

**MOMENTIVE™**

Momentive Performance Materials (India) Pvt. Ltd.

B-3, Sipcot Industrial Growth Centre  
Orgadam, Sriperumbudur Tq  
Kanchipuram Dist  
Tamil Nadu - 602 105 INDIA  
www.momentive.com

Date: 24-09-2013

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

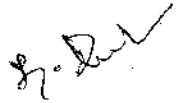
Dear Sir,

Sub: Submission of Environment Statement April 2012 to March-2013 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

C C to:

- The District Environment Engineer,  
593/3, Bazaar Street, Balaji Complex, Padappai-601031.  
Sriperumpudur Tk, Kancheepuram District.
- The Director (S),  
Government of India, Ministry of Environment & Forest,  
Regional Office (Southern Zone),  
Kendriya Sadan 4<sup>th</sup> floor, E & F wings,  
17<sup>th</sup> Main road, 2<sup>nd</sup> Block, Koramangala,  
Banglore - 560 034



<b>FORM V</b>				
<b>Rule No 14 ,Under Environmental Protection Rules 1986</b>				
<b>Environmental Statement for the financial year Ending the 31 st March 2013</b>				
<b>PART A</b>				
i}	Name and address of the owner/Occupier of the industry operations or process	<b>Momentive Performance Materials (India) Private Ltd,</b> B-3,SIPCOT Industrial Growth center, Oragadam – 602105, Sriperumbudur Tk, Kancheepuram DT, Tamilnadu.		
ii}	Industry category Primary – (STC code ) Secondary – (STC Code )	<b>Red</b>		
iii}	Production capacity – Units –	<b>Products</b>	<b>MT / Annum</b>	
		Silicone Fluids(Aminos/PDMS)	<b>1104</b>	
		Abn Quats	<b>324</b>	
		Silicone Emulsion	<b>936</b>	
		UV Hard Coats	<b>48</b>	
		Silicone Polymer & Elastomer (HCR)	<b>3000</b>	
		Silicone Sealant Repacking	<b>300</b>	
		Silicone Surfactants (UA/Personal Care blend)	<b>996</b>	
		<b>By Products</b>		
		Octa methyl Cyclo tetra siloxane(OMCTS/Poly dimethyl Siloxane(PDMS)	<b>1800</b>	
Heat Cured Rubber gum	<b>2196</b>			
iv}	Year of Establishment	2009		
v}	Date of last Environmental statement submitted	10/9/2012		
<b>PART B</b>				
{1}	<b><u>Water and Raw Material Consumption</u></b>			
	Water consumption M3 / Day -Total	<b>35 M<sup>3</sup> / day</b>		
	Process	13.0 M <sup>3</sup> / day		
	cooling	13.0 M <sup>3</sup> / day		
	Domestic	9.0 M <sup>3</sup> / day		
	Name of the products	Process water consumption per unit of product		
		During the previous financial Year	During the Current financial Year	
		{1}	{2}	
1	Silicone Fluids(Aminos/PDMS)			
2	Abn Quats			
3	Silicone Emulsion	<b>Refer Annexure -1</b>		
4	UV Hard Coats			

6	Silicone Sealant Repacking		
7	Silicone Surfactants (UA/Personal Care blend)		
{2}	<b>** Raw Material Consumption</b>		
	Name of the Raw material	Name of the products	Consumption of the raw material per During the previous financial Year During the Current financial Year
<b>(Refer Annexure - 2)</b>			
** Industry may use codes if disclosing details of raw material would violate Contractual obligations ,otherwise all industries have to name the ram materials used			
<b>PART C</b>			
<b>Pollution discharged to Environment/ Unit of Output</b>			
[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	56 M <sup>3</sup> / Day	Zero Liquid discharge plant the permeate water consumed Within the limits
	Domestic waste water	9.0 M <sup>3</sup> / Day	Biologically treated & The treated water reused for 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
b)	From pollution control Facilities	NA	N A
<b>(Refer Annexure - 3)</b>			
<b>PART E</b>			
<b>Solid wastes</b>			
		Total Quantity	
		During the previous financial Year	During the Current
a)	Process		
b)	From pollution control Facilities		
c)	Quantity Recycled or reutilised within the unit		
d)	Solid		
e)	Disposed		
<b>(Refer Annexure - 3)</b>			

<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.
<b>(Refer Annexure - 3)</b>
<b>PART G</b>
Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.
<b>(Refer Annexure - 4)</b>
<b>PART H</b>
Additional measures/investment proposal for environmental protection including abatement of pollution.
<b>(Refer Annexure - 5)</b>
<b>PART- I</b>
Any other particulars in respect of environmental protection and abatement of pollution.
<b>(Refer Annexure - 6)</b>

