



FORM V			
Rule No 14 ,Under Environmental Protection Rules 1986			
Environmental Statement For The Financial Year Ending The 31 st March 2022			
PART A			
i)	Name and address of the owner/Occupier of the industry operations or process	Mr. B.Balaji, M/s. Momentive Performance Materials (India) Pvt. Ltd, B-3 Sipcot Industrial Growth Center, Oragadam,Sriperumbudur(Tk), Kanchipuram(Dist.),Tamilnadu - 602 105	
ii)	Industry category Primary- (STC code ) Secondary - (STC Code )	Red	
iii)	Production capacity - Units -	<b>PRODUCTS</b>	<b>MT / MONTH</b>
		Silicone Fluids(Aminos/PDMS)	141
		(AB)n/Quats	78
		Silicone Emulsion	156
		Hard Coats	27
		Silicone Polymer & Elastomer (HCR)	135
		Silicone Sealant Repacking	125
		Silicone Surfactants (UA/Personal Care blend)	243
		<b>By-Product Details</b>	
		Octa methyl Cyclo Tetra Siloxane(OMCTS/Poly Dimethyl Siloxane(PDMS)	150
		Dimethyl Siloxane (PDMS) Heat Cured rubber gum	49
iv)	Year of Establishment	2009	
v)	Date of last Environmental statement submitted	23-09-2021	
PART B			
<b>{1} Water and Raw Material Consumption</b>			
	Water consumption M3 / Day -Total	21 M <sup>3</sup> / day	
	Process	6 M <sup>3</sup> / day	
	Cooling & Boiler	6 M <sup>3</sup> / day	
	Domestic	9 M <sup>3</sup> / day	
	Name of the products	Process water consumption per unit of product output	
		During the previous financial Year(20-21)	During the Current financial Year (21-22)M3 / MT
		{1}	{2}
	1 Silicone Fluids(Aminos/PDMS)	(Refer Annexure -1)	(Refer Annexure -1)
	2 Abn Quats		
	3 Silicone Emulsion		
	4 UV Hard Coats		
	5 Silicone Polymer & Elastomer (HCR)		
	6 Silicone Sealant Repacking		
	7 Silicone Surfactants (UA/Personal Care blend)		
<b>{2} ** Raw Material Consumption</b>			
	Name of the Raw material	Name of the products	Consumption of the raw material per unit
			During the previous financial year (20-21)
(Refer Annexure - 2)			
** 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				
Pollution	Quantity of pollutants Discharged ( Mass / Day )	Concentrations of Pollutants in discharges Mass / Volume	Percentage of variation from prescribed standards with reasons	
<b>Water</b>				
Process waste water	4.3 M <sup>3</sup> / Day	Zero Liquid discharge plant the	Within the limits	
Domestic waste water	9.0 M <sup>3</sup> / Day	Biologically treated & The treated water reused for Gradening	Within the limits	
Air	Utilities & Process off gas stack discharged as per norms		Within the limits	
<b>PART D</b>				
<b>Hazardous waste</b>				
As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016				
Hazardous wastes		Total Quantity (Kg)		
		During the previous financial Year(20-21)	During the Current financial Year (21-22)	
a) Process	(Refer Annexure - 3)			
b) From pollution control Facilities				
<b>PART E</b>				
<b>Solid wastes</b>				
		Total Quantity		
		During the previous financial Year(20-21)	During the Current financial Year (21-22)	
a) Process	(Refer Annexure - 3)		(Refer Annexure - 3)	
b) From pollution control Facilities				
c) Quantity Recycled or reutilised within the unit				
d) Solid				
e) Disposed				
<b>PART F</b>				
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.				
(Refer Annexure - 3)				
<b>PART G</b>				
Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.				
(Refer Annexure - 4)				
<b>PART H</b>				
Additional measures/investment proposal for environmental protection including abatement of pollution.				
(Refer Annexure - 5)				
<b>PART- I</b>				
Any other particulars in respect of environmental protection and abatement of pollution.				
(Refer Annexure - 6)				

