

United States Environmental Regulations and Chemical Lists

REGULATION	CHEMICALS REGULATED	LIST	Al Cpds	Mn Cpds	Se Cpds
OSHA, 1999	Occupational Safety and Health Act (1970)				
29 CFR Parts 1900-1910	Occupational Exposures Limits for Air Contaminants/Subpart Z	677			
	Time Weighted Averages (TWAs, 8 Hr) Short Term Exposure Levels (15 minutes) Not to be Exceeded Levels (Ceiling) Immediately Dangerous to Life or Health (IDLH)		15 mg/m3 Total Dust 5 mg/m3 Resp. Dust	5 mg/m3 Ceiling 500 mg/m3 IDLH	0.2 mg/m3 TWA 1.0 mg/m3 IDLH
	Carcinogen (NTP, IARC, or OSHA) Skin Designation/Target Organ Odor Threshold		Yes		Se Sulfide Yes 0.3 ppm Hydrogen Selenide
29 CFR Part 1910.119	Process Safety Management of Highly Hazardous Chemicals (1992)				
	List of Highly Hazardous Chemicals, Toxics and Reactives: Threshold Quantity (TQ) in Pounds (kg)	137	No	No	No
29 CFR Part 1910.1200	Hazard Communication Standard (1983) Limits for Air Contaminants/Subpart Z	677	Yes	Yes	Yes
EPA	U.S. Environmental Protection Agency				
40 CFR Part 63	Hazardous Air Pollutants (HAPS)	189	No	Yes	Yes
	National Emission Standards for HAPS (NESHAP) Major Sources: 10 tons/yr/HAP or 25 tons/yr/all HAPS				
40 CFR Part 131	Clean Water Act (1972, 1977) Ambient Water Quality Priority (120) Non-priority Pollutants (45) Organoleptic (Taste/Odor) Effects (23)	165	Non Priority	Non Priority	Priority
	Water Quality Criteria for Priority Toxic Pollutants Acute (CMC) Aquatic Freshwater Standards Chronic (CCC) Freshwater Standards Acute Saltwater Standards Chronic Saltwater Standards Human Health: Freshwater + Organism Consumption Organism Consumption Only				0.020 mg/l 0.005 mg/l 0.290 mg/l 0.710 mg/l 0.170 mg/l 11.0 mg/l
	State, Local, and Site or Industry Specific Standards				
40 CFR Part 141 and Part 143	Safe Drinking Water Act (1974) Primary and Secondary Maximum Contaminant Levels (MCLs)	102	Secondary	Secondary Taste/Odor	Primary Health
	Primary: Microbes (7), Disinfectants/Products (7), Inorganics (16), Organics (53), Radionuclides (4)	87			0.05 mg/L
	Secondary: Chemicals/Characteristics	15	0.05-0.2 mg/L	0.05 mg/L	
40 CFR Parts 260-	Hazardous Wastes (RCRA, 1976, TSCA, 1976, CERCLA, 1980 and SARA, 1986)	400			
40 CFR Part 261	Listed HWs: Discarded/Off-Spec/Spill Residue Wastes (P and U Listed) and Waste Streams from Specific Sources (F and K Listed)		See Al Cmpd List Below	See Mn Cmpd List Below	See Se Cmpds List Below
	Characteristic HWs: Reactive, Ignitable, Corrosive, Toxic (TCLP Limits for 40 Chemicals)		No	No	1.0 mg/L TCLP
	Appendix VII – Lists Basis for Hazardous Listing of F and K Listed Wastes, Appendix VIII - Lists Hazardous Constituents of U and P Listed Wastes		Aluminum Phosphide (P006)	Manganese Dimethyldithio- carbamate (P196)	Selenious Acid (U204) Selenium Sulfide (U205)

