

Joint Committee Inspection Report

In the Matter of

Original Application No.02/2023

‘Sheikh Shakir Vs Grasim Industries Ltd. Chemical Division & Ors.’

w.r.to

Hon`ble National Green Tribunal Central Bench Bhopal
order dated 27th July, 2023

Date of Visit: 23rd & 24th August, 2023
Location: Nagda, Distt. Ujjain (MP)

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Joint Committee's Re-Inspection Report in the matter of
“Sheikh Shakir Vs Grasim Industries Ltd. Chemical Division & Ors.”

Background:

An application was filed by Sh. Sheikh Shakir in Central Zone Bench, Bhopal and same was accepted by Hon'ble NGT in O.A. No. 02/2023 in the matter of 'Sheikh Shakir Vs Grasim Industries Ltd. Chemical Division & Ors.'. Further, the Hon'ble NGT passed an order dated 09.02.2023 and constituted a Joint Committee consisting of

- *Collector, Ujjain, (M.P.).*
- *One representative from MoEF&CC, Regional Office, Bhopal.*
- *One representative from Central Pollution Control Board, (M.P.).*
- *One representative from Madhya Pradesh Pollution Control Board*

The committee was directed to visit the place and submit a factual and action taken report within six weeks. The above said committee submitted report before the Hon'ble NGT. Subsequently, the learned counsel appearing for applicant has filed objection to the joint committee's report stating that the committee visited the site without informing the applicant and therefore applicant had no opportunity to assist the committee; and it has collected samples not from the relevant sites or places but from different sites as pointed out by proponent to have a favourable report. Applicant has also filed certain testing reports after collecting samples herself from certain sites. Applicant has also filed a detailed objection dated 01.07.2023.

Hon'ble NGT (CZ), Bhopal vide its order dated 27th July, 2023 directed as under vide para 11, 12 and 13:-

11. At this stage, we neither intend to comment on such reports based on sample privately collected by applicant nor propose to express any final opinion on the Joint Committee report and find it appropriate to have a fresh report so that this time site visit/inspection is made in presence of applicant and representative of respondent 1 i.e. project proponent and thereafter samples would be collected and report shall be submitted.

12. We direct the same committee, which was constituted vide order dated 09.02.2023, to submit a fresh report but it shall ensure that site shall be visited after giving prior information to applicant so that applicant may also have an opportunity to remain present at the time of inspection and representative of respondent 1 shall also remain present. Respondent 1 may be given information of inspection on reaching the site and prior notice to respondent 1 is not necessary.

13. Report shall include physico-chemical property of the water in respect of heavy metals also besides other. The said report shall be submitted within one month, after serving copies upon the parties.

In view of the above the same Committee again visited the site to ascertain verification of the violations and submit the factual report to the Hon'ble Tribunal. The constituted joint committee is comprising of the following officers:

1. Sh. Anukool Jain, ADM Distt.Ujjain
2. Sh. Hemant Tiwari Regional Officer, M.P.P.C.B, Ujjain
3. Sh.Vishwa Bandhu Meena Scientist-D, MoEF&CC R.O. Bhopal
4. Dr. Anoop Chaturvedi, Scientist 'B' Regional Directorate, CPCB, Bhopal

The joint committee visited the area under question in Nagda, District Ujjain on 23rd and 24th August, 2023 to assess the factual status of allegation made in petition and objection dated 1.7.2023 along with present compliance status of Zero liquid discharge, status of ambient air quality and emission through online system, river water quality, ground water quality and drain etc.

The issue was also discussed with the officials of M/s Grasim Industries, (Chemical Division) Nagda (further referred as 'Unit') during visit. The other officials present during the inspection are Shri Pratim Khare, Scientist, Dr. Deepak Kale, Scientist and Shri H.S. Sharma, Junior Scientist, MPPCB Ujjain.

For better coordination in the investigation, the committee informed to applicant Sh. Shaikh Shalir well in advance vide MPPCB letter dated 22.08.2023 regarding the proposed visit, which is enclosed as **Annexure-01**.

The meeting was held with applicant on 23.08.2023 along with his other colleagues and discussed the issues mentioned in the petition and objection. The water sampling and other inspection was carried out with applicant on 23.08.2023. Panchnama of the same is enclosed as **Annexure-02**. On next day due to some urgent work, applicant was not present and on behalf of applicant his representative Sh. Javed accompanied the committee. The authority letter given by applicant is enclosed as **Annexure-03** and the panchnama of second day 24.08.2023 is enclosed as **Annexure-04**

To find out facts as well as to know the extent of problem, the committee visited the nearby main villages which are mentioned in order dated 09.02.2023 and in objection filed by the applicant. To co-relate the visual observation samples of river and ground water have been collected. Besides of this stack monitoring of prominent parameters was also carried out.

A brief on the industrial cluster & norms

The Nagda Industrial Cluster was developed prior to constitution of the State Pollution Control Boards way back in year 1954 and M/s Grasim Industries Ltd (Chemical Division) Nagda was established in 1972. The State Pollution Control Board constituted under the Water (Prevention and Control of Pollution) Act, 1974 started grant of consent for disposal of treated waste water as per prevailing norms. However, as on date, none of the major industries discharging their effluent in river or land by maintaining the Zero Liquid Discharge status and M/s Grasim Industries(Chemical Division)Nagda is one of them.

It is noted that the unit was granted Environment Clearance for “Expansion of Caustic Chlorine Products from and value added derivatives along with installation of new Chloromethane plant by M/s Grasim Industries Ltd. (Chemical Division) at Birlagram, Nagda, District Ujjain (Madhya Pradesh)” vide letter dated 07.01.2020. The copy of the Environment Clearance is enclosed as **Annexure-05**.

The unit has valid Consent upto 31.01.2024 under Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 for the production of the same. The copy of the consent is enclosed as **Annexure-06**

Issues mentioned in petition and objection filed:

(A) The present OA.No.02/2023 has been filed before the Hon'ble NGT by Sh. Shaikh Shakir. The main issues raised by applicant through the petition are as given below:

1. The unit is discharging untreated water on land and in river Chambal and adversely affecting the water body.
2. The unit is involved in various chemical production and Durgapura and Mehatwas are located at just adjacent to the unit.
3. The unit using various acidic elements i.e. Sulphur, mercury, Chlorine and HCl etc. leading to cause of pollution in the area.
4. The unit using toxic chemicals resulting un-breathable atmosphere for residents of Nagda.
5. The unit has not obtained the ground water extraction permission from CGWB.
6. Other substantial issues i.e. ground water and soil contamination in area, health related problems of nearby population were also mentioned in the report.

(B) Applicant has filed detailed objection dtd. 01.07.2023. The main issues raised are given as below:

1. The committee has not collected water samples from Kacchi Naali (industrial drain), Mehtwas, River Chambal at Bhagatpuri, Parmarkhedhi, Bhimapura, Padliya Nala Nagda etc.
2. The Unit is dumping huge quantity of chemical waste near railway track and no water sampling carried out from nearby location.
3. Various complaint made by the Hon'ble Member of Parliament and local leader of political parties.
4. A fire incident took place in Hydrogen tank and four workers seriously burnt.

The committee made the following observations during site visit on the above mentioned issues:-

Issue No. 01: The unit is discharging untreated water on land and in river Chambal and adversely affecting the water body.

