	109	82
77-47-4	Hexachlorocyclopentadiene	0.1	0.007	0.005
1335-87-1	Hexachloronaphthalene	0.2	0.013	0.010
684-16-2	Hexafluoroacetone	0.7	0.047	0.035
822-06-0	Hexamethylene diisocyanate	0.03	0.002	0.0015
680-31-9	Hexamethylphosphoramide (WA)	---	0.002	0.0015
110-54-3	Hexane (n-Hexane)	180	12	9
591-78-6	2-Hexanone, see Methyl n-butyl ketone			
108-10-1	Hexone, see Methyl isobutyl ketone			
108-84-9	sec-Hexyl acetate	300	20	15
107-41-5	Hexylene glycol (CL)	121	0.806	6.05
37275-59-5	Hydrogenated terphenyls	5	0.333	0.25
10035-10-6	Hydrogen bromide (CL)	10	0.0667	0.5
7647-01-0	Hydrogen chloride (CL)	7.5	0.05	0.375
7722-84-1	Hydrogen peroxide	1.5	0.1	0.075
7783-06-4	Hydrogen sulfide	14	0.933	0.7
123-31-9	Hydroquinone	2	0.133	0.1
123-42-2	4-Hydroxy-4-Methyl-2-pentanone, see Diacetone alcohol			
999-61-1	2 -Hydroxypropyl acrylate	3	0.2	0.15
95-13-6	Indene	45	3	2.25
7440-74-6	Indium & compounds as In	0.1	0.007	0.005
7553-56-2	Iodine (CL)	0.1	0.0067	0.005
75-47-8	Iodoform	10	0.667	0.5
1309-37-1	Iron oxide fume (Fe <sub>2</sub> O <sub>3</sub> ) as Fe	5	0.333	0.25
13463-40-6	Iron pentacarbonyl as Fe	0.8	0.053	0.04
7439-89-6	Iron salts, soluble, as Fe	1	0.067	0.05
123-92-2	Isoamyl acetate	525	35	26.25
123-51-3	Isoamyl alcohol	360	24	18
110-19-0	Isobutyl acetate	700	46.7	35
78-83-1	Isobutyl alcohol	150	10	6
26952-21-6	Isooctyl alcohol	270	18	13.5
78-59-1	Isophorone	28	1.867	1.4
4098-71-9	Isophorone diisocyanate	0.09	0.006	0.0045
109-59-1	Isopropoxyethanol	105	7	5.25

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
108-21-4	Isopropyl Acetate	1040	69.3	52
67-63-0	Isopropyl alcohol	980	65.3	49
75-31-0	Isopropylamine	12	0.8	0.6
643-28-7	N-Isopropylaniline	10	0.667	0.5
108-20-3	Isopropyl ether	1040	69.3	52
4016-14-2	Isopropyl glycidyl ether (IGE)	240	16	12
1332-58-7	Kaolin (respirable dust)	2	0.133	0.1
463-51-4	Ketene	0.9	0.06	0.045
7580-67-8	Lithium hydride	0.025	0.002	0.00125
546-93-0	Magnesite	10	0.667	0.5
1309-48-4	Magnesium oxide fume	10	0.667	0.5
121-75-5	Malathion	10	0.667	0.5
108-31-6	Maleic anhydride	1	0.067	0.05
7439-96-5	Manganese as Mn Including:			
7439-96-5	Dust & compounds	5	0.333	0.25
7439-96-5	Fume	1	0.067	0.05
101-68-8	MDI, see Methylene diphenyl isocyanate			
NA	Mercaptans not otherwise listed (ID)	---	0.033	0.025
141-79-7	Mesityl oxide	60	4	3
79-41-4	Methacrylic acid	70	4.67	3.5
74-93-1	Methanethiol, see Methyl mercaptan			
67-56-1	Methanol	260	17.3	13
16752-77-5	Methomyl	2.5	0.17	0.125
72-43-5	Methoxychlor	10	0.667	0.5
109-86-4	2-Methoxyethanol	16	1.07	0.8
110-49-6	2-Methoxyethyl acetate	24	1.6	1.2
150-76-5	4-Methoxyphenol	5	0.333	0.25
108-65-6	1-methoxy-2-propyl acetate (ID)	n/a	24	3.6
79-20-9	Methyl acetate	610	40.7	30.5
74-99-7	Methyl acetylene	1640	109	82
NA	Methyl acetylene-propadiene mix (MAPP)	1640	109	82
96-33-3	Methyl acrylate	35	2.33	1.75
126-98-7	Methylacrylonitrile	3	0.2	0.15
74-89-5	Methylamine	12	0.8	0.6

