MOMENTIVE™

Momentive Performance Materials (India) Pvt. Ltd.
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Sriperumbudur Taluk, Kancheepuram Dist
Tamil Nadu - 602 105 INDIA
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www.momentive.com

Date: 25-09-2017

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

Dear Sir,

Sub: Submission of Environment Statement - April 2016 to March-2017 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,
O/o District Environment Engineer,
Plot No.CP-5B, SIPCOT Industrial Growth Centre,
Oragadam, Kanchipuram District – 602 102.

☐ Additional Principal Chief Conservator of Forests (C),
Ministry of Environment, Forest and Climate Change,
Regional Office (SEZ),
Ist and IInd Floor, Handloom Export Promotion Council,
34, Cathedral Garden Road, Nungambakkam,
Chennai – 34

Received on. 26/9/2017
District Environmental Engineer
Tamil Nadu Pollution Control Board
Sriperumbudur @ Oragadam

FORM V				
Rule No 14 ,Under Environmental Protection Rules 1986				
Environmental Statement For The Financial Year Ending The 31 st March 2016				
PART A				
i}	Name and address of the owner/Occupier of the industry operations or process	**Momentive Performance Materials (India) Private Ltd,** B-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(Aminos/PDMS)	**68.75**	**825.00**
		Abn Quats	**33.58**	**402.96**
		Silicone Emulsion	**107.25**	**1287.00**
		UV Hard Coats	**10.75**	**129.00**
		Silicone Polymer & Elastomer (HCR)	**20.25**	**243.00**
		Silicone Sealant Repacking	**23.83**	**285.96**
		Silicone Surfactants (UA/Personal Care blend)	**241.50**	**2898.00**
		Octa methyl Cyclo Tetra Siloxane(OMCTS/Poly Dimethyl Siloxane(PDMS)	**65.67**	**788.04**
		Heat Cured Rubber gum	--------	--------
iv}	Year of Establishment	2009		
v}	Date of last Environmental statement submitted	23/9/2016		
	PART B			
{1}	**Water and Raw Material Consumption**			
	Water consumption M3 / Day -Total	**29.84 M^3 / day**		
	Process	7.98 M^3 / day		
	cooling	11.86 M^3 / day		
	Domestic	10.00 M^3 / 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(Aminos/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 ram 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
Water				
	Process waste water	19.86 M^3 / Day	Zero Liquid	Within the limits
	Domestic waste water	9.0 M^3 / Day	Biologically treated & The treated water reused for	Within the limits
	Air	Utilities & Process off gas stack discharged as per norms		Within the limits

PART D

Hazardous waste

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)

PART E

Solid wastes

		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)

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.
(Refer Annexure - 3)
PART G
Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.
(Refer Annexure - 4)
PART H
Additional measures/investment proposal for environmental protection including abatement of pollution.
(Refer Annexure - 5)
PART- I
Any other particulars inrespect 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-2015 to March-2016**	**From April-2016 to March-2017**
			M3/MT	
1	Aminosiloxane	Octra Methyl Cyclo Tetra Siloxane (D 4) Catalyst Siloxane	**NIL**	**NIL**
2	Abn Quats	De-Mineralised Water	**0.0200**	**0.0200**
3	Emulsion	De-Mineralized Water *	**0.511**	**0.513**
4	UV Hard Coats	Methoxy Propanol Lucirin Baysillon Hard Coat Ebecryl Tinuvin 123	**NIL**	**NIL**
5	Heat Cured rubber HCR	Heat Cured Rubber Gum Silica-Fumed/ Precipitated HMDZ Dispersion oils Base Rubber	**NIL**	**NIL**
6	Ureathene Additives blends	Polyvornol Silicone polymers Soybean oil Dipropyleneglycol Isopropanol Ucar Filmer Diluents	**NIL**	**NIL**
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 2015 to March-2016	From April 2016 to March-2017
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	0.8350
		Amine Salt Solution	0.0993	0.0994
		Downol	0.0920	0.0919
		De-Mineralised Water	0.0200	0.0200
3	**Emulsions**	Silicone Oil	0.2090	0.2091
		Additives (Acetic Acid & Polyethylene glycol)	0.2810	0.2800
		De-Mineralized Water *	0.5110	0.5130
4	**UV Hard Coats**	Methoxy Propanol	0.3100	0.3120
		Lucirin	0.0096	0.0096
		Baysillon	0.0790	0.0790
		Hard Coat	0.0420	0.0410
		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	0.0287
		HMDZ	0	0
		Dispersion oils	0.002	0.002
		Base Rubber	0.9430	0.9432
6	**Ureathene Additives blends**	Polyvornol		
		Silicone polymers	0.6850	0.6850
		Soybean oil		
		Dipropyleneglycol	0.3250	0.3251
		Isopropanol		
		Ucar Filmer		
		Diluents		
7	**Sealants**	Sealants from our other companies	Repacking	1.004

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-2014 to March-2015	From April-2015 to March-2016	From April-2016 to March-2017	UOM	Disposal method
			Quantity/ Annum				
1	Used Oil	5.1	NIL	1.800	NIL	MT	Disposed to Sasi Industries Dindugal.
2	Spent Solvent	20.2	NIL	79.808	189.25	MT	TNPCB Authorized recycler
3	Cotton waste & Used Gloves contaminated with Silicone Residue	27.1	37.462	45.022	34.04	MT	Disposed to Tamil Nadu Waste Management facility at Gummidipoondi.
4	ETP Sludge	34.3	5.980	5.950	5.968	MT	Disposed to Tamil Nadu Waste Management facility at Gummidipoondi.
5	Discarded Containers	33.3	4.375	158.704	124.969	MT	TNPCB Authorized recycler

Part- E

Solid wastes

Non - Hazardous waste

S No	Physical form and Description of the Non Hazardous waste Generated	From April-2014 to March-2015	From April-2015 to March-2016	From April-2016 to March-2017	UOM	Disposal method
		Quantity/ Annum				
1	Sewage Treatment Plant Sludge (Non Hazardous)	1.440	1.440	1.440	MT	Used as manure for gardening inside the premises.
2	waste cotton boxes / Packing materials/Plastic covers	29.560	29.560	73.431	MT	Disposed to M.G Traders, Chennai.

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 - 2016 to 2017

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.