M/s Grasim Industries Ltd. (Chemical Division) has installed 1000 KLD ETP to treat effluent of alkaline, acidic and neutral characteristics. The effluent quantity of about 320 m³/day is generated from the caustic soda plant after treatment which is being recycled and reused for various process and utility requirements.

- The effluent, clari-flocculated & clarified in flocculation & clarifier units respectively. The clarified effluent further treated through two-stage filtration system i.e., sand filter & activated carbon filter.
- To reduce the TDS, industry has installed brackish water RO followed by Multi Effect evaporator (MEE) & Sea Water RO followed by Agitated Thin Film Dryer (ATFD).
- The condensate water recovered from MEE is reused in Process & cooling. Whereas dried powder sent to (TSDF) M/s Pithampur Industrial Waste Management Pvt. Ltd., Pithampur District- Dhar a unit of Ramky.
- Industry has maintained Zero Liquid Discharge status after installing double stage Reverse Osmosis (600KLD) Multi Effect Evaporator (MEE) (120KLD) & Agitated Thin Film Dryer (ATFD) on 31.03.2018 and same has been intimated to MPPCB vide letter dated 02.04.2018 which is enclosed as **Annexure-07**
- To treat the domestic waste, Activated Sludge Process based 02 STPs of total 80KLD capacity is installed. The treated effluent is used in horticulture & gardening.

Petitioner also mentioned about water pollution and claimed that the unit still discharging the untreated waste water in the drain but during visit no waste water discharge was observed in the main drain. To assess the present status of water quality samples of River Chambal up and down stream, ground water from nearby area, piezometer and drains have been collected and analyzed by MPPCB, Regional Laboratory at Ujjain. The samples were collected at representative locations on random basis so that they are uniformly distributed in the visited area. The results of water analysis are given below:

River Water Analysis

S. No.	Parameters	Unit	River Chambal at Bhagatpuri, Nagda	River Chambal 100 meter D/s at JunaNagda	River Chambal at Parmarkhedi , Nagda	River Chambal 1 K.M. D/s of JunaNagda	River Chambal at Upstream of Nagda
1	Temperature	Centigrade	24	23	23	25	26
2	Colour	Pt.Co.Sc.	Colourless	Colourless	Colourless	Colourless	Colourless
3	Odour	--	Odourless	Odourless	Odourless	Odourless	Odourless
4	pH	pH Units	7.84	7.95	7.86	7.92	7.96
5	Specific Conductance	micro mho/cm	485	403	393	401	391
6	Turbidity	N.T.U.	13.2	11.9	15.8	25.2	11.2
7	Chloride as Cl ⁻	mg/l	62	54	58	61	55
8	Total Alkalinity as CaCO ₃	mg/l	190	188	196	196	192
9	Total Hardness as CaCO ₃	mg/l	184	192	208	220	176
10	Calcium Hardness as CaCO ₃	mg/l	120	100	128	140	110
11	Magnesium Hardness as CaCO ₃	mg/l	64	92	80	80	66
12	Dissolved Oxygen	mg/l	6.8	6.8	7	6.8	7.1
13	Total Solids	mg/l	356	298	334	310	290
14	Suspended Solids	mg/l	18	16	20	28	16
15	Total Dissolved Solids	mg/l	338	282	314	282	274
16	B.O.D.(3 Days 27 ^o C)	mg/l	3.6	7	6	8	1.8
17	Chemical Oxygen Demand	mg/l	26	24	25	30	12
18	Ammonical Nitrogen as NH ₃ -N	mg/l	0.986	0.698	0.864	1.32	0.1

19	Nitrite as NO ₂ ⁻ -N	mg/l	0.006	0.006	0.005	0.007	0.002
20	Nitrate as NO ₃ ⁻ -N	mg/l	1.68	1.65	1.78	1.65	1.782
21	Phosphate as PO ₄ ³⁻ -P	mg/l	0.067	0.052	0.077	0.062	0.121
22	Sulphate as SO ₄ ²⁻	mg/l	40.55	32.4	32.83	49.77	16.5
23	Sodium as Na	mg/l	30.2	30.4	32.4	33.2	11.2
24	Potassium as K	mg/l	1	1	1.1	1	0.982
25	Total Coliform	MPN/100ml	>1600	>1600	>1600	>1600	48
26	Fecal Coliform	MPN/100ml	12	33	34	33	1.8
27	Boron as B	mg/l	0.202	0.198	0.216	0.216	BDL
28	Fluoride	mg/l	0.136	0.171	0.183	0.149	0.216
29	Copper (as Cu)	mg/l	ND	ND	ND	ND	ND
30	Lead (pb)	mg/l	ND	ND	ND	ND	0.035
31	Zinc (as Zn)	mg/l	ND	ND	ND	ND	ND
32	Nickel (as Ni)	mg/l	0.031	0.023	0.036	0.081	ND
33	Iron (as Fe)	mg/l	0.039	0.101	0.088	0.133	0.041
34	Total Chromium (as Cr)	mg/l	0.011	0.009	0.03	0.034	0.054
35	Mercury (as Hg)	mg/l	ND	ND	ND	ND	ND
Category			D	D	D	D	A

Classification of River water based on IS - 2296 – 1982, ND- Not Detected , BDL- Below Detectable Limit

During inspection & sample collection it was observed that the Chambal River barrage near Railway Bridge was overflowing and sufficient flow at down stretch of river near Bhagatpuri, Parmarkhedi etc. Basis on the above analysis values of river Chambal it can be concluded that the BOD value increased in downstream of the river Chambal w.r.to upstream water quality due to mixing of city sewage and other non-industrial drains without any treatment.

It was observed that during visit two major drains (Nallah) joining the river Chambal at downstream side without any treatment i.e. Padliya drain and Mixed open drain of industrial area. Padliya drain mainly carrying city sewage and mixed open drain carrying waste water generated from industrial area major source of inflow are vehicle washing, commercial activity etc. Mixed open drain nallah passes through School Bridge and finally met to Padliya nallah at Juna Nagda. So sample has also been taken from School Bridge & Combined drain along with the drain behind Nagda industrial area. To assess the quality of

waste water samples from major drains samples have been collected and the analysis results are given below:

Drain (Nallah) water analysis

S. No.	Parameters	Unit	Drain behind Nagda industrial area.	Mix Open Drain at Inside area, Nagda	Drain near School Bridge, Birlagram, Nagda	PadliyaNallah near Indira Nagar, Nagda	Combined Drain D/C to Chambal river on by pass road, Nagda
1	Appearance	--	Turbid	Turbid	Turbid	Turbid	Turbid
2	Odour	--	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant
3	pH	pH Units	6.9	7.58	7.92	7.57	7.51
4	Total Solids	mg/l	2080	1286	2624	934	2204
5	Suspended Solids	mg/l	82	90	96	82	112
6	Total Dissolved Solids	mg/l	1998	1196	2528	852	2092
7	Chloride as Cl ⁻	mg/l	860	452	700	156	490
8	B.O.D.(3 Days 27 ^o C)	mg/l	6	12	18	38	20
9	Chemical Oxygen Demand	mg/l	90	70	90	90	80
10	Phosphate as PO ₄ ³⁻ -P	mg/l	0.26	0.881	1.36	1.53	1.67
11	Mercury (as Hg)	mg/l	ND	ND	ND	ND	ND
ND- Not Detected , BDL- Below Detectable Limit							

The above drain water analytical results indicate that the value of BOD in Padiliyanallah are higher side w.r.to discharged standards however no Hg concentration is observed which a major concern. The drains are finally joining river Chambal at downstream side and increased the organic and inorganic load in river and after rainy season stagnation/lean flow further deteriorated the water quality.