**Annexure 1**

**Water consumption per unit of product output**

S No	Products	Raw Materials	From April-2020 to March-2021	From April-2021 to March-2022
			M3/MT	
1	Aminosiloxane	Octra Methyl Cyclo Tetra Siloxane (D 4)	NIL	NIL
		Catalyst		
		Siloxane		
2	Abn Quats	De-Mineralised Water	0.0201	0.0202
3	Emulsion	De-Mineralized Water *	0.513	0.512
4	UV Hard Coats	Methoxy Propanol	NIL	NIL
		Lucirin		
		Baysillon		
		Hard Coat		
		Ebecryl		
		Tinuvin 123		
5	Heat Cured rubber HCR	Heat Cured Rubber Gum	NIL	NIL
		Silica-Fumed/ Precipitated		
		HMDZ		
		Dispersion oils		
		Base Rubber		
6	Ureathene Additives blends	Polyvornol	NIL	NIL
		Silicone polymers		
		Soybean oil		
		Dipropyleneglycol		
		Isopropanol		
		Ucar Filmer		
		Diluents		
7	Sealants	Sealants from our other companies	NIL	NIL
* DM water is purchased externally				

<b>Annexure 2</b>				
<b>Raw material consumption</b>				
S No	Products	Raw Materials	From April-2020 to March-2021	From April-2021 to March-2022
1	Aminosiloxane	Octra Methyl Cyclo Tetra Siloxane (D 4)	0.9986	0.9985
		Catalyst	0.0021	0.0021
		Siloxane	0.0165	0.0166
2	Abn & Quats	Si-H fluid	0.8350	0.8352
		Amine Salt Solution	0.0993	0.0991
		Downol	0.0920	0.0920
		De-Mineralised Water	0.0200	0.0202
3	Emulsions	Silicone Oil	0.2090	0.2090
		Additives (Acetic Acid & Polyethylene glycol)	0.2810	0.2810
		De-Mineralized Water *	0.5110	0.5120
4	UV Hard Coats	Methoxy Propanol	0.3100	0.3100
		Lucirin	0.0096	0.0095
		Baysillon	0.0790	0.0790
		Hard Coat	0.0420	0.0421
		Ebecryl	0.5600	0.5600
		Tinuvin 123	0.0030	0.0030
5	Heat Cured rubber HCR	Heat Cured Rubber Gum	0.0282	0.0283
		Silica-Fumed/ Precipitated	0.0288	0.0000
		HMDZ	0	0
		Dispersion oils	0.002	0.002
		Base Rubber	0.9430	0.9430
6	Ureathene Additives blends	Polyvornol	0	0
		Silicone polymers	0.6850	0.6851
		Soybean oil	0	0
		Dipropyleneglycol	0.3250	0.3249
		Isopropanol	0	0
		Ucar Filmer	0	0
		Diluents	0	0
7	Sealants	Sealants from our other companies	Repacking	Repacking

ANNEXURE - 3  
Part - D

Hazardous Wastes

Waste Source	Haz category no.	During previous financial year		UOM	Disposal Method	
		(20-21)	(21-22)			
(a)	From Process:					
	Used / Spent Oil	5.1	1.17	1.46	MT	Disposed to TNPCB Authorized Recycler
	Spent solvent	20.2	71.95	79.31	MT	Disposed to TNPCB Authorized Recycler
	Process residue - Cotton waste, used gloves contaminated with silicone residue	27.1	45.96	45.07	MT	Disposed to Tamil Nadu Waste Management facility at Gummidiipoondi.
	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	33.1	272.28	377.28	MT	Disposed to T. Sathya Narayana Chetty, Chennai.
From pollution control facility :						
(b)	Chemical Sludge from waste water treatment	35.3	19.19	19.69	MT	Disposed to Tamil Nadu Waste Management facility at Gummidiipoondi.

Solid Wastes (Non Hazardous waste)

Waste Source	During previous financial year(20-21)	During current financial year (21-22)	UOM
(a)			
Process			
Waste cotton boxes / Packing materials/Plastic covers	83.83	87.5	MT
(b)			
From Pollution Control Facility			
Sewage Treatment Plant Bio Sludge	1.61	1.44	MT
(c)			
Quantity recycled or re-utilized within the unit	Nil	Nil	MT

**Part - G**  
**Annexure - 4**  
**Impact of the Pollution control measures on**  
**Natural Resources Conservation**

**Conservation measures**

**A Water conservation**

**B Power conservation**

**C Soil conservation measures**

**A Water conservation**

- 1 Replacement of toilet fixtures to reduce the water consumption
- 2 Treated water Sewage and Effluent treatment plant are operated and maintained by the third party competent person and the discharge water is being reused for process /Gardening needs within the premises, thereby Raw water procurement is optimized.
- 3 Awareness on conservation of water among the workers are practiced
- 4 Display boards on effective utilization of water as an eye opener.
- 5 To conserve and effective utilization of water, Orifice plates provided in the pipe line and information boards displayed at the utility points.
- 6 Rain water Harvesting system incorporated to maintain/increase the underground water level at the site
- 7 Collected rainwater is used for gardening purposes
- 8 To control and to monitor the water consumption Water Flow meters fixed in all utility points and wherever specific consumption is high conservation measures will be taken.
- 9 Necessary manpower is provided to monitor the conservation programme
- 10 All water taps and pipe lines were monitored periodically and replace the defects to minimize the water wastages.

## **B Power conservation**

- 1 Old reciprocating compressors are replaced with high energy efficient screw compressors
- 2 High efficiency equipments are in service to perform and conserve naturally occurring fuels
- 3 Switching off the Electrical equipments in time to avoid waste electrical energy.
- 4 Installed Capacitors to attain the Power factors up to 98%
- 5 Energy saving Fluorescence bulbs are used instead of the conventional Incandescence bulbs
- 6 Natural illuminations is effectively utilized and usage of electrical lights are minimized.
- 7 Display boards on effective utilization of power as an eye opener.
- 8 Periodical Cleaning of lighting covers and shades to minimize more number of lights and for effective illumination
- 9 Periodical Preventive maintenance is in practice, thereby excess noise released and energy consumed by the equipment is minimized.

## **C Soil conservation measures**

- 1 The site is fully covered with walls with suitable drains there by erosion of soil due to heavy rain is minimized.
- 2 Rain water Harvesting system existing to minimize the soil erosions.
- 3 Plantation of trees to minimize the soil erosion.
- 4 Proper drains and trenches to minimize the earth erosion

## Annexure 5

### Part - H

#### Additional measures proposed for Environment protection and pollution prevention.

Proposed cost for implementing of Environment management system for the financial year - 2021 to 2022

S No	Area of development	Operational Cost in Lakhs / year
1	Projects to reduce energy & fuel consumptions.	17.1
2	ETP & STP Annual Maintenance by third party competent person	15.6
3	Environmental Monitoring By TNPCB - Central Advanced Lab	1.7
4	Environmental Monitoring by third party competent person	10.1
6	Safe Disposal of Hazardous waste by third party competent person	14.3
7	Green Belt development	2.0
8	Maintenance of gardening and House keeping	5.0
9	Display on Environment related Boards/signs	1.0
<b>Total per Annum in INR</b>		<b>66.8</b>

#### Environment Monitoring system

- 1 Environment is monitored round the clock. Patrolling round by Environment department, Shift in-charges, field section in-charges and Security personals. Any deviations noticed, Immediate corrective actions initiated.
- 2 Members of Environmental Management cell is force for exclusive monitoring of Environment.
- 3 Environmental Measuring and Monitoring by Third party competent persons

Details as follows:

Monitoring Frequency: once in a month

Method of sampling: ISO-Kinetic, Manual Procedure.

Monitoring Parameters: As per TNPCB Norms

Results: With in the norms

Particulars of monitoring

Ambient Air quality monitoring

Stack emission monitoring

Noise monitoring

ETP/STP inlet/outlet monitoring

working Zone monitoring

- 4 Ambient Air quality Monitoring at plant premises
- 5 Waste water quality : Domestic(STP)
- 6 ETP Zero Liquid Discharge: Outlet of Effluent treatment Plant (24 hours Continuous monitoring)
- 7 Noise level : Noise level Measurement at:
  - 1 Administration Block
  - 2 Process Air Blower area
  - 3 Compressor room
  - 4 D G Set area
  - 5 Boundary of the plant
- 8 Quality Physical & Chemical parameters and metals in Soil by Grab sampling method in Pre-monsoon and post Monsoon season.

**Part - I**  
**Annexure 6**

**) Initiatives on Environments protection abatement**

- 1 Boiler feed water automation project implemented to reduce the LDO consumption and emission
- 2 Non hazardous waste to biogas conversion through authorized vendor
- 3 Focused Green belt development. More than 30% of the site area is covered by greenery plantations.
- 4 More than 100 Number of tree samplings planted during June 5 ,World Environment day in and around the plant premises
- 5 Conducting Environmental related awareness programmes, quiz programmes are
- 6 conducted during June 5 ,World Environment day.
- 7 We plan for Conducting training on Environmental awareness for the nearby village school students
- 8 Separate Bins placed at section wise for effective disposal of Bio-gradable,non bio-gradable wastes, Biomedical waste(Mask)
- 9 All the storages were provided with dyke arrangement.