

**Specific Checklist, specifying the locations/Places where online effluent/emission monitoring systems/cameras/flow meters that are to be installed in Non-Ferrous industries (Aluminium, Copper & Zinc industries)**

<b>1. Aluminium industries</b>			
<b>Emissions</b>			
<b>Sl. No.</b>	<b>Location</b>	<b>Parameters to be monitored</b>	<b>Prescribed Standards</b>
<b>a) Alumina plant</b>			
(i)	Raw material handling (Primary and secondary crusher)	Particulate matter	150 mg/Nm <sup>3</sup>
(ii)	Precipitation areas: Calcination	Particulate matter	250 mg/Nm <sup>3</sup>
		Carbon monoxide	1% max.
		Stack height	H=14 (Q) <sup>0.3</sup> Where Q is emission rate of SO <sub>2</sub> in kg/hr and H is stack height in meter
<b>b) Smelter plant</b>			
(i)	Green anode shop	Particulate matter	150 mg/Nm <sup>3</sup>
(ii)	Anode bake oven	Particulate matter	50 mg/Nm <sup>3</sup>
		Total fluoride (F)	0.3 kg/tonne of aluminium produced
(iii)	Pot room	Particulate matter	150 mg/Nm <sup>3</sup>
		Total fluoride For Soderberg Technology	2.8 kg/tonne by 31st December 2006
		Total fluoride For Pre-baked Technology	0.8 kg/tonne by 31st December 2006
<b>Effluent (If unit is not ZLD)</b>			
(i)	ETP/CETP/STP (Outlet Sump)	pH	As given in consent to operate.
		BOD	As given in consent to operate.
		TSS	As given in consent to operate.
		COD	As given in consent to operate.
<b>Effluent (If unit is ZLD)</b>			

(i)	Inlet to collection sump	Flow meter	---
(ii)	Collection sump	Webcamera	---
<b>2. Copper industries</b>			
<b>Emissions</b>			
Sl. No.	Location	Parameters to be monitored	Prescribed Standards
<b>a) Copper plant</b>			
(i)	Concentrator	Particulate matter	100 mg/Nm <sup>3</sup> (for existing plant) 75 mg/Nm <sup>3</sup> (for new units)
(ii)	Sulphur Dioxide Recovery Unit* (for plant capacity upto 300t/day)	Particulate matter	1375 mg/Nm <sup>3</sup> (for existing plant) 1250 mg/Nm <sup>3</sup> (for new units)
(ii)	Sulphur Dioxide Recovery Unit* (for plant capacity above 300t/day)	Particulate matter	1250 mg/Nm <sup>3</sup> (for existing plant) 950 mg/Nm <sup>3</sup> (for new units)
<b>Effluent (If unit is not ZLD)</b>			
(i)	ETP/CETP/STP (Outlet Sump)	pH	As given in consent to operate.
		BOD	As given in consent to operate.
		TSS	As given in consent to operate.
		COD	As given in consent to operate.
<b>Effluent (If unit is ZLD)</b>			
(i)	Inlet to collection sump	Flow meter	---
(ii)	Collection sump	Webcamera	---
<b>3. Zinc industries</b>			
<b>Emissions</b>			
Sl. No.	Location	Parameters to be monitored	Prescribed Standards
<b>b) Copper plant</b>			
(i)	Concentrator	Particulate matter	100 mg/Nm <sup>3</sup> (for existing plant) 75 mg/Nm <sup>3</sup> (for new units)

(ii)	Sulphur Dioxide Recovery Unit* (for plant capacity upto 300t/day)	Particulate matter	1375 mg/Nm <sup>3</sup> (for existing plant) 1250 mg/Nm <sup>3</sup> (for new units)
(ii)	Sulphur Dioxide Recovery Unit* (for plant capacity above 300t/day)	Particulate matter	1250 mg/Nm <sup>3</sup> (for existing plant) 950 mg/Nm <sup>3</sup> (for new units)
<b>Effluent (If unit is not ZLD)</b>			
(i)	ETP/CETP/STP (Outlet Sump)	pH	As given in consent to operate.
		BOD	As given in consent to operate.
		TSS	As given in consent to operate.
		COD	As given in consent to operate.
<b>Effluent (If unit is ZLD)</b>			
(i)	Inlet to collection sump	Flow meter	---
(ii)	Collection sump	Webcamera	---