**Annexure 1**

**Water consumption per unit of product output**

S No	Products	Raw Materials	From April-2011 to March-2012	From April-2012 to March-2013
			M3/MT	
1	Aminosiloxane	Octra Methyl Cyclo Tetra Siloxane (D 4)	NIL	NIL
		Catalyst		
		Siloxane		
2	Abn Quats	De-Mineralised Water	0.022	0.015
3	Emulsion	De-Mineralized Water *	0.511	0.505
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				

**Annexure 2**

**Raw material consumption**

S No	Products	Raw Materials	From April 2011 to March-2012	From April 2012 to March-2013
1	Aminosiloxane	Octra Methyl Cyclo Tetra Siloxane (D 4)	0.9980	0.9985
		Catalyst	0.0030	0.0035
		Siloxane	0.0180	0.0188
2	Abn & Quats	SI-H fluid	0.9420	0.9428
		Amine Salt Solution	0.0820	0.0825
		Downol	0.0380	0.0385
		De-Mineralised Water	0.0220	0.0228
3	Emulsions	Silicone Oil	0.2500	0.2500
		Additives (Acetic Acid & Polyethylene glycol)	0.2480	0.2480
		De-Mineralized Water *	0.5110	0.5110
4	UV Hard Coats	Methoxy Propanol	0.3160	0.3180
		Lucirin	0.0120	0.0125
		Baysillon	0.0820	0.0825
		Hard Coat	0.0390	0.0394
		Ebecryl	0.5460	0.5468
		Tinuvin 123	0.0040	0.0047
5	Heat Cured rubber HCR	Heat Cured Rubber Gum	0.0280	0.0280
		Silica-Fumed/ Precipitated	0.0290	0.0290
		HMDZ	0.0001	0.0001
		Dispersion oils	0.0018	0.0018
		Base Rubber	0.9420	0.9420
6	Ureathene Additives blends	Polyvornol		
		Silicone polymers	0.5448	0.5452
		Soybean oil		
		Dipropyleneglycol	0.4625	0.4629
		Isopropanol		
		Ucar Filmer		
		Diluents		
7	Sealants	Sealants from our other companies	Repacking	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-2011 to March-2012	From April-2012 to March-2013	UOM	Disposal method
			Quantity/ Annum			
1	Spent oil	5.1	650	NIL	Lit	To be Disposed through authorized vendors.
2	Cotton waste & Used Gloves contaminated with Silicone oil Residue	27.1	11.07	22.735	MT	Disposed to Tamil Nadu Waste Management facility at Gummidipoondi, Chennai
3	ETP Sludge	34.3	NIL	1.45	MT	Disposed to Tamil Nadu Waste Management facility at Gummidipoondi,

**Part- E**

**Solid wastes**

**Non - Hazardous waste**

S No	Physical form and Description of the Non Hazardous waste Generated	From April-2011 to March-2012	From April-2012 to March-2013	UOM	Disposal method
		Quantity/ Annum			
1	Sewage Treatment Plant Sludge (Non Hazardous)	1.5	1.3	MT	Uses as Manure for gardening inside the premises.
2	Product Drums M S	63.8	135.8	MT	Disposed through authorized vendors.
3	waste cotton boxes / Packing materials/Plastic covers	64.805	89.225	MT	
4	Product Drums Plastic	2.8	7.8	MT	
5	Empty Carbuoys Plastic	11.2	2.2	MT	

## **Part - G**

### **Annexure - 4**

#### **Impact of the Pollution control measures on Naturally 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 98%
- 4 Energy saving Fluorescence bulbs are used instead of the conventional Incandescence 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 - 2012 to 2013

S No	Area of development	Operational Cost in Lakhs / year
1	Online Air Monitoring for Sox, Nox & SPM connected to Air Care Centre and implementation in this site in near future.	40
2	Projects to reduce power & fuel consumptions.	10
3	Effluent Treatment Plant Annual Maintenance by third party competent person	5
4	Sewage water treatment Annual maintenance by third party competent person	5
5	Environmental Monitoring By TNPCB - Central Advanced Lab	1
6	Stack Monitoring by third party competent person	4
7	Ambient Air quality monitoring by third party competent person	4
8	Safe Disposal of Hazardous waste by third party competent person	3
9	Green Belt development	2
10	Maintenance of gardening and House keeping	5
11	Display on Environment related Boards/signs	2
<b>Total per Annum in INR</b>		<b>80</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  
(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 50% 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.