

ANNEXURE-5

ENVIRONMENTAL STATEMENT FORM-V

Environmental Statement for the financial year ending with 31<sup>st</sup> March 2018

PART - A

- i. Name and address of the owner/occupier of the industry operation or process : K K Roy Kurian  
Managing Director,  
Kerala Minerals & Metals Ltd.,  
Chavara. 691583.
- ii. Industry category : Red
- iii. Production category - Units. : Metallurgical
- iv. Year of establishment : 2012
- v. Date of the last environmental statement submitted : KSPCB Consent to Operate No.  
PCB/HO/KLM/ICO-R/09/2016  
Issued on: 14<sup>th</sup> July 2016  
Valid upto: 30<sup>th</sup> June 2018

PART - B

Water and Raw Material Consumption:

i. Water consumption in m<sup>3</sup>/d

Process : 0.343 M<sup>3</sup>/day

Cooling : 4.523 M<sup>3</sup>/day

Domestic : 3.695 M<sup>3</sup>/day

\* Note: Present capacity utilization of plant is only 33%

Name of Products	Process water consumption per unit of products (M <sup>3</sup> /MT)	
	During the previous financial year	During the current financial year
Titanium Sponge	4.759 M <sup>3</sup> /MT	3.432 M <sup>3</sup> /MT
Magnesium Chloride		

ii. Raw material consumption

Name of raw materials*	Name of Products	Consumption of raw material per unit of output (MT/MT)	
		During the previous financial year	During the current financial year
1. High purity Magnesium	Ti Sponge	0.998 MT	1.111 MT
2. Anhydrous pigment grade Titanium Tetra Chloride	MgCl <sub>2</sub>	3.879 MT	3.987 MT
3. Argon gas for blanketing		0.687 MT	0.707 MT
4. Caustic lye for neutralizing		39 Kg	37 Kg
5. Hydrochloric acid		7.29 Kg	8.52 Kg
6. Vacuum oil		53 L	79 L

\* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

**PART - C**

**Pollution discharged to environment/unit of output**  
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons.
(a) Water	1.690 M <sup>3</sup> /day *	As per KSPCB norm	No deviation
(b) Air( Intermittently)	14400 Nm <sup>3</sup> /hr	As per KSPCB norm	No deviation

\* Complete Recycling for plant floor washing

**PART - D**

**HAZARDOUS WASTES**

*(as specified under Hazardous Wastes (Management & Handling Rules, 1989).*

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year	During the current financial year
1. From Process (Used Oil)	7350	12768
2. From Pollution Control Facilities	NIL	NIL

**PART - E**

**SOLID WASTES:**

Solid Wastes	Total Quantity (Kg)	
	During the previous financial year	During the current financial year
a. From process	3500 * (Non Hazardous)	3500 * (Non Hazardous)
b. From pollution Control Facility		
c. Quantity recycled or re-utilized within the unit		

*\*The same will be utilized for secured land filling.*

**PART - F**

*Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.*

Sl. No.	Type of waste	Quantity	Disposal
1	MgCl <sub>2</sub> Salt	3500 Kg (Non Hazardous)	Secured land filling.
2	Used Oil	12768 Kg (Hazardous)	Collected in drums and sold to KSPCB approved vendors.

**PART - G**

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

1. 32 No's of 400 W Metal Halide lights are replaced by 100 W LED lights.

**PART - H**

Additional measures for environmental protection including abatement of pollution.

1. *Instruments for the Online Stack monitoring facility in the Stack No. 2 (Process Scrubber) from M/s Environment SA India Pvt Ltd was commissioned on 14.02.2017. The order value was ₹47.50 Lakhs.*
2. *Decanter for the sludge processing from M/s Alfa Lavel Ltd was commissioned on 04.10.2016. The order value was ₹10.87 Lakhs.*
3. *Though the solid concentration of the treated effluent is low, for improving the settling of solids in Clarifier, Rake arm mechanism was proposed. Rake Arm mechanism from M/s Murugappa Organo Water Solutions Pvt Ltd., Chennai was commissioned on 16.09.2017. The order value was ₹11.25 Lakhs.*

**PART - I**


**MISCELLANEOUS:**

*Any other particulars in respect of environmental protection and abatement of pollution.*

1. *As part of green belt development, 33% of areas is covered with green vegetation. Planted around 200 Nos .of trees, plants and saplings on 05<sup>th</sup> June 2017.*

Place : Chavara

Date : 18/06/2018



**AGM & HOD (TSP)**

**The Kerala Minerals and Metals Ltd**