The samples of ground water were also collected from representative village at locations mentioned in order dated 09.02.2023 and objection raised dated 01.07.2023 the location details and analyzed values are given below:

Ground Water Analysis

S. No.	Parameters	Unit	Indian Standard Drinking Water Specification (Second Revision) IS 10500 : 2012		Hand Pump water at Mehatwas near PanikiTank i, Birlagram, Nagda	Bore well water at Durgapura, Nagda	Handpump water near School Takrawada , Nagda	Hand pump water near Pardi village, Nagda
			Requirement (Acceptable Limit)	Permissible in the Absence of Alternate Source				
1	Colour	Pt.Co.Sc.	5	15	Colourless	Colourless	Colourless	Colourless
2	Odour	--	Agreeable	Agreeable	Odourless	Odourless	Odourless	Odourless
3	pH	pH Unit	6.5-8.5	No relaxation	7.84	7.35	7.1	7.23
4	Specific Conductivity	μMhos/cm.	--	--	1024	1508	1468	2192
5	Turbidity	NTU	1	5	2.6	2.4	1.2	1.6
6	Total Solids	mg/l	--	--	832	1218	1174	1766
7	Total Dissolved Solids	mg/l	500	2000	824	1206	1164	1756
8	Suspended Solids	mg/l	--	--	8	12	10	10
9	Chloride as Cl	mg/l	250	1000	192	300	264	440
10	Total Alkalinity as CaCO ₃	mg/l	200	600	304	242	762	552
11	Total Hardness as CaCO ₃	mg/l	200	600	490	464	560	872
12	Calcium as (Ca)	mg/l	75	200	100	64	145.6	152
13	Magnesium as (Mg)	mg/l	30	100	58.32	73.87	47.62	119.55
14	Ammonical Nitrogen as NH ₃ -N	mg/l	0.5	No relaxation	BDL	BDL	BDL	BDL
15	Nitrate as NO ₃	mg/l	45	No relaxation	7.88	30.23	1.84	36.74
16	Nitrite as NO ₂ -N	mg/l	--	--	BDL	0.002	BDL	0.002
17	Sulphate as SO ₄	mg/l	200	400	80.376	116.6	32.388	119.25
18	Phosphate as PO ₄ -P	mg/l	--	--	BDL	0.14	0.022	0.004
19	Sodium as Na	mg/l	--	--	66	92.5	183	133
20	Potassium as K	mg/l	--	--	1.9	2.2	1.1	5.68
21	Chemical Oxygen Demand	mg/l	--	--	12	15	14	12
22	B.O.D. (3 Days 27 ^o C)	mg/l	--	--	1.2	1.6	1.4	1
23	Fluoride (as F)	mg/l	1	1.5	0.689	0.98	0.96	0.889
24	Copper (as Cu)	mg/l	0.05	1.5	0.021	ND	ND	ND
25	Lead (as Pb)	mg/l	0.01	No relaxation	ND	0.005	ND	ND
26	Zinc (as Zn)	mg/l	5	15	ND	0.459	ND	0.007
27	Nickel (as Ni)	mg/l	0.02	No relaxation	0.011	0.018	0.013	ND
28	Iron (as Fe)	mg/l	0.3	No relaxation	0.039	0.052	0.214	0.139
29	Total Chromium (as Cr)	mg/l	0.05	No relaxation	0.011	0.035	0.032	0.032
30	Mercury (as Hg)	mg/l	0.001	No relaxation	ND	ND	ND	ND

ND- Not Detected , , BDL- Below Detectable Limit

The Unit has also installed piezometers in North & South direction of plant, along with other prominent locations to assess any leakage from SLF. The

samples of piezometer were also collected from representative locations of up and down gradient in the presence of applicant. The location details and analyzed values are given below:

Piezometric Point Analysis

S. No.	Parameters	Unit	Piezometric Point near Weigh Bridge at Pardi Gate at U/S of SLF Site of M/S Grasim Ind. Ltd. (Chemical Division), Birlagram , Nagda	Piezometric Point No. – 3, near Bottling Plant, Nagda	Piezometric Point no. 6 at Grasim Staff Colony, Nagda
1	Colour	Pt.Co.Sc.	Colourless	Colourless	Colourless
2	Odour	--	Odourless	Odourless	Odourless
3	pH	pH Units	7.11	8.07	7.51
4	Specific Conductance	micromho/cm	519	590	1192
5	Turbidity	N.T.U.	5.6	4.1	7.3
6	Chloride as Cl ⁻	mg/l	110	128	602
7	Total Alkalinity as CaCO ₃	mg/l	194	176	226
8	Total Hardness as CaCO ₃	mg/l	220	232	232
9	Calcium Hardness as CaCO ₃	mg/l	120	120	96
10	Magnesium Hardness as CaCO ₃	mg/l	100	112	136
11	Total Solids	mg/l	428	484	964
12	Suspended Solids	mg/l	10	12	10
13	Total Dissolved Solids	mg/l	418	472	954
14	Copper (as Cu)	mg/l	ND	ND	ND
15	Lead (as Pb)	mg/l	ND	0.014	ND
16	Zinc (as Zn)	mg/l	ND	0.021	0.074
17	Nickel (as Ni)	mg/l	ND	0.148	ND
18	Iron (as Fe)	mg/l	0.015	0.222	0.124
19	Total Chromium (as Cr)	mg/l	ND	0.05	0.059
20	Mercury (as Hg)	mg/l	ND	ND	ND
ND- Not Detected					

On the basis of the analysis results of the ground water and piezometers, it can be concluded that none of the parameter is showing abnormal value. Mercury (Hg) is also not observed in any ground water sample.

The unit has maintained Zero Liquid Discharge condition. At the time of visit, it is found that MEE and ATFD were operational. The unit has also installed 02 PTZ cameras at ETP area and back side of the unit. The access of the camera is with MPPCB, Bhopal to monitor the status remotely at round the clock basis.

It was observed that a stone crusher located at the backside of the industrial area at Takrawada village rain water was found accumulated in the mined pit. However, no waste water discharge was observed in this area.

The Unit has also installed two STP of capacity 50 KLD each for the treatment of domestic waste water. On average basis 25 to 30 KLD water is being treated by these STPs which is further used for horticulture, dust suppression etc. The samples of STPs were collected during inspection water analysis report is as under:

STP water analysis

S. No.	Parameters	Unit	M/s Grasim Chemical Division Nagda, STP no. - 1, Capacity 50 KLD (Treated Water reuse in Garden)	M/s Grasim Chemical Division Nagda, STP no. - 2, Capacity 50 KLD (Treated Water reuse in Garden)
1	Appearance	--	Sl. Turbid	Sl. Turbid
2	Odour	--	Unpleasant	Unpleasant
3	pH	pH Units	7.48	7.43
4	Total Solids	mg/l	986	1104
5	Suspended Solids	mg/l	38	40
6	Total Dissolved Solids	mg/l	948	1064
7	Chloride as Cl ⁻	mg/l	190	198
8	B.O.D.(3 Days 27 ⁰ C)	mg/l	8	12
9	Chemical Oxygen Demand	mg/l	40	60
10	Phosphate as PO ₄ ³⁻ P	mg/l	0.713	0.924

Issue No 02-The unit is involved in various chemical production and Durgapura and Meahtwas is located to just adjacent to the unit.