<b>CAS NUMBER</b>	<b>SUBSTANCE</b>	<b>OEL (mg/m3)</b>	<b>EL (lb/hr)</b>	<b>AAC (mg/m3)</b>
108-11-2	Methyl emyl alcohol, see Methyl isobutyl carbinol			
110-43-0	Methyl n-amyl ketone	235	15.7	11.75
100-61-8	N-Methyl aniline	2	0.133	0.1
74-83-9	Methyl bromide	19	1.27	0.95
591-78-6	Methyl n-butyl ketone	20	1.33	1
74-87-3	Methyl chloride	103	6.867	5.15
71-55-6	Methyl chloroform	1910	127	95.5
137-05-3	Methyl 2-cyano-acrylate	8	0.533	0.4
25639-42-3	Methylcyclohexanol	235	15.7	11.75
583-60-8	o-Methylcyclohexanone	230	15.3	11.5
8022-00-2	Methyl demeton	0.5	0.033	0.01
101-68-8	Methylenediphenyl diisocyanate (MDI)	0.05	0.003	0.0025
5124-30-1	Methylene bis (4-cyclohexyl isocyanate)	0.11	0.007	0.0055
78-93-3	Methyl ethyl ketone (MEK)	590	39.3	29.5
1338-23-4	Methyl ethyl ketone peroxide (CL)	1.5	0.01	0.0075
107-31-3	Methyl formate	246	16.4	12.3
541-85-5	5-Methyl-3-heptanone, see Ethyl amyl ketone			
110-12-3	Methyl isoamyl ketone	240	16	12
108-11-2	Methyl isobutyl carbinol	104	6.93	5.2
108-10-1	Methyl isobutyl ketone	205	13.7	10.25
624-83-9	Methyl isocyanate	0.05	0.003	0.0025
563-80-4	Methyl isopropyl ketone	705	47	35.25
74-93-1	Methyl mercaptan	0.5	0.033	0.025
80-62-6	Methyl methacrylate	410	27.3	20.5
298-00-0	Methyl parathion	0.2	0.013	0.01
107-87-9	Methyl propyl ketone	700	46.7	35
681-84-5	Methyl silicate	6	0.4	0.3
98-83-9	a-Methyl styrene	240	16	10.20
109-87-5	Methylal (dimethoxymethane)	3110	207	155.5
108-87-2	Methylcyclohexane	1610	107	80.5
21087-64-9	Metribuzin	5	0.333	0.25
7786-34-7	Mevinphos	0.1	0.007	0.005
12001-26-2	Mica (Respirable dust)	3	0.2	0.15
NA	Mineral Wool Fiber (no asbestos)	10	0.667	0.5

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
7439-98-7	Molybdenum as Mo - Including:			
NA	Soluble compounds	5	0.333	0.25
NA	Insoluble compounds	10	0.667	0.5
108-90-7	Monochlorobenzene, see Chlorobenzene			
6923-22-4	Monocrotophos	0.25	0.017	0.0125
110-91-8	Morpholine	70	4.67	0.35
300-76-5	Naled	3	0.2	0.15
91-20-3	Naphthalene	50	3.33	2.5
54-11-5	Nicotine	0.5	0.033	0.025
1929-82-4	Nitrapyrin	10	0.667	0.5
7697-37-2	Nitric acid	5	0.333	0.25
100-01-6	p-Nitroaniline	3	0.2	0.15
98-95-3	Nitrobenzene	5	0.333	0.25
100-00-5	p-Nitrochlorobenzene	3	0.2	0.15
79-24-3	Nitroethane	310	20.7	15.5
7783-54-2	Nitrogen trifluoride	29	1.93	1.45
55-63-0	Nitroglycerin	0.46	0.031	0.023
75-52-5	Nitromethane	50	3.333	2.5
108-03-2	1-Nitropropane	90	6	4.5
99-08-1	m (or) 3-Nitrotoluene	11	0.733	0.55
88-72-2	o (or) 2-Nitrotoluene	11	0.733	0.55
99-99-0	p (or) 4-Nitrotoluene	11	0.733	0.55
76-06-2	Nitrotrichloromethane, see Chloropicrin			
10024-97-2	Nitrous oxide	90	6	4.5
111-84-2	Nonane	1050	70	52.5
2234-13-1	Octachloronaphthalene	0.1	0.007	0.005
111-65-9	Octane	1400	93.3	70
NA	Oil mist, mineral	5	0.333	0.25
20816-12-0	Osmium tetroxide as Os	0.002	0.0001	0.0001
144-62-7	Oxalic acid	1	0.067	0.05
7783-41-7	Oxygen difluoride (CL)	0.11	0.0007	0.0005
8002-74-2	Paraffin wax fume	2	0.133	0.1
4685-14-7	Paraquat	0.1	0.007	0.007
NA	Paraquat, all Compounds	0.1	0.007	0.005



