MOMENTIVE™

Momentive Performance Materials (India) Pvt. Ltd.

B-3, SIPCOT Industrial Growth Centre, Oragadam
Sriperumbudur Taluk, Kancheepuram Dist
Tamil Nadu - 602 105 INDIA
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CIN : U24299KA1995PTC019244
www.momentive.com

Date: 22-09-2021

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

Dear Sir,

Sub: Submission of Environment Statement - April 2020 to March-2021 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
P. Alagarsamy -Site head.

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),
  Ist and IInd Floor, Handloom Export Promotion Council,
  34, Cathedral Garden Road, Nungambakkam,
  Chennai – 34

22 SEP 2021

FORM V				
Rule No 14 ,Under Environmental Protection Rules 1986				
Environmental Statement For The Financial Year Ending The 31 st March 2021				
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)	65.16	781.90
		Abn Quats	30.23	362.77
		Silicone Emulsion	101.50	1218.02
		UV Hard Coats	4.06	48.67
		Silicone Polymer & Elastomer (HCR)	68.90	826.77
		Silicone Sealant Repacking	14.37	172.42
		Silicone Surfactants (UA/Personal Care blend)	218.22	2618.65
		Octa methyl Cyclo Tetra Siloxane(OMCTS/Poly Dimethyl Siloxane(PDMS)	79.68	956.19
		Heat Cured Rubber gum	0	0
iv}	Year of Establishment	2009		
v}	Date of last Environmental statement submitted	28/9/2020		
	PART B			
{1}	**Water and Raw Material Consumption**			
	Water consumption M3 / Day -Total	19.6 M^3 / day		
	Process	6.6 M^3 / day		
	cooling	5.7 M^3 / day		
	Domestic	7.3 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-2020 to March-2021 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	12.72 M^3 / Day	Zero Liquid discharge plant	Within the limits
	Domestic waste water	9.0 M^3 / 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

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-2019 to March-2020	From April-2020 to March-2021
			M3/MT	
1	Aminosiloxane	Octra Methyl Cyclo Tetra Siloxane (D 4) Catalyst Siloxane	NIL	NIL
2	Abn Quats	De-Mineralised Water	0.0202	0.0201
3	Emulsion	De-Mineralized Water *	0.514	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 2019 to March-2020	From April 2020 to March-2021
1	**Aminosiloxane**	Octra Methyl Cyclo Tetra Siloxane (D 4)	0.9986	0.9986
		Catalyst	0.0021	0.0021
		Siloxane	0.0165	0.0165
2	**Abn & Quats**	Si-H fluid	0.8350	0.8350
		Amine Salt Solution	0.0993	0.0993
		Downol	0.0920	0.0920
		De-Mineralised Water	0.0200	0.0200
3	**Emulsions**	Silicone Oil	0.2090	0.2090
		Additives (Acetic Acid & Polyethylene glycol)	0.2810	0.2810
		De-Mineralized Water *	0.5110	0.5110
4	**UV Hard Coats**	Methoxy Propanol	0.3100	0.3100
		Lucirin	0.0096	0.0096
		Baysillon	0.0790	0.0790
		Hard Coat	0.0420	0.0420
		Ebecryl	0.5600	0.5600
		Tinuvin 123	0.0030	0.0030
5	**Heat Cured rubber HCR**	Heat Cured Rubber Gum	0.0282	0.0282
		Silica-Fumed/ Precipitated	0.0288	0.0288
		HMDZ	0	0
		Dispersion oils	0.002	0.002
		Base Rubber	0.9430	0.9430
6	**Ureathene Additives blends**	Polyvornol		
		Silicone polymers	0.6850	0.6850
		Soybean oil		
		Dipropyleneglycol	0.3250	0.3250
		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-2016 to March-2017	From April-2017 to March-2018	From April-2018 to March-2019	From April-2019 to March-2020	From April-2020 to March-2021	UOM	Disposal method
			Quantity/ Annum						
1	Used Oil	5.1	1.800	1.200	Nil	1.350	1.170	MT	Disposed to TNPCB Authorized Recyclers
2	Spent Solvent	20.2	79.808	131.87	62.15	117.9	71.95	MT	Disposed to TNPCB Authorized Recyclers
3	Cotton waste & Used Gloves contaminated with Silicone Residue	27.1	45.022	42.407	25.01	45.9	45.96	MT	Disposed to Tamil Nadu Waste Management facility at Gummidipoondi.
4	ETP Sludge	35.3	5.950	19.461	13.730	19.820	19.190	MT	Disposed to Tamil Nadu Waste Management facility at Gummidipoondi.
5	Discarded Containers	33.1	158.704	92.873	143.236	330.270	272.281	MT	Disposed to T. Sathya Narayana Chetty, Chennai.

Part- E

Solid wastes

Non - Hazardous waste

S No	Physical form and Description of the Non Hazardous waste Generated	From April-2016 to March-2017	From April-2017 to March-2018	From April-2018 to March-2019	From April-2019 to March-2020	From April-2020 to March-2021	UOM	Disposal method
		Quantity/ Annum						
1	Sewage Treatment Plant Sludge (Non Hazardous)	1.560	1.740	1.650	1.710	1.610	MT	Used as manure for gardening inside the premises.
2	waste cotton boxes / Packing materials/Plastic covers	73.431	80.774	95.228	80.559	83.830	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 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 - 2020 to 2021

S No	Area of development	Operational Cost in Lakhs / year
1	Projects to reduce power & fuel consumptions.	10
2	Effluent Treatment Plant Annual Maintenance by third party competent person	20.2
3	Sewage water treatment Annual maintenance by third party competent person	5
4	Environmental Monitoring By TNPCB - Central Advanced Lab	2
5	Stack Monitoring by third party competent person	5
6	Ambient Air quality monitoring by third party competent person	5
7	Safe Disposal of Hazardous waste by third party competent person	15
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

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.

Environment Monitoring system

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