

COUNTRY	SURFACE WATER mg/L	DRINKING WATER mg/L	GROUND WATER mg/L	INDUSTRIAL EFFLUENT & SOLID WASTE mg/L & mg/kg	AIR EMISSION mg/m3	WORKPLACE AIR mg/m3 ppm	SOIL QUALITY mg/kg g/day	FORAGE QUALITY mg/kg	FISH FLESH mg/kg	HEALTH BASED mg/kg bw/d
South Africa	0.002 mg/L TWQR 0.005 mg/L CEV 0.03 mg/L AEV	0.05 mg/L Livestock		0.02 mg/L						
Spain	10,000 mg/L Dissolved Se Annual Average Aquatic Spills									
Sweden		0.01 mg/L				0.1 mg/m3				
Thailand				0.5 mg/L						
UK	0.01 mg/L	0.01 mg/L Drinking, Mineral			Nonferrous Metal Installations; 0.5 mg/Nm3 total metal	0.1 mg/m3	Contaminated Land Threshold; 3.0 mg/kg Domestic/Gardens 6.0 mg/kg Parks/Spaces 3.0 mg/kg Livestock Grazing			Chronic Daily Oral Exposure; 0.005 mg/kg Minimum 0.046 mg/kg Maximum Uncertainty Factor = 3
USA	Freshwater ; 0.020 mg/L Acute 0.005 mg/L Chronic	0.05 mg/L	0.01	100 mg/kg SludgeLoading 5.7 mg/L TCLP Univ.Trt.Std. 1.0 mg/L TCLP Hazard. Waste	BAT Major Sources; 25 tons/yr All HAPs 0.005mg/m3 Ambient Air 24 Hr. Std. 8 States	0.2 mg/m3 TWA 8 hours 1.0 mg/m3 IDLH	10,000 mg/kg Industrial 390 mg/kg Residential	5 mg/kg	6.8 mg/kg EPA RBC Fish Screening 2.9 to 20 ppm Se EPA Green Waterbodies	0.18 mg/L EPA RBC Tap Water 0.018mg/m3 EPA RBC Ambient Air
European Union	0.005 mg/L Limit Detection, Precision/Accuracy 10%	0.01 mg/L Maximum Drinking/Food Manufacture				0.07 mg/m3 0.02ppm TWA 0.17 mg/m3 0.05ppm STEL				
World Bank				0.1 mg/L Mine Effluents		0.2 mg/m3				0.004 mg/L Drinking Water NOAEL

SUMMARY TABLE OF EUROPEAN UNION LEGISLATION
ERM Interim Report on Selenium in Manganese within Europe, July 2003

EUROPEAN UNION LEGISLATION	DESCRIPTION	SELENIUM LIMITS
IPPC Directive	Minimize pollution from industrial point sources.	No limits imposed, permit application demonstrates BAT.
The European Waste Catalogue (EWC)	Dangerous substances or wastes such as heavy metals, include selenium compounds	No limits.
REACH Consultation	Chemicals and substances will require registration.	No limits, requires registration for all substances produced or imported in volumes of 1 tonne or more per year.
The Hazardous Waste & Waste Framework Directives	Hazardous waste prevention recycling and processing of waste. Annex II Constituents of Wastes include selenium compounds.	No limits.
Baltic Marine Environment Protection Commission	Preventative measures for priority groups of harmful substances including heavy metals and selenium.	No limits.
UNITED KINGDOM		
Local Air Pollution Control	Selenium is potential emission monitored for operators of processes with permits	Process specific.
Technical Guidance for Non-Ferrous Metals	Pollution control techniques, BAT standards. <u>Selenium emission control BAT includes raw material purchasing specifications.</u>	Se Benchmark Level: 0.5 mg/Nm ³ in total as metal.
National Atmospheric Emissions Inventory	Ten heavy metals include selenium in annual UK emissions.	No limits.
UK Environmental Agency	Pollution inventory identifies selenium emissions from industrial sources.	No limits.