<b>CAS NUMBER</b>	<b>SUBSTANCE</b>	<b>OEL (mg/m3)</b>	<b>EL (lb/hr)</b>	<b>AAC (mg/m3)</b>
56-38-2	Parathion	0.1	0.007	0.005
19624-22-7	Pentaborane	0.01	0.001	0.0005
1321-64-8	Pentachloronaphthalene	0.5	0.033	0.025
82-68-8	Pentachloronitrobenzene	0.5	0.0333	0.025
87-86-5	Pentachlorophenol	0.5	0.033	0.025
109-66-0	Pentane	1770	118	88.5
107-87-9	2-Pentanone, see Methyl propyl ketone			
594-42-3	Perchloromethyl mercaptan	0.8	0.053	0.04
7616-94-6	Perchloryl Fluoride	13	0.867	0.65
93763-70-3	Perlite	10	0.667	0.5
532-27-4	Phenacyl chloride, see a-Chloroacetophenone			
108-95-2	Phenol	19	1.27	0.95
92-84-2	Phenothiazine	5	0.333	0.25
108-45-2	m-Phenylenediamine	0.1	0.0067	0.005
106-50-3	p-Phenylenediamine	0.1	0.007	0.005
101-84-8	Phenyl ether, vapor	7	0.467	0.035
122-60-1	Phenyl glycidyl ether (PGE)	6	0.4	0.3
108-98-5	Phenyl mercaptan	2	0.133	0.1
638-21-1	Phenylphosphine (CL)	0.25	0.0017	0.00125
298-02-2	Phorate	0.05	0.003	0.001
7786-34-7	Phosdrin, see Mevinphos			
75-44-5	Phosgene	0.4	0.027	0.02
7803-51-2	Phosphine	0.4	0.027	0.02
7664-38-2	Phosphoric acid	1	0.067	0.05
7723-14-0	Phosphorus	0.1	0.007	0.005
10025-87-3	Phosphorus oxychloride	0.6	0.04	0.030
10026-13-8	Phosphorus penta-chloride	1	0.067	0.05
1313-80-3	Phosphorus penta-sulfide	1	0.067	0.05
1314-56-3	Phosphorus pentoxide (ID)	--	0.067	0.05
7719-12-2	Phosphorus trichloride	1.5	0.1	0.075
85-44-9	Phthalic anhydride	6	0.4	0.3
626-17-5	m-Phthalodinitrile	5	0.333	0.25
1918-02-1	Picloram	10	0.667	0.5
88-89-1	Picric acid	0.1	0.006	0.005