As mentioned above the unit involved in production of various chemicals and having valid consent from MPPCB and permission from petroleum and explosion safety organisation (PESO) for storage and handling of Chlorine

which is valid upto 30.09.2032. The permission of PESO is enclosed as **Annexure-08**

The one of the main contentions of the petition is location of Mehtwas village which is located in close proximity of the industrial cluster. Generally minimum buffer zone is 500 meters has been fixed but in present case village is located near to Nagda industrial cluster. The other houses and villages also located within the range of 200 to 500 meter distance from this cluster. As per industry representative the plant was established in 1972 and at that time, population was very less and at that time no concept of buffer zone was existed. However, to control emission from stack the unit has provided scrubbers attached with stack. The details of the installed air pollution control devices are as tabulated below:

S.No.	Unit	APCDs & Stack height (mtrs)
1.	Caustic Soda Unit_1	Alkali Scrubber (32m) Water Scrubber (34m)
2.	Caustic Soda Unit_2	Alkali Scrubber (34m) Water Scrubber (34m)
3.	Calcium Chloride	Water Scrubber (34m)
4.	Chlorinated Paraffin Unit	Alkali scrubber (30m) Water Scrubber (30m)
5.	Chlosulphonic Acid plant	H2SO4 scrubber (30m) Water scrubber (30m)
6.	Poly Aluminum Chloride Plant	Water Scrubber (34m) Spray Dryer Scrubber (34m)
7.	Stable bleaching powder Plant	Bag Filter, Cyclone, Dust Collector, Gravity Settling Chamber, Hood Cover

Industry has provided CEMS in Caustic soda unit 1 & 2 and Chlorinated paraffin units stacks for continuous monitoring of HCl & Cl₂. Total 88 sensors for Cl₂&HCl leak detection are installed in plant premises during visit some of them has been verified at random basis. The location details of the installed sensors are enclosed as **Annexure-09**.

Issue No. 03-The unit is using various acidic elements i.e. Sulphur, mercury, Chlorine and HCl etc. causing pollution in the area.

The unit is involved mainly in the production of Chlorine based product. The representative of the unit informed that sulphur and Mercury is nowhere used in the process. The unit produces caustic soda through membrane technology which is safer production method as compared to earlier method i.e. Mercury cell. The unit has switchover the mercury cell to membrane technology in 2006 the intimation letter issued in this regard is enclosed as **Annexure-10**.

The stack emission is point source of air pollution in any chemical industry. In this unit the main stacks are Caustic soda unit 01 and unit 02 at the time of visit both were operational hence stack emission has been monitored for consented parameters i.e. HCl and Cl. The details of the monitored stack emission values are given below:

S.No.	Stack emission monitoring location	Control equipment	HCl (mg/Nm ³)	Chlorine (mg/Nm ³)	CEMS provided
01	Caustic Soda unit- 01	Alkali and Water Scrubber	2.73	1.731	The unit has installed the OCEMS and the data shows that during the emission monitoring all values within the limit as given in consent.
02	Caustic Soda unit- 02	Scrubber	2.83	0.98	
Emission standards			35	15	

On the basis of the above stack emission monitoring data, it was observed that the emission values complying the norms.

As per the guideline of CPCB, the unit has installed OCEMS in all the stacks of chemical plant to monitor HCl and Chlorine emission round the clock. The CEMS data available at MPPCB/CPCB website and transmission was verified during visit. As per the OCEMS data all the stack emission of HCl & Chlorine was well within the consented limits i.e. 35mg/Nm³ & 15mg/Nm³ respectively.

As mentioned in above para, the unit has switchover the mercury cell to membrane technology and as on date no Mercury is being used in process. The unit has constructed new SLF which has Double Composite Liner System and designed as per the CPCB guideline, 2001. Bottom is lined with compacted clay,

HDPE liners & leachate collection system. After the switchover the production technology from Mercury to membrane the characteristic of sludge also changed in result.

As per the direction of MPPCB a study on “Environmental Assessment For Evaluating The Strength Of Abandoned Secured Landfill Site Of M/S. Grasim Industries Ltd, Nagda, Madhya Pradesh” was carried out by National Environmental Engineering Research Institute, Hyderabad Zonal Centre. The report concludes as:

“Possibility of leaching of metals including mercury from the mercury bearing sludge and ash layers from the secured landfill is minimal. Two locations, one each in upstream and downstream of secured land fill site were identified for drilling borewells and groundwater samples were collected from various depths at each location in order to assess the strength of the SLF. Mercury levels in the groundwater, collected from drilled sites, were below detectable levels. The groundwater quality of the monitored locations in the path of groundwater flow from SLF indicates that mercury was below detectable level. Furthermore, the new drilled borewells also did not show mercury levels in the groundwater. Based on the TCLP analysis of mercury bearing sludge and the groundwater quality, no leaching of mercury from the SLF was observed. This indicates that the SLF has the capacity of not allowing the chemicals from sludge to the groundwater and the SLF site is intact.

The present study revealed that the mercury sludge in SLF is stabilized and there is no considerable evidence for leaching of mercury from SLF. Geologically, the study area is comprised of Basalts rocks and has no permeability. However, the groundwater as well as soil quality surrounding the SLF site need to be monitored on annual basis.”

The conclusion part of the report is enclosed as **Annexure-11**.

Issue No 04-The unit using toxic chemicals resulting un-breathable atmosphere for residents of Nagda.

As mentioned in the above paragraph the unit is involved in the production of Chlorine based derivatives and to detect any fugitive emission proper sensor has been installed at prominent locations. The unit has provided proper scrubber system to control emissions. The unit has also provided all the stacks above 30 meter from ground for proper dispersion of pollutant.

In this industrial cluster, 03 numbers of Continuous Ambient Air Quality Monitoring System (CAAQMS) are established at following locations to monitor ambient air concentration of PM_{2.5}, PM₁₀, SO₂, NO₂, HCl, Cl etc.

1. Guest House No.2
2. Temple Guest House &
3. Chemical division Labor Club

The CAAQMS data of the 01.08.2023 to 25.08.2023 were collected. It was observed that the CAAQMS data showing that the air quality data are within the NAAQM standards. The data sheet of CAAQMS is enclosed as **Annexure-12.**

Issue No. 05-The unit has not obtained the ground water extraction permission from CGWB.

As informed by the unit representative the unit does not have any borewell for extraction of ground water and all the water requirement is being fulfilled through Chambal river water and recycled water. The unit also reduced its water requirement after reuse of treated water of ETP and condensate. The unit consumes about 2600 KLD water in production about 650 KLD water is being recycled. The unit also intimated to CGWA, Bhopal on 06.10.2021 regarding no requirement of NOC as unit not extracting ground water. The letter is enclosed as **Annexure-13.** The agreement of MPWRD and M/s Grasim industries is enclosed as **Annexure-14.**

Issue No. 06 - Other substantial issues i.e. health related problems of nearby population, ground water and soil contamination in area and odour related issues were also mentioned in the report.

In compliance of the direction issued by MPPCB at time to time the unit has carried out various studies from central government institutes i.e. NEERI, NIREH to assess the environmental status of the area. The said studies covered all the aspects of health and environment as mentioned in the petition and implementations of the recommendations are under progress or completed. The main studies carried out in recent years are given below:

Brief about Health study by ICMR-NIREH

Central Pollution Control Board (CPCB) issued direction on 19th February 2020 under section 18 (1) (b) of the Water (Prevention & Control of

Pollution) Act, 1974 to Madhya Pradesh Pollution Control Board (MPPCB). One of the specified direction states as:

“xiv. A detailed health study of Nagda region to be carried out in light of synergistic health effects of pollutant by engaging any reputed government institute working in the field of research in environmental health by MPPCB.”

In compliance of the above direction MPPCB has issued direction under section 33/A of water (Prevention and Control of Pollution) Act 1974 to occupiers of the industries of Nagda including M/s Grasim Industries (Chemical Division) on 13th may 2020.

In compliance of the above, occupiers viz. M/s Grasim Staple Fibre Division, M/s Grasim Chemical Division & M/s Lanxess (I) Pvt Ltd, combindly awarded a health study to Indian Council Of Medical Research - National Institute For Research In Environmental Health (ICMR-NIREH), Bhopal (M.P.). The Terms of Reference (TOR) were finalized after due discussion among concern authority viz. CPCB, CGWB, MPPCB, Municipal Authority and occupiers. The final report was submitted by occupiers on 13th July 2022. The main recommendation of study as below:

Recommendations of the Study:

1. Even though a majority of surveyed population was found to be healthy the proportion of participants who were found to have abnormal findings in health assessments should be subjected to detailed investigation especially because the tests used in this study were meant for screening purposes.
2. Many of the health data obtained as part of this cross-sectional studies such as blood pressure, spirometry and ECG reflects the need for further in-depth health evaluation of the community, especially keeping in mind the limitation of cross-sectional studies such as one time measurement, lack of populations exposure to such tests resulting in inadequate performance in effort dependent tests and residual confounding effects.
3. In the present study, majority of the participants showed normal neuro-behavioral functions further investigations are recommended for the establishment of the neuro-behavioral diagnosis if any in screening positive participant in this study.

4. The abnormal lipid profile seen in multiple participants highlights the need for advocating for lifestyle modification in the community such as increasing physical activity, healthier diet including consumption of good quality fat.
5. One time measurement of gaseous pollutants may not reflect the dose-response relationship. Considering the known detrimental health effects of the gaseous pollutants their periodic or seasonal monitoring is recommended.
6. It is recommended to have a mechanism for periodic monitoring of ambient air pollutant concentration in the vicinity of the industrial region.
7. It is recommended to have periodic monitoring for detection of groundwater contamination by heavy metals at early stage and to prevent adverse health effects if any from the consumption of contaminated groundwater.

Brief about Ground Water study by CSIR-NEERI

CSIR-NEERI, Hyderabad Zonal Centre has previously conducted groundwater quality assessment studies in and around Chemical Division, Grasim Industries Limited (GIL), Nagda during November-December 2017. Based on the recommendations of CSIR-NEERI, M/s GIL approached CSIR-NEERI to undertake a detailed study to assess the groundwater quality and identify the pollution source over a period of 4 hydrological cycles, this study started in 2018. Accordingly, to assess the groundwater quality over a period of 4 hydrological cycles and to identify the pollution source through integrated geophysical, stable isotopic and groundwater modelling studies is going on and based on the final recommendation further action will be taken.

This study started in 2018 in the buffer zone of 5 km surrounding the Chemical Division, Grasim Industry. The study is to be completed in 2024.

Brief about Environmental audit carried out by CSIR-NEERI

As per the direction of MPPCB, a study on “Environmental Audit of the Secured Landfill Site of Chemical Division Grasim Industries Ltd, Nagda, Madhya Pradesh” was carried out by National Environmental Engineering Research Institute, Hyderabad Zonal Centre in 5 Km radius of the SLF and completed in June 2021. The report concluded mainly that

The heavy metal concentrations in the soils are below the screening level for Industrial area as per MoEF&CC Guidelines for contaminated sites in India.

The heavy metals are below TCLP concentration Limit as per Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

The present study revealed that the mercury sludge in SLF is stabilized and there is no considerable evidence for leaching of mercury from SLF. Geologically, the study area is comprised of Basalts rocks and have no permeability. However, the groundwater as well as soil quality surrounding the SLF site need to be studied at least once in a year.

Brief about Monitoring of odour and odourous compound

A study on “Monitoring of odour and odourous compounds at Grasim industries Ltd (Chemical Division)” was carried out by J.M. Environet Pvt. Ltd Gurugram and completed in January 2020. The conclusion part of the report enclosed as **Annexure-15**

Issues raised through objection dated 01.07.2023

The main issues raised by the applicant through objection filed on 01.07.2023 are as given below:

Objection-01: The committee has not collected water samples from Kacchi Naali (industrial drain), Mehtwas, River Chambal at Bhagatpuri, Parmarkhedi, Bhimapura, Padliya Nala Nagda etc.

Reply: At the time of previous inspection committee visited the periphery of the industrial unit including back side of the unit at that time no waste water was found discharged from any industrial unit hence waste water samples were not collected, however samples from Mehtwas and Padliyanala were collected at that time.

During the visit on 23.08.2023, same site was visited with applicant and it was observed that due to rain, water was flowing in that drain hence sample has been collected.

Objection-02 The Unit is dumping huge quantity of chemical waste near railway track and no water sampling carried out from nearby location.

Reply: The brine sludge is being generated during production of Caustic for storage of the same the unit has constructed SLF which has Double Composite Liner System and designed as per the CPCB guideline, 2001.

The unit has obtained permission from MPPCB on 26.09.2022 for construction of new captive secured landfill site –II with the capacity of 45000 MT and this site is located near railway track. During visit construction work is under progress. No unscientific dumping of chemical sludge was observed.

The old and new secured landfill sites are located in nearby area and to monitor the ground water quality samples has been collected from piezometer in the presence of applicant. However, during previous visit of the committee, sampling was done from the same locations.

Objection-03 Various complaint made by the Hon'ble Member of Parliament and local leader of political parties.

Reply: During the inspection and interaction with the officials, it has come to the knowledge that the similar types of complaints were received in various time intervals. The local administration and MPPCB already doing work on the same issues as mentioned in the petition. Some important complaints received and its action taken as given below :

1. Sh. Anil Firojiya Hon'ble MP of Ujjain raised an issue of water pollution caused by Grasim group of industries and other industries of Nagda town in December 2019. In compliance of that a joint team of CPCB, Delhi and Regional Directorate, Bhopal visited the area further CPCB, Delhi issued a direction to MPPCB under section of 18(1) b of the Water (prevention & control of pollution) Act, 1974. In compliance of that MPPCB issued a notice to Units located in Nagda area including M/s Grasim Chemical Division on 13.5.2020. The copy of notice and work completed by the Unit enclose as **Annexure-16**.

2. Sh. Bhuvneshwar Kalita and Sh. Jawahar Sirkar Hon'ble MP of Rajya Sabha forwarded a complaint letter related to the wastewater discharged by the Grasim group of industries and other industries of Nagda town in December 2022. The Regional Directorate of CPCB Bhopal investigated the matter thoroughly in November 2022 along with the complainant. The visiting team also interacted with other complainants of Nagda who sent their complaints at various time intervals. After inspection a letter has been

issued to MPPCB on 09.01.2023 for further improvement by CPCB, Delhi.

3. With reference to public complaints of Nagda area Collector Ujjain constituted a team of six departments i.e. Health, agriculture, ground water board, labour department, SPCB, CPCB and district administration for thorough investigation of the area above committee visited the area in January 2020 and based on the inspection, instruction for further improvement has been given to unit.

Objection-04 A fire incident took place in Hydrogen tank and four workers seriously burnet.

Reply: The Fire incident took place on 23-03-2023 at 12 noon during yearly shutdown of MC-2 Plant due to heat up the bolts while using a Gas cutting torch. Due to heating of the bolts a flash fire with explosion occurred by entrapped hydrogen.

In this incident one supervisor & 3 labours were affected. After first aid at Janseva Hospital Nagda one labour was discharged while other 3 person shifted to Choithram Hospital, Indore (Burn Speciality Hospital). After treatment at Choithram Hospital, Indore one person discharged on dated 31-03-2023 & remaining two people were discharge on 05-04-2023. The fitness certificates of three employees are enclosed as **Annexure-17**.

Action Taken so far for improvement of environmental condition in Nagda

Chambal river stretch from Nagda to Rampura declared as polluted river stretch based on the increased level of BOD level based on monthly water quality monitoring data. In compliance of the Hon'ble NGT order in O.A. 673/2018, action plans for polluted river stretches was prepared and its execution is under progress. Measures taken by different government agencies to improve the water quality in Chambal River are as below:

1. The Municipal council of Nagda has prepared DPR for the sewerage line & treatment of domestic waste water generated from Nagda Town. The project is under consideration in M.P. Urban Development Company Bhopal (MPUDC). The letter given by the Nagda Municipal Corporation regarding latest status is enclosed as **Annexure-18**.

2. PHED & the M.P. Jal Nigam Maryadith Periyogna scheme of Rs 29.29 Crore is already in implementation to supply potable water in affected village along the bank of Chambal River.

3. Industries like M/s Grasim Industries Ltd (Chemical Division), M/s Lanxess India Pvt Ltd and M/s Grasim Industries Ltd (SFD) Nagda have achieved zero liquid discharge.

Conclusion:

On the basis of the present inspection, it was observed that the unit has been maintaining Zero Liquid Discharge status by installation of MEE and ATFD since 2018 and no waste water found discharged during visit which is the main contention of the petition.

To control the emission from the stacks the unit has provided scrubbers. The manual monitoring values as well as CEMS data has been found within the limits given in consent.

The unit has installed CEMS system to monitor emission on real time basis and also installed PTZ cameras at two locations to observe live activity remotely and all data transmitted on MPPCB portal.

It is pertinent to mention that the district administration and MPPCB have already taken up the issues mentioned in the petition and various studies related to ground water, health, soil contamination and odour has been completed by central institutes very recently and execution work on the recommendation of studies are going on. The unit also informed that the recommendations/suggestions made in the reports/studies are being implemented.

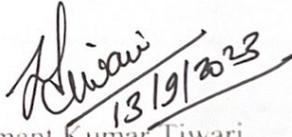
Recommendations

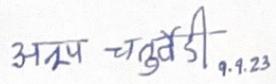
On the basis of the above observations made during inspection of the committee, the following recommendations are made by the committee:

1. The unit should take measures to control the odour /smell in the area as per recommendations/suggestions in the odour related study conducted by M/s JM Enviro, Gurugram.
2. District Administration should ensure tap water supply in affected villages i.e. Pardi, Takrawda, Parmarkhedi etc under “Har Ghar Jal” Mission in light of high TDS in ground water of the village.

3. The unit should monitor the groundwater as well as soil quality surrounding the SLF site at least once in a year through NABL/EPA recognized and submit the report to MPPCB.
4. The rain water harvesting structures should be constructed for ground water quality improvement in nearby villages in consultation with CGWA.
5. Health check up camps should be organised in nearby village in association with local health authorities.
6. Municipal Council, Nagda should expedite the approval & construction of Sewage Treatment Plant without further delay.
7. The municipal Corporation, Nagda should make a action plan for treatment of waste water generated from commercial activities and vehicle washing etc in industrial area.
8. MPPCB and local authority should keep constant vigil over the industry.


Sh. Anukool Jain,
ADM Ujjain


13/9/2023
Sh. Hemant Kumar Tiwari
Regional Officer,
M.P. Pollution Control Board, Ujjain


9.9.23
Dr. Anoop Chaturvedi, Scientist 'B'
Regional Directorate, CPCB, Bhopal


Sh. Vishwa Bandhu Meena,
Scientist-D, MoEF&CC R.O. Bhopal

Photograph of the committee visit



Committee meeting with applicant



Committee visit in side plant with applicant



Water sampling with applicant



Committee with applicant at MEE plant area



River sampling with applicant at Parmarkhedhi



River sampling with applicant at Bhagatpuri



Drain water sampling with applicant Kucchi nali





GW sampling at Pardi village with applicant's representative



GW sampling at Takrawda village with applicant's representative



CCV2+JJ7, MPEB Rd, Industrial Area, Nagda,
Madhya Pradesh 456331, India

Latitude
23.4439241°

Longitude
75.40152358°

Local 06:10:00 PM

Altitude 429.15 meters

GMT 12:40:00 PM

Wednesday, 08.23.2023

GW sampling at Mehatwas village with applicant



Water sampling from Kucchi nali with applicant



Sampling at Piezometer-06 with applicant's



Dry drain inside the unit



Sampling at Padliya nallah



Combined drain at bypass road before joining Chambal River



Water sampling with applicant





क्षेत्रीय कार्यालय, म.प्र.प्रदूषण नियंत्रण बोर्ड,
17, भरतपुरी, उज्जैन दूरभाष कार्यालय-0734-2510984
ई-मेल romppcb_ujjain@yahoo.co.in



क्रमांक- 970 / प्रनिबो / क्षेत्राउ / 2023
प्रति,

उज्जैन, दिनांक 22 / 8 / 2023

1. श्री एच. के. तिवारी,
क्षेत्रीय अधिकारी,
म.प्र. प्रदूषण नियंत्रण बोर्ड, उज्जैन (म.प्र.)
2. डॉ. अनूप चतुर्वेदी, वैज्ञानिक-ख, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, भोपाल
3. श्री विश्वबन्धु मीणा, वैज्ञानिक 'डी',
केन्द्रीय पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय
क्षेत्रीय कार्यालय, भोपाल ईमेल vishwabandhu.meena@gov.in

विषय :- माननीय राष्ट्रीय हरित अधिकरण, भोपाल बेंच के प्रकरण क्रमांक 02/2023 शेख शाकिर विरुद्ध ग्रेसिम इंडस्ट्रीज लि. केमिकल डिवीजन एवं अन्य में दिनांक 27.07.2023 को पारित आदेश के अनुपालन में संयुक्त समिति द्वारा निरीक्षण एवं मॉनिटरिंग किए जाने के संबंध में।

—00—

उपरोक्त विषयान्तर्गत माननीय राष्ट्रीय हरित अधिकरण, भोपाल बेंच के प्रकरण क्रमांक 02/2023 शेख शाकिर विरुद्ध ग्रेसिम इंडस्ट्रीज लि. केमिकल डिवीजन में दिनांक 27.07.2023 को पारित आदेश के अनुपालन में संयुक्त समिति द्वारा दिनांक 23 अगस्त 2023 को अपराह्न 3:00 बजे निरीक्षण किया जाना है। अतः निरीक्षण हेतु उपस्थिति सुनिश्चित किये जाने हेतु पत्र सूचनार्थ प्रेषित।

अतिरिक्त जिला दंडाधिकारी महोदय उज्जैन द्वारा अनुमोदित।

(एच.के.तिवारी)
क्षेत्रीय अधिकारी, उज्जैन

पृ. क्रमांक- / प्रनिबो / क्षेत्राउ / 2023
प्रतिलिपि:-

उज्जैन, दिनांक / / 2023

1. अतिरिक्त जिला दंडाधिकारी, कार्यालय कलेक्टर जिला उज्जैन की ओर कृपया सूचनार्थ प्रेषित।
2. श्री शेख शाकिर निवासी नागदा की ओर पत्र कृपया सूचनार्थ एवं दिनांक 23.08.2023 को अपराह्न 3:00 बजे आपकी उपस्थिति सुनिश्चित किये जाने हेतु पत्र कृपया प्रेषित है।

(एच.के.तिवारी)
क्षेत्रीय अधिकारी, उज्जैन

पंचनामा

क्र. नं. 2/2023 में 23/8/2023

को गठित समिति के सदस्यों- श्री अनुपम लॉ, ए.डी.एन. 36 लॉ-
 श्री एच.के. गिजारी, क्षेत्रीय अधिकारी, स.प्र. प्रकृत विभाग कोड, 36 लॉ-
 श्री राजेश-पटवर्धन, वैशालीक 'ख', केंद्रीय प्रकृत विभाग कोड, गीजारी
 श्री विश्व-बंदु-मीरा, वैशालीक 'घ' के.प्र. नि.को. मोराला के साथ
 श्रीवासन कर्म श्री शैल शर्मा एवं अन्य पंचनामा-यथा-
 श्री-प्रति-रव, वैशालीक, स.प्र. नि.कोड 36 लॉ के.डी.एन.
 कर्म, वैशालीक स.प्र. नि.को. 36 लॉ-को उपस्थिति में निम्न-
 विवरणानुसार काम करने का कार्य किया गया।

- 1) Piezometer no.1 (मे. कौशिकीय डिप्लोमा-गडगा) at 5:35 PM
- 2) Drain behind Grassim at 5:50 PM
- 3) Hand Pump water at mehatwas near Pani Ki Tanki at 6:10 PM
- 4) River Chambal at Bhagatpuri at 6:35 PM
- 5) River Chambal 100m D/S of Juna Nagda at 6:45 PM
- 6) River Chambal at Parmarkhedi at 7:00 PM
- 7) River Chambal 1 km D/S of Juna Nagda at 7:15 PM

उपरोक्तानुसार काम करने का कार्य निम्नानुसार किया गया है। श्री शैल कर्म का कार्य सभी विदुओं के काम करने को मौक पर ही सील कर परीक्षण-को किया गया है।


 C.P. 23/08/23
 36 लॉ-

 श्री शैल कर्म का कार्य 36 लॉ-
 स.प्र. नि.कोड 36 लॉ-
 23/08/2023
 23-8-23
 स.प्र. नि.कोड 36 लॉ-
 23/08/23

संयुक्त समिति को पूर्व में जमा की गई रिपोर्ट में पर उठाई गई आपत्तियों पर आज दिनांक 23/8/2023 पर भी कार्यवाही की गई है तथा वर्तमान में शिक्षातज्जर्न (श्री शेख) को कोई अन्य आपत्ति नहीं है। शिक्षातज्जर्न को कोई अन्य जमा नमूने एका नहीं करवाना चाहते हैं। अर्थात् समिति पूर्व में दिनांक 21/3/2023 को एका किये गये जमा नमूनों के एकाओं से पुनः दिनांक 24/8/2023 को पुनर्जांचक अध्ययन हेतु जमा नमूने एका करेगी।

निरीक्षण के समय उद्योग परिसर से कोई जमा निष्काक नहीं पाया गया तथा उद्योग द्वारा स्थापित MEE कार्यरत पाया गया जिसे शिक्षातज्जर्न कदा भी देखा गया।

आवेदन (श्री शेख शाफिर) द्वारा अज्ञात कराया गया है कि दिनांक 24/8/2023 को जमा नमूने एका के समय उनके प्रतिनिधि उपस्थित रहे।

सभी उपरोक्त बंदियों के समक्ष यह पंचनामा पढ़कर सुनाया गया। आवेदन एवं अन्य सभी सदस्य मिले गये नश्यों से सहमत हैं। यह पंचनामा आज दिनांक 23/8/2023 को ही पर पठाया गया।

1) 
A.P. Usmani


(R.O.)
23/8/2023

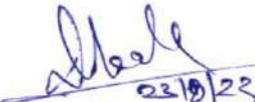

23/08/2023
(V.B. Meenu)
Mobile No. 80000 R.O. Bhopal

अज्ञेय चक्रवर्ती
23.8.23


Pratim Khare
scientist
MPPCB, Ujjain
23/8/2023

संकीर्ण

23/8/2023


23/8/23
Dr. Deepak Kalle
Scientist, MPPCB, Ujjain


23/8/23
(H.S. Sharma)
Sr. Sci. Ujjain


23.8.23
Teh. Nagark


Som
Nagark


23/8/23

अधिकार पत्र

मैं, शेख शाकिर पिता शरीफ शेख निवासी चेतन पुरा मस्जिद के पास, नागदा जंक्शन जिला उज्जैन का हूँ मैंने नेशनल ग्रीन ट्रिब्यूनल भोपाल में एक आवेदन जिसका प्रकरण क्रमांक ओ. ए. 02/2023 (सीजेड) है, लगाया है जिसमें माननीय ट्रिब्यूनल के आदेशानुसार माननीय ट्रिब्यूनल द्वारा गठित संयुक्त कमेटी ने दिनांक 23.08.2023 को मेरी उपस्थिति में मेसर्स ग्रासिम इण्डस्ट्रीज लिमिटेड, केमिकल डिवीजन, नागदा में तथा मेरे द्वारा बताये गये अन्य स्थल पर मेरी उपस्थिति में स्थल निरीक्षण एवं सेपल संग्रहित किया है। माननीय संयुक्त कमेटी अन्य स्थल का निरीक्षण एवं सेपल संग्रहित करने हेतु दिनांक 24.08.2023 को भी उपस्थित रहने का कहा है किंतु मैं अपने आपसी कुछ कार्यवश दिनांक 24.08.2023 को उपस्थित नहीं रह सकता हूँ इसकारण मैं अपनी ओर से अपने प्रतिनिधी के रूप में जावेद कुरशी पिता अजीज कुरैशी निवासी खजूरवाली मस्जिद, उज्जैन जिला उज्जैन (म.प्र.) मोबाइल न. 9826825100 को अधिकृत कर रहा हूँ जिनकी उपस्थिति में स्थल निरीक्षण एवं सेपल संग्रहित किया जावे जिसपर मुझे कोई आपत्ति नहीं होगी और पूर्णतः मान्य होगा।

स्थान :- नागदा

दिनांक : 23.08.2023

हस्ताक्षर



शेख शाकिर
पिता शरीफ शेख

9098633700

नं. MST के प्रस्ताव नं. 2/2023 के अंतर्गत में पारित आदेश अधिनियम 27.7.2023 के अंतर्गत निर्धारित दिनांक 24.8.2023 में निम्नलिखित स्थानों में नमूने संग्रह के लिए 1 करोड़ रुपये का अनुदान आवंटित किया है:

- 1) Piezo meter No. 3 Near bottling plant
- 2) Mit open drain at industrial area
- 3) Bore well water at Durgapura
- 4) Hand pump water at ~~the~~ Takrawda vill. Near school.
- 5) Piezo Meter. No. 6 Gassim Staff colony
- 6) Hand pump water Near Pardi village
- 7) Drain Near school bridge
- 8) Chambal river at upstream of Nagda
- 9) Padliya Nala Near Indira Nagar
- 10) combined drain B/L to chambal river on by pass Road

उक्त सभी उक्त स्थानों पर नमूने संग्रह के लिए आवश्यक उपकरणों की आपूर्ति के लिए 1 करोड़ रुपये का अनुदान आवंटित किया गया है। उक्त अनुदान को सही ढंग से उपयोग में लाने के लिए निम्नलिखित बिंदु ध्यान में रखे जायें।

यदि संवर्धन एजेंसी के अधिकारी उपरोक्त स्थानों पर नमूने संग्रह के लिए आवश्यक उपकरणों की आपूर्ति के लिए 1 करोड़ रुपये का अनुदान आवंटित किया गया है।

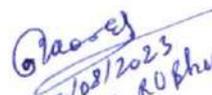
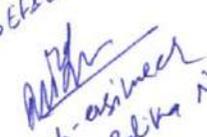
1) अतिरिक्त चर्चा
CPCB, Bhopal.

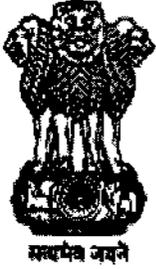
2) Javeed Ahmad
24/8/2023.
(98268-25100)

3) H.S. Sharma
Jyoti MPCC (D, UTM)


24.8.23
R.S. Patil
Teh. Nagda

Somnath
25.8.23


24/08/2023
MoEFCC RO Bhopal

Sub-divisional
Nagda Palika Nagda



F. No. J-11011/119/2015-IA-II (I)
 Government of India
 Ministry of Environment, Forest & Climate Change
 Impact Assessment Division

Indira Paryavaran Bhavan,
 Vayu Wing, 3rd Floor, Aliganj,
 Jor Bagh Road, New Delhi-110 003

Dated: 7th January, 2020

To,

M/s Grasim Industries Ltd.,
 Village- Birlagram, Nagda,
 District-Ujjain-456 331 (Madhya Pradesh)

Sub: Expansion of Caustic Chlorine Products from and Value Added Derivatives along with installation of new Chloromethane Plant by M/s Grasim Industries Ltd. (Chemical Division) at Birlagram, Nagda, District Ujjain (Madhya Pradesh) – Environmental Clearance reg.

Sir,

This has reference to your online proposal No.IA/MP/IND2/26969/2015, dated 30th September, 2019 along with the EIA/EMP report and Public hearing proceedings for the above mentioned project.

2. The details of proposed products are as under –

S. No.	Particulars	Existing (TPA)	Additional (TPA)	Total (TPA)
A. Main Products				
1.	Caustic Soda	270000	180000	450000
2.	Poly Aluminum Chloride	27720	137280	165000
3.	Stable Bleaching Powder	29436	25314	54750
4.	Chlorinated Paraffin	27000	18645	45645
5.	Chloromethane	Nil	36000	36000
6.	Chloro Sulphonic Acid	23400	Nil	23400
7.	Calcium Chloride (100 %)	54000	Nil	54000
B. CO-Products and By-Products				
1.	Chlorine	215200	149800	365000
2.	Hydrochloric Acid (100%)	79000	56000	135000
3.	Sodium Hypochlorite (100%)	53520	36480	90000
4.	Hydrogen	6730	4670	11400
5.	Compressed Hydrogen	960	500	1460
6.	Carbon Dioxide (By-product)	23760	Nil	23760

3. The proposed project/activity is listed under category A of item 4(d) 'Chlor - Alkali Industry' and 5(f) 'Synthetic organic chemical industry' in the schedule of Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal/approval at central level by sectoral Expert Appraisal Committee (EAC).

4. The terms of reference for the project was granted on 29th July, 2015 followed by validity extension of ToR vide letter dated 11th December, 2018. Public Hearing for the

proposed expansion project was conducted by State Pollution Control Board on 04th June, 2019. The Public Hearing was chaired by ADM Ujjain. The main issue raised during the public hearing are related to Employment, Water source & Water pollution, Effluent discharge, Gaseous Emission etc.

5. Project Proponent reported that the existing land area is 61.92 ha (619200 m²). No additional land will be required for proposed expansion. Industry has already developed greenbelt in an area of 38% i.e. 23.68 ha (236800 m²) out of total area of the project. Project Proponent reported that there is no National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger/Elephant Reserve, and Wildlife Corridor within 10 km distance from the project site. Dam is at a distance of 2.13 km in NW direction, Bangerl Nadi flows at distance of 2.5 km in West direction, Chambal River flows at a distance of 0.6 km in West direction, Khajuri Nala is at 0.5 km in South direction.

6. Project Proponent reported that total water requirement is 6000 m³/day including fresh water requirement of 5400 m³/day proposed to be met from Chambal river. Effluent of 610 m³/day quantity is being/will be treated in Effluent Treatment Plant. The plant is being/will be based on Zero Liquid discharge system. Power requirement after expansion will be 141 MW including existing 80 MW and will be met from Outsource & Madhya Pradesh State Electricity Board (MPSEB). Existing unit has 2 Nos. DG sets of 2000 KVA capacity each, having 30 metre stack height as per CPCB norms used during power failure. Additionally, no DG sets will be required for proposed expansion project. Existing unit has 2 Hydrogen gas fired boilers of 9 TPH capacity each. No new boiler will be installed.

7. Project Proponent reported that the Ambient air quality monitoring was carried out at 8 locations during Winter Season (Dec., 2016 to Feb., 2017) and the baseline data indicates the ranges of concentrations as: PM₁₀ (63.2 to 90.1 µg/m³), PM_{2.5} (28.2 to 47.4 µg/m³), SO₂ (7.3 to 32.9 µg/m³), NO₂ (12.6 to 30.6 µg/m³), respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.024 µg/m³, 0.085 µg/m³, 0.10 µg/m³, with respect to PM, Cl₂, HCl. The resultant concentration of PM is within the National Ambient Air Quality Standards (NAAQS).

8. The estimated project cost for expansion of the project is ₹285 Crores. Total capital cost earmarked towards environmental pollution control measures is ₹20 Crores and the recurring cost (operation and maintenance) will be about ₹3.4 Crores/annum. The expenditure towards Corporate Environment Responsibility (CER) for the project would be ₹5 Crores of the project cost as committed by the project proponent. Total employment will be 1545 persons (Regular: 245 + Contractual: 1300) including 128 persons (Regular: 28 + Contractual: 100) after expansion of the project.

9. The project proponent has informed that a case was filed in High court and transferred to NGT (Case no.77/2017 CZ) regarding pollