

- iv. In case halogenated organic waste in more than 1% by weight in input waste, waste shall be incinerated only in twin chamber incinerators and all the facilities shall be designed to achieve a minimum temperature of 1100°C in secondary combustion chamber with a gas residence time in secondary combustion chamber not less than two seconds.
- v. Scrubber meant for scrubbing emissions shall not be less used as quencher.
- vi. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, and their loss on ignition is less than 5% of the dry weight.
- vii. The incinerators shall have a chimney of atleast thirty metre height.

B. Wastewater

- i. Wastewater (scrubber water and floor washings) shall be discharged into receiving water conforming to the norms prescribed under Schedule VI: General Standards for Discharge of Environment Pollutions (Part A : Effluents) notified under the Environment (Protection) Rules, 1986.
- ii. The built up in Total Dissolved Solids (TDS) in wastewater of floor washings shall not exceed 1000 mg/l over and above the TDS of raw water used.

¹[102. REFRACTORY INDUSTRY

A. Emission Standards

(i) Down Draft Kiln (Fuel:Coal)

| | Category * | limiting concentration (mg/Nm ³) |
|--------------------|------------------------|--|
| Particulate matter | Small/ medium/large | 350 |
| | | Minimum (metres) |

¹ Inserted by Rule 2 of the Environment (Protection) Amendment Rules, 2009 notified by G.S.R.97(E), dated 18.2.2009.

| | | |
|--------------|--------|----|
| Stack height | Small | 15 |
| | Medium | 18 |
| | Large | 21 |

(ii) Other than Down Draft Kiln (Fuel:Coal)

| | Category * | Limiting concentration (mg/Nm ³) |
|--------------------|------------|--|
| Particulate matter | Small | 300 |
| | Medium | 200 |
| | Large | 150 |
| Stack height | | Minimum (metres) |
| | Small | 15 |
| | Medium | 18 |
| | Large | 21 |

(iii) Box, Tunnel Down Draft Kiln, etc. (Fuel:Natural Gas/Producer Gas/LPG or a combination of Fuels/Furnance Oil as Secondary Fuel)

| | Category* | Limiting concentration (mg/Nm ³) |
|--------------------|------------------|--|
| Particulate matter | Small | 200 |
| | Medium/ Large | 150 |
| Stack height | | Minimum (metres) |
| | Small | 12 |
| | Medium | 15 |
| | Large | 18 |
| | Category* | Production (tpa) |
| | small kiln | <15,000 |
| | Medium kiln | 15,001-50,000 |
| | Large kiln | above 50,000 |

(iv) Rotary Kiln (Fuel: Furnance Oil)

| | Category** | Limiting concentration (mg/Nm ³) |
|--------------------|--------------------|--|
| Particulate matter | Small | 200 |
| | Medium/ Large | 150 |
| | | Minimum (metres) |
| Stack height | Small | 35 |
| | Medium | 45 |
| | Large | 60 |
| | Category** | Production (tpd) |
| | Small/rotary kiln | <50 |
| | medium rotary kiln | 51-100 |
| | large rotary kiln | Above 100 |

Note:-

- (i) All values of particulate matter are to be corrected at 6 per cent Carbon Dioxide.
 - (ii) Fugitive emission shall not exceed 10 mg/m³ from any process or plant.
 - (iii) Each stack shall be at least 2 metre above the top most point of the building, shed or plant in the industry excluding bucket elevator, mill house and vibrating screen.
 - (iv) If more than one kiln is connected to single stack, sum of the production capacity of all the kilns would be considered for determining the capacity of the kiln and accordingly depending upon the total capacity, emission standard and stack height would be implemented.
 - (v) Monitoring of stack shall be carried out at the time of charging and after the completion of charging and average of these two results shall be considered as emission level.
-

B. EFFLUENT STANDARDS

| | Limiting value for concentration (mg/l except for pH) | | |
|----------------------------------|---|--------------|---------------------|
| | Inland Surface Water | Public Sewer | Land for Irrigation |
| pH | 5.5 to 9.0 | 5.5 to 9.0 | 5.5 to 9.0 |
| Oil and Grease | 10 | 20 | 10 |
| BOD BOD _{3 days, 27° C} | 30 | 250 | 100 |
| COD | 250 | - | - |
| Suspended Solids | 100 | 600 | 200 |
| Phenols | 1.0 | 5.0 | - |
| Cyanide as CN | 0.2 | 2.0 | 0.2 |
| Cr(Hexavalent) | 0.1 | 2.0 | 1.0 |
| Cr(Total) | 2.0 | 2.0 | 2.0] |

¹**[103 CASHEW SEED PROCESSING INDUSTRY**

A. EMISSION STANDARDS

| | Process | Limiting concentration in mg/Nm ³ |
|--------------------|--|--|
| | Roasting | 250 |
| Particulate Matter | Cooking (roasted shell/deoiled cake as fuel) | 150 |
| | Borma Oven Heater (roasted shell/deoiled cake as fuel) | 150 |

¹ Inserted by Rule 2 of the Environment (Protection) Amendment Rules, 2010 notified vide GSR 1(E), dated 1.1.2010.