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
83-26-1	Pindone	0.1	0.007	0.005
142-64-3	Piperazine dihydro-chloride	5	0.333	0.25
83-26-1	2-Pivaloyl-1,3-indandione, see Pindone			
7440-06-4	Platinum - Including:			
7440-06-4	Metal	1	0.067	0.05
NA	Soluble salts, as Pt	0.002	0.0001	0.0001
65997-15-1	Portland cement	10	0.667	0.5
1310-58-3	Potassium hydroxide	2	0.133	0.1
107-19-7	Propargyl alcohol	2.3	0.153	0.115
123-38-6	Propionaldehyde (LA)	0.43	0.0287	0.0215
79-09-4	Propionic acid	30	2	1.5
114-26-1	Propoxur (Baygon)	0.5	0.033	0.025
109-60-4	n-Propyl acetate	840	56	42
71-23-8	Propyl alcohol	500	33.3	25
78-87-5	Propylene dichloride	347	23.133	17.35
6423-43-4	Propylene glycol dinitrate	0.34	0.023	0.017
107-98-2	Propylene glycol monomethyl ether	360	24	18
75-56-9	Propylene oxide	48	3.2	2.4
627-13-4	n-Propyl nitrate	105	7	5.25
8003-34-7	Pyrethrum	5	0.333	0.25
110-86-1	Pyridine	15	1	0.75
120-80-9	Pyrocatechol, see Catechol			
106-51-4	Quinone	0.4	0.027	0.02
121-84-4	RDX, see Cyclonite			
NA	Refractory Ceramic Fibers (see entry for specific content of emissions, ex: silica)			
108-46-3	Resorcinol	45	3	2.25
7440-16-6	Rhodium - Including:			
7440-16-6	Metal	1	0.067	0.05
NA	Insoluble compounds, as Rh	1	0.067	0.05
NA	Soluble compounds, as Rh	0.01	0.001	0.0005
299-84-3	Ronnel	10	0.667	0.5
83-79-4	Rotenone (commercial)	5	0.333	0.25

<b>CAS NUMBER</b>	<b>SUBSTANCE</b>	<b>OEL (mg/m3)</b>	<b>EL (lb/hr)</b>	<b>AAC (mg/m3)</b>
8030-30-6	Rubber solvent (Naphtha)	1590	106	79.5
14167-18-1	Salcoine as CO	0.1	0.007	0.005
7782-49-2	Selenium	0.2	0.013	0.010
NA	Selenium and compounds as Se	0.2	0.013	0.01
136-78-7	Sesone	10	0.667	0.5
7803-62-5	Silane, see silicon tectrahydride			
NA	Silica - amorphous - Including:			
61790-53-2	Diatomaceous earth (uncalcined)	10	0.667	0.5
112926-00-8	Precipitated silica	10	0.667	0.5
112926-00-8	Silica gel	10	0.667	0.5
NA	Silica, crystalline - Including:			
14464-46-1	Cristobalite	0.05	0.0033	0.0025
14808-60-7	quartz	0.1	0.0067	0.005
60676-86-0	silica, fused	0.1	0.0067	0.005
15468-32-3	tridymite	0.05	0.0033	0.0025
1317-95-9	Tripoli	0.1	0.0067	0.005
7440-21-3	Silicon	10	0.667	0.5
409-21-2	Silicon carbide	10	0.667	0.5
7803-62-5	Silicon tetrahydride	7	0.467	0.35
7440-22-4	Silver - Including			
7440-22-4	Metal	0.1	0.007	0.005
7440-22-4	Soluble compounds, as Ag	0.01	0.001	0.005
26628-22-8	Sodium azide (CL)	0.3	0.002	0.0015
7631-90-5	Sodium bisulfite	5	0.333	0.25
136-78-7	Sodium 2,4-dichloro-phenoxyethyl sulfate, see Sesone			
62-74-8	Sodium fluoroacetate	0.05	0.003	0.0025
1310-73-2	Sodium hydroxide	2	0.133	0.1
7681-57-4	Sodium metabisulfite	5	0.333	0.25
NA	Stearates (not including toxic metals)	10	0.667	0.5
7803-52-3	Stibine	0.5	0.033	0.025
8052-41-3	Stoddard solvent	525	35	26.25
57-24-9	Strychnine	0.15	0.01	0.0075
60-41-3	Strychnine sulfate as strichnine	0.15	0.01	0.01
100-42-5	Styrene monomer (ID)	--	6.67	1

