

Date: 25-09-2018

To  
The Member Secretary  
TamilNadu Pollution Control Board  
73, Mount salai, Guindy  
Chennai 600 032

Dear Sir,

Sub: Submission of Environment Statement - April 2017 to March-2018 regarding  
Ref: Environmental Protection Rules-1986 Rule Number 14 & "Form - V"

With reference to the above subject and as a part of complying the statutory requirements we would like to submit the Environmental statement in "Form-V to your office with necessary details for your kind reference and for your record please.

Kindly acknowledge the same.

Yours faithfully,  
For Momentive Performance Materials (India) Private Limited,



Authorised Signatory  
B. Balaji, GM - Operations & Supply Chain



CC to:

- The District Environment Engineer,  
593/3, Bazaar Street, Balaji Complex, Padappai-601031  
Sriperumbudur Tk, Kancheepuram District.
- Additional Principal Chief Conservator of Forests (C),  
Ministry of Environment, Forest and Climate Change,  
Regional Office (SEZ),  
1st and 11nd Floor, Handloom Export Promotion Council,  
34, Cathedral Garden Road, Nungambakkam,  
Chennai - 34

FORM V			
Rule No 14, Under Environmental Protection Rules 1986			
Environmental Statement For The Financial Year Ending The 31 st March 2018			
PART A			
i) Name and address of the owner/occupier of the industry operations or process	Momentive Performance Materials (India) Private Ltd, 3, SIPCOT Industrial Growth center, Oragadam - 602105, Sriperumbudur Tk, Kancheepuram DT, Tamilnadu.		
ii) Industry category Primary-- (STC code) Secondary - (STC Code)	Red		
iii) Production capacity - Units -	PRODUCTS	MT / MONTH	MT/ ANNUM
	Silicone Fluids(Amines/PDMS)	113.85	1366.26
	Abn Quats	38.23	458.79
	Silicone Emulsion	94.02	1128.25
	UV Hard Coats	9.46	113.54
	Silicone Polymer & Elastomer (HCR)	63.02	756.35
	Silicone Sealant Repacking	30.61	367.41
	Silicone Surfactants (UA/Personal Care blend)	222.69	2672.32
	Octa methyl Cyclo Tetra Siloxane(OMCTS/Poly Dimethyl Siloxane(PDMS)	150	1800
	Heat Cured Rubber gum	0	0
iv) Year of Establishment	2009		
v) Date of last Environmental statement submitted	25/9/2017		
PART B			
(1) Water and Raw Material Consumption			
Water consumption M3 / Day -Total	23.46 M <sup>3</sup> / day		
Process	8.60 M <sup>3</sup> / day		
cooling	5.86 M <sup>3</sup> / day		
Domestic	9.0 M <sup>3</sup> / day		
Name of the products	Process water consumption per unit of product output		
	During the previous financial Year	During the Current financial Year April-2010 to March-2011 M3 / MT	
	(1)	(2)	
1 Silicone Fluids(Amines/PDMS)			
2 Abn Quats			
3 Silicone Emulsion	Refer Annexure -1		
4 UV Hard Coats			
5 Silicone Polymer & Elastomer (HCR)			
6 Silicone Sealant Repacking			
7 Silicone Surfactants (UA/Personal Care blend)			
(2) ** Raw Material Consumption			
Name of the Raw material	Name of the products	Consumption of the raw material per During the previous financial Year	
(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	14.46 M <sup>3</sup> / Day	Zero Liquid	Within the limits
Domestic waste water	9.0 M <sup>3</sup> / Day	Biologically treated & The treated water reused for Gardening	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 Haz waste (Management and Handling Rules 1989 )			
Hazardous wastes		Total Quantity (Kg)	
a) Process	During the previous financial Year	During the Current financial Year	
b) From pollution control Facilities	NA	N A	
(Refer Annexure - 3)			
<b>PART E</b>			
<b>Solid wastes</b>			
		Total Quantity	
		During the previous financial Year	During the Current financial Year
a) Process			
b) From pollution control Facilities			
c) Quantity Recycled or reutilised within the unit			
d) Solid			
e) Disposed			
(Refer Annexure - 3)			
<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-2016 to March-2017	From April-2017 to March-2018
			M3/MT	
1	Aminosiloxane	Octra Methyl Cyclo Tetra Siloxane (D 4)	NIL	NIL
		Catalyst		
		Siloxane		
2	Abn Quats	De-Mineralised Water	0.0200	0.0200
3	Emulsion	De-Mineralized Water *	0.513	0.511
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	Urethane 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				

**Annexure 2**

**Raw material consumption**

S No	Products	Raw Materials	From April 2016 to March-2017	From April 2017 to March 2018
1	Aminosiloxane	Octra Methyl Cyclo Tetra Siloxane (D 4)	0.9985	0.9986
		Catalyst	0.0021	0.0021
		Siloxane	0.0166	0.0165
2	Abn & Quats	Si-H fluid	0.8350	0.8350
		Amine Salt Solution	0.0994	0.0993
		Downol	0.0919	0.0920
		De-Mineralised Water	0.0200	0.0200
3	Emulsions	Silicone Oil	0.2091	0.2090
		Additives (Acetic Acid & Polyethylene glycol)	0.2810	0.2810
		De-Mineralized Water *	0.5130	0.5110
4	UV Hard Coats	Methoxy Propanol	0.3120	0.3100
		Lucirin	0.0096	0.0096
		Baysillon	0.0790	0.0790
		Hard Coat	0.0410	0.0420
		Ebecryl	0.5600	0.5600
		Tinuvin 123	0.0030	0.0030
5	Heat Cured rubber HCR	Heat Cured Rubber Gum	0.0283	0.0282
		Silica-Fumed/ Precipitated	0.0287	0.0288
		HMDZ	0	0
		Dispersion oils	0.002	0.002
		Base Rubber	0.9432	0.9430
6	Ureathene Additives blends	Polyvornol		
		Silicone polymers	0.6850	0.6850
		Soybean oil		
		Dipropyleneglycol	0.3251	0.3250
		Isopropanol		
		Ucar Filmor		
		Diluents		
7	Sealants	Sealants from our other companies	1.00	Repacking

**Annexure -3**

**Part - D**

**Hazardous waste Details**

S No	Physical form and Description of the Haz waste Generated	Haz. Category as per TNPCB	From April-2015 to March-2016	From April-2016 to March-2017	From April-2017 to March-2018	UOM	Disposal method
			Quantity/ Annum				
1	Used Oil	5.1	1.800	1.800		MT	Disposed to Sasi Industries Dindugal.
2	Spent Solvent	20.2	79.808	79.808	131.87	MT	Disposed to TNPCB Authorized Recyclers
3	Cotton waste & Used Gloves contaminated with Silicone Residue	27.1	45.022	45.022	42.407	MT	Disposed to Tamil Nadu Waste Management facility at Gummidipoondi.
4	ETP Sludge	34.3	5.950	5.950	19.461	MT	Disposed to Tamil Nadu Waste Management facility at Gummidipoondi.
5	Discarded Containers	33.3	158.704	158.704	92.873	MT	Disposed to Sathya Narayana Chetty, Chennai. T.

**Part- E**

**Solid wastes**

**Non - Hazardous waste**

S No	Physical form and Description of the Non Hazardous waste Generated	From April-2015 to March-2016	From April-2016 to March-2017	From April-2017 to March-2018	UOM	Disposal method
		Quantity/ Annum				
1	Sewage Treatment Plant Sludge (Non Hazardous)	1.440	1.560	1.740	MT	Used as manure for gardening inside the premises.
2	waste cotton boxes / Packing materials/Plastic covers	65.346	73.431	80.774	MT	Disposed to M.G Traders, Chennai.

**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 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.
- 2 Awareness on conservation of water among the workers are practiced
- 3 Display boards on effective utilization of water as an eye opener.
- 4 To conserve and effective utilization of water, Orifice plates provided in the pipe line and information boards displayed at the utility points.
- 5 Rain water Harvesting system incorporated to maintain/increase the underground water level at the site.
- 6 Collected rainwater is used for gardening purposes
- 7 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.
- 8 Necessary manpower is provided to monitor the conservation programme
- 9 All water taps and pipe lines were monitored periodically and replace the defects to minimize the water wastages.

**B Power conservation**

- 1 High efficiency equipments are in service to perform and conserve naturally occurring fuels
- 2 Switching off the Electrical equipments in time to avoid waste electrical energy.
- 3 Installed Capacitors to attain the Power factors up to 95%
- 4 Energy saving Fluorescence bulbs are used instead of the conventional Incandescent bulbs
- 5 Natural illuminations is effectively utilized and usage of electrical lights are minimized.
- 6 Display boards on effective utilization of power as an eye opener.
- 7 Periodical Cleaning of lighting covers and shades to minimize more number of lights and for effective illumination
- 8 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 - 2017 to 2018

S No	Area of development	Operational Cost in Lakhs / year
1	Projects to reduce power & fuel consumptions.	12
2	Effluent Treatment Plant Annual Maintenance by third party competent person	13
3	Sewage water treatment Annual maintenance by third party competent person	5
4	Environmental Monitoring By TNPCB - Central Advanced Lab	1
5	Stack Monitoring by third party competent person	5
6	Ambient Air quality monitoring by third party competent person	4
7	Safe Disposal of Hazardous waste by third party competent person	14
8	Green Belt development	2
9	Maintenance of gardening and House keeping	5
10	Display on Environment related Boards/signs	2
Total per Annum in INR		63

## **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  
(24 hours Continuous monitoring)
- 5 Waste water quality : Domestic(STP)  
(24 hours Continuous monitoring)
- 6 ETP Zero Liquid Discharge: Out let 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 Focused Green belt development. More than 30% of the site area is covered by greenery plantations.
- 2 Periodical mockdrills on chemical spills, Leaks , Fire and Natural Hazards to check the alertness and necessary corrective actions are implemented to masticate any type of hazards.
- 3 Conducting Environmental related awareness programmes, quiz programmes are conducted during June 5 ,World Environment day.
- 4 Every year we plan to plant samplings of more than 100 Number in and around the industrial premises
- 5 We plan for Conducting training on Environmental awareness for the nearby village school students
- 6 Separate Bins placed at section wise for effective disposal of Bio-gradable and non bio-gradable wastes.
- 7 All the storages were provided with dyke arrangement.