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40 CFR Part 264	Design & Operating Specifications for Treatment, Storage, and Disposal Facilities (TSDF) Maximum Contaminant Concentrations for Protection of Groundwater:	14	NA	NA	0.01 mg/L
40 CFR Part 268	Land Disposal Restrictions: Land Disposal Prohibited for TCLP Metal Wastes and Soils Exhibiting TCLP Levels for Metals unless meet Universal Treatment Standards (UTS)				
	Regulated Hazardous Constituent Under LDR: Wastewater UTS Nonwastewater UTS		No	No	Yes 0.82 mg/L 5.7 mg/L TCLP
40 CFR Part 302	List of Hazardous Substances and Reportable Quantities (Section 311 of SARA and CWA, CAA, RCRA) Hazardous Substances: Reportable Quantities (RQ):	717	No	Yes Mn & Mn Cmpds No RQ	Yes Se & Se Cmpds No RQ D010 Wastes RQ = 10 lbs
40 CFR Part 355	List of Extremely Hazardous Substances (EHS) (Section 304 of SARA) Reportable Quantities in Pounds: Threshold Planning Quantities (TPQ):	406	Not EHS as pure Al	Not EHS as pure Mn	Not EHS as pure Se
40 CFR Part 370	Hazardous Chemical Reporting (Tier I/II) (Section 312 of SARA) Store On-Site Greater than 10,000 Lbs of a Hazardous Chemical or Greater than TPQ of an EHS or 500 Lbs (whichever is lower)		Yes, if onsite storage exceeds thresholds	Yes, if onsite storage exceeds thresholds	Yes, if onsite storage exceeds thresholds
40 CFR Part 372	Toxic Release Reporting (TRI/Form R) (Section 313 of SARA) Manufacture/Import/Process over 25,000/yr or Otherwise Use over 10,000 pounds/yr of Toxic Chemical/Category De Minimus Conc. (%) of Mixtures: 1.0% Not Carcinogen 0.1% for Carcinogens	646	Yes Since 1987 CAS No. 7429-90-5 Dm = 1%	Yes Since 1987 CAS No. 7439-96-5 Dm = 1%	Yes Since 1987 CAS No. 7782-49-2 Dm = 1%
40 CFR Part 401	Effluent Guidelines and Standards – General Provisions National Pollutant Discharge Elimination System (NPDES) Program Toxic Pollutants: Conventional Pollutants:	65 5	No	No	Yes
40 CFR Part 405 – Part 471	Pretreatment Regulations for Specific Wastewater Point Source Categories (i.e., Specific Industries) For Example: Primary Aluminum Smelting, Secondary Aluminum Smelting, etc.		Al limit listed in select categories	Mn limit listed in select categories	Se limit listed in select categories
40 CFR Part 503	Standards for the Use or Disposal of Sewage Sludge Ceiling Concentration for Land Application of Sludge		No	No	Yes 100 mg/kg
DOT, 2000	U.S. Department of Transportation (1996) (Section 101 of CERCLA)				
49 CFR Part 172.101	List of Hazardous Substances and Waste Streams Reportable Quantities in Pounds (kg) EPA Characteristic Wastes/Waste Streams	1000	No	No	100 lbs

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EPA Region III	U.S. Environmental Protection Agency Region III				
	Risk-Based Concentration (RBC) Table (10/9/02) Source: EPA Risk Assessment Guidance for Superfund Assumptions: 70 kg Body Wt., 20 m3/day Carcinogenic Lifetime Cancer Risk of 1E-6 Non-carcinogenic Hazard Quotient = 1	400- 500			
	Oral Reference Dose (RfD) —mg/kg/day		1.0	0.02	0.005
	Oral Cancer Slope Factor (CSF) —l/mg/kg/day				
	Inhalation Reference Dose—mg/kg/day			1.43E-05	
	Inhalation Cancer Slope Factor—l/mh/kg/day				
	Tap Water—ug/liter		37,000	730	180
	Ambient Air—ug/m3		3.7	0.52	18
	Fish—mg/kg Fish Flesh Screening Values—25 Target Analytes for USEPA Green Waterbodies		1,400	27	6.8
	Soil Industrial—mg/kg		2E+6	41,000	10,000
	Soil Residential—mg/kg		78,000	1,600	390
	Forage—mg/kg				5