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
1395-21-7	Subtilisins (Proteolytic enzymes as 100% pure crystalline enzyme)	0.00006	4.0E-07	3.0E-7
3689-24-5	Sulfotep	0.2	0.013	0.01
7664-93-9	Sulfuric acid	1	0.067	0.05
10025-67-9	Sulfur monochloride (CL)	6	0.04	0.03
5714-22-7	Sulfur pentafluoride (CL)	0.1	0.0007	0.0005
7783-60-0	Sulfur tetrafluoride (CL)	0.4	0.0027	0.002
2699-79-8	Sulfuryl fluoride	20	1.33	1
35400-43-2	Sulprofos	1	0.067	0.05
8065-48-3	Systox, see Demeton			
93-76-5	2,4,5-Trichlorophen-oxyacetic acid (2,4,5,-T)	10	0.667	0.05
7440-25-7	Tantalum	5	0.333	0.25
3689-24-5	TEDP, see Sulfotep			
13494-80-9	Tellurium & Compounds as Te	0.1	0.007	0.005
7783-80-4	Tellurium hexafluoride as Te	0.2	0.013	0.01
3383-96-8	Temephos	10	0.667	0.5
107-49-3	TEPP (Tetraethyl-pyrophosphate)	0.05	0.003	0.0025
26140-60-3	Terphenyls	4.7	0.313	0.235
1335-88-2	Tetrachloronaphthalene	2	0.133	0.10
78-00-2	Tetraethyl Lead	0.1	0.007	0.005
597-64-8	Tetraethyltin as organic tin	0.1	0.007	0.005
109-99-9	Tetrahydrofuran	590	39.3	29.5
75-74-1	Tetramethyl lead, as Pb	0.15	0.01	0.0075
3333-52-6	Tetramethyl succinonitrile	3	0.2	0.15
509-14-8	Tetranitromethane	8	0.533	0.4
7722-88-5	Tetrasodium pyrophosphate	5	0.333	0.25
479-45-8	Tetryl	1.5	0.1	0.075
7440-28-0	Thallium, soluble Compounds, as Tl	0.1	0.007	0.005
96-69-5	4,4-Thiobis (6 tert, butyl-m-cresol)	10	0.667	0.5
68-11-1	Thioglycolic acid	4	0.267	0.2
7719-09-7	Thionyl chloride (CL)	4.9	0.0327	0.245
137-26-8	Thiram	5	0.333	0.25
7440-31-5	Tin - Including:			
7440-31-5	Metal	2	0.133	0.1

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
NA	Oxide & inorganic compounds, except SnH4, as Sn	2	0.133	0.1
NA	Organic compounds as Sn	0.1	0.007	0.005
108-88-3	Toluene (toluol)	375	25	18.75
584-84-9	Toluene-2,4-di-isocyanate (TDI)	0.04	0.003	0.002
10-41-54	p-Toluenesulfonic acid (ID)	n/a	0.067	0.05
126-73-8	Tributyl phosphate	2.2	0.147	0.11
76-03-9	Trichloroacetic acid	7	0.467	0.35
120-82-1	1,2,4-Trichlorobenzene (CL)	37	2.47	1.85
79-01-6	Trichloroethylene	269	17.93	13.45
1321-65-9	Trichloronaphthalene	5	0.333	0.25
76-06-2	Trichloronitromethane, See Chloropicrin			
95-95-4	2,4,5-Trichlorophenol (MA)	---	---	0.0016
96-18-4	1,2,3-Trichloropropane	60	4	3
121-44-8	Triethylamine	4.1	0.27	0.2
1582-09-8	Trifluralin (PL3)	---	7.7	1.15
552-30-7	Trimellitic anhydride	0.04	0.003	0.002
75-50-3	Trimethylamine	12	0.8	0.6
25551-13-7	Trimethyl benzene (mixed and individual isomers)	123	8.2	6.15
540-84-1	2,2,4-Trimethyl-pentane	350	23.3	17.5
121-45-9	Trimethyl phosphite	10	0.667	0.5
479-45-8	2,4,6-Trinitrophenyl-methylnitramine, see Tetryl			
78-30-8	Triorthocresyl phosphate	0.1	0.007	0.005
603-34-9	Triphenyl amine	5	0.333	0.25
115-86-6	Triphenyl phosphate	3	0.2	0.15
7440-33-7	Tungsten - Including:			
NA	Insoluble compounds	5	0.333	0.25
NA	Soluble compounds	1	0.067	0.05
8006-64-2	Turpentine	560	37.3	28
7440-61-1	Uranium (natural) Soluble & insoluble compounds as U	0.2	0.013	0.01
110-62-3	n-Valeraldehyde	175	11.7	8.75
1314-62-1	Vanadium, as V2O5 Respirable Dust & fume	0.05	0.003	0.0025
108-05-4	Vinyl acetate	35	2.3	1.75
25013-15-4	Vinyl toluene	240	16	12

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
8032-32-4	VM & P Naphtha	1370	91.3	68.5
81-81-2	Warfarin	0.1	0.007	0.005
1330-20-7	Xylene (o-, m-, p-isomers)	435	29	21.75
1477-55-0	m-Xylene a, a-diamine (CL)	0.1	0.0007	0.0005
1300-73-8	Xylidine	2.5	1.67	0.125
7440-65-5	Yttrium (Metal and compounds as Y)	1	0.067	0.05
7440-66-6	Zinc metal (ID)	--	0.667	0.5
7646-85-7	Zinc chloride fume	1	0.067	0.05
1314-13-2	Zinc oxide fume	5	0.333	0.05
1314-13-2	Zinc oxide dust	10	0.667	0.5
7440-67-7	Zirconium compounds as Zr	5	0.333	0.25

**Note:** **ACGIH:** American Conference of Government Industrial Hygienists; **CAS:** Chemical Abstract Service; **CL:** Derived from ACGIH ceiling Limit UF = 10; **ID:** Idaho Division Department of Environmental Quality. Not OEL based; **LA:** From LA Dept. of Environmental Quality. Not OEL based eight (8) hour TWA; **MA:** From MA Dept. of Environmental Protection, Div. of Air Quality Control. Not OEL based, annual averaging time, no UF; **MI:** From MI Dept. of Natural Resources, Air Quality Div. Based on toxicological data, annual averaging time, no UF; **NY:** From New York Dept. of Conservation, Div. of Air Quality. Not OEL based, annual averaging. time no UF; **OEL:** Reference Occupational Exposure Level; **PL:** From Phil. Dept. of Air Management Services. Not OEL based, annual averaging time no UF; **PL1:** From Phil. Dept. of Air Management Services. Unspecified OEL based, annual averaging time, UF=10; **PL2:** From Phil. Dept. of Air Management Services. Not OEL based annual averaging. time, UF=10; **PL3:** From Phil. Dept. of Air Management Services. Not OEL based, annual averaging. time, UF=1000.; **TWA:** Time Weighted Average; **UF:** Uncertainty Factor; **WA:** From Washington Dept. of Ecology, Air Programs. Acceptable Source Impact Level based. (3-28-23)( )

**586. TOXIC AIR POLLUTANTS CARCINOGENIC INCREMENTS.**

**01. Toxic Air Pollutant Carcinogenic Increments.** Those ambient air quality increments based on the probability of developing excess cancers over a seventy (70) year lifetime exposure to one microgram per cubic meter (1 ug/m3) of a given carcinogen and expressed in terms of a screening emission level or an acceptable ambient concentration for a carcinogenic toxic air pollutant. ( )

**02. Carcinogen Table.** The screening emissions levels (EL) and acceptable ambient concentrations (AACC) for carcinogens are as provided in the following table. The AACC in this section are annual averages. (3-28-23)( )

CAS NUMBER	SUBSTANCE	URF	EL lb/hr	AACC ug/m3
75-07-0	Acetaldehyde	2.2E-06	3.0E-03	4.5E-01
79-06-1	Acrylamide	1.3E-03	5.1E-06	7.7E-04
107-13-1	Acrylonitrile	6.8E-05	9.8E-05	1.5E-02
309-00-2	Aldrin	4.9E-03	1.3E-06	2.0E-04
62-53-3	Aniline	7.4E-06	9.0E-04	1.4E-01

CAS NUMBER	SUBSTANCE	URF	EL lb/hr	AACC ug/m3
140-57-8	Aramite	7.1E-06	9.3E-04	1.4E-01
NA	Aroclor, all (PCB) (ID)	---	6.6E-05	1.0E-02
7440-38-2	Arsenic compounds	4.3E-03	1.5E-06	2.3E-04
1332-21-4	Asbestos (Fibers /M.L.)	2.3E-01	N/A	4.0E-06
71-43-2	Benzene	8.3E-06	8.0E-04	1.2E-01
92-87-5	Benzidine	6.7E-02	9.9E-08	1.5E-05
50-32-8	Benzo(a)pyrene	3.3E-03	2.0E-06	3.0E-04
7440-41-7	Beryllium & compounds	2.4E-04	2.8E-05	4.2E-03
106-99-0	1,3-Butadiene	2.8E-04	2.4E-05	3.6E-03
111-44-4	Bis (2-chloroethyl) ether	3.3E-04	2.0E-05	3.0E-03
542-88-1	Bis (chloromethyl) ether	6.2E-02	1.0E-07	1.6E-05
108-60-1	Bis (2-chloro-1-methyl- ethyl) ether	2.0E-05	3.3E-04	5.0E-02
117-81-7	Bis (2-ethylhexyl) phthalate	2.4E-07	2.8E-02	4.2E+00
7440-43-9	Cadmium and compounds	1.8E-03	3.7E-06	5.6E-04
56-23-5	Carbon tetrachloride	1.5E-05	4.4E-04	6.7E-02
57-74-9	Chlordane	3.7E-04	1.8E-04	2.7E-03
67-66-3	Chloroform	2.3E-05	2.8E-04	4.3E-02
18540-29-9	Chromium (VI) & compounds as Cr+6	1.2E-02	5.6E-07	8.3E-05
NA	Coal Tar Volitiles as benzene			
NA	Coke oven emissions	6.2E-04	1.1E-05	1.6E-03
8001-58-9	Creosote (ID) See coal tar volatiles as benzene extractables			
50-29-3	DDT (Dichlorodi phenyltrichloroethane)	9.7E-05	6.8E-05	1.0E-02
96-12-8	1,2-Dibromo-3-chloropropane	6.3E-03	1.0E-06	1.6E-04
75-34-3	1,1 dichloroethane	2.6E-05	2.5E-04	3.8E-02
107-06-2	1,2 dichloroethane	2.6E-05	2.5E-04	3.8E-02
75-35-4	1,1 dichloroethylene	5.0E-05	1.3E-04	2.0E-02
75-09-2	Dichloromethane (Methylenechloride)	4.1E-06	1.6E-03	2.4E-01
542-75-6	1,3 dichloropropene	4.0E-06	1.7E-03	2.5E-01
764-41-0	1,4-Dichloro-2-butene	2.6E-03	2.5E-06	3.8E-04
60-57-1	Dieldrin	4.6E-03	1.4E-06	2.1E-04
56-53-1	Diethylstilbestrol	1.4E-01	4.7E-08	7.1E-06
123-91-1	1,4 dioxane	1.4E-06	4.8E-03	7.1E-01

CAS NUMBER	SUBSTANCE	URF	EL lb/hr	AACC ug/m3
	Dioxin and Furans (2,3,7,8,TCDD & mixtures) Dioxin and Furan emissions are considered as one TAP and expressed as an equivalent emission of 2,3,7,8, TCDD based on the relative potency of the isomers in accordance with US EPA guidelines. U.S. EPA, (2010) Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2,3,7,8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds. Risk Assessment Forum, Washington, DC. EPA/600/R-10/005.			
122-66-7	1,2-Diphenylhydrazine	2.2E-04	3.0E-05	4.5E-03
106-89-8	Epichlorohydrin	1.2E-06	5.6E-03	8.3E-01
106-93-4	Ethylene dibromide	2.2E-04	3.0E-05	4.5E-03
75-21-8	Ethylene oxide	1.0E-04	6.7E-05	1.0E-02
50-00-0	Formaldehyde	1.3E-05	5.1E-04	7.7E-02
76-44-8	Heptachlor	1.3E-03	5.1E-06	7.7E-04
1024-57-3	Heptachlor Epoxide	2.6E-03	2.5E-06	3.5E-04
118-74-1	Hexachlorobenzene	4.9E-04	1.3E-05	2.0E-03
87-68-3	Hexachlorobutadiene	2.0E-05	3.3E-04	5.0E-02
	Hexachlorocyclo-hexane, Technical	5.1E-04	1.3E-05	1.9E-03
319-84-6	Hexachlorocyclohexane (Lindane) Alpha (BHC)	1.8E-03	3.7E-06	5.6E-04
319-85-7	Hexachlorocyclohexane (Lindane) Beta (BHC)	5.3E-04	1.3E-05	1.8E-03
58-89-9	Hexachlorocyclohexane (Lindane) Gamma (BHC)	3.8E-04	1.7E-05	2.6E-03
67-72-1	Hexachloroethane	4.0E-06	1.7E-03	2.5E-01
302-01-2	Hydrazine	2.9E-03	2.3E-06	3.4E-04
10034-93-2	Hydrazine Sulfate	2.9E-03	2.2E-06	3.5E-04
56-49-5	3-methylcholanthrene	2.7E-03	2.5E-06	3.7E-04
75-09-2	Methylene Chloride	4.1E-06	1.6E-03	2.4E-01
74-87-3	Methyl chloride	3.6E-06	1.9E-03	2.8E-01
101-14-4	4,4-Methylene bis(2-Chloroaniline)	4.7E-05	1.4E-04	2.1E-02
60-34-4	Methyl hydrazine	3.1E-04	2.2E-05	3.2E-03
7440-02-0	Nickel	2.4E-04	2.7E-05	4.2E-03
12035-72-2	Nickel Subsulfide	4.8E-04	1.4E-05	2.1E-02
7440-02-0	Nickel Refinery Dust	2.4E-04	2.8E-05	4.2E-02
79-46-9	2-Nitropropane	2.7E-02	2.5E-07	3.7E-05
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine) (DEN)	4.3E-02	1.5E-07	2.3E-05
62-75-9	N-Nitrosodimethylamine	1.4E-02	4.8E-07	7.1E-05
924-16-3	N-Nitrosodi-n-butylamine	1.6E-03	4.1E-06	6.3E-04
930-55-2	N-Nitrosopyrrolidine	6.1E-04	1.1E-05	1.6E-03



CAS NUMBER	SUBSTANCE	URF	EL lb/hr	AACC ug/m3
684-93-5	N-Nitroso-N-methylurea (NMU)	3.5E-01	1.9E-08	2.9E-06
82-68-8	Pentachloronitrobenzene	7.3E-05	9.1E-05	1.4E-02
127-18-4	Perchloroethylene (see tetrachloroethylene)			
NA	Polyaromatic Hydrocarbons (except 7-PAH group)	7.3E-05	9.1E-05	1.4E-02
	(Polycyclic Organic Matter or 7-PAH group) For emissions of the 7-PAH group, the following PAHs are considered together as one TAP, equivalent in potency to benzo(a)pyrene: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, chrysene, indeno(1,2,3-cd)pyrene, benzo(a)pyrene. (WA)			
23950-58-5	Promanide	4.6E-06	1.5E-03	2.2E-01
50-55-5	Reserpine	3.0E-03	2.2E-06	3.3E-04
1746-01-6	2,3,7,8,-Tetrachlorodibenzo-p-dioxin (2,3,7,8, -TCDD)	4.5.E+01	1.5E-10	2.2E-08
NA	Soots and Tars (ID) See coal tar volatiles as benzene extractables.			
79-34-5	1,1,2,2,Tetrachloro-ethane	5.8E-05	1.1E-05	1.7E-02
127-18-4	Tetrachloroethylene	4.8E-07	1.3E-02	2.1E+00
79-00-5	1,1,2 - trichloroethane	1.6E-05	4.2E-04	6.2E-02
62-56-6	Thiourea	5.5E-04	1.2E-05	1.8E-03
8001-35-2	Toxaphene	3.2E-04	2.0E-05	3.0E-03
79-01-6	Trichloroethylene	1.3E-06	5.1E-04	7.7E-01
88-06-2	2,4,6 - Trichlorophenol	5.7E-06	1.2E-03	1.8E-01
75-01-4	Vinyl chloride	7.1E-06	9.4E-04	1.4E-01

**Note:** **CAS:** Chemical Abstract Service; **ID:** Idaho ~~Division~~ Department of Environmental Quality. Not OEL based; **URF:** Unit Risk Factor from EPA. **WA:** From Washington Dept. of Ecology, Air Programs. Acceptable Source Impact Level based. (3-28-23)( )

**(BREAK IN CONTINUITY OF SECTIONS)**

**600. RULES FOR CONTROL OF OPEN BURNING.**

**01. General.** Sections 600 through 624 establish rules to protect human health and the environment from air pollutants resulting from open burning as well as to reduce the visibility impairment in mandatory Class I Federal Areas in accordance with the regional haze long-term strategy referenced at Section 667. (3-28-23)( )

**02. Open Burning.** Burning of matter where the products of combustion are emitted directly into the ambient air without passing through a stack, duct or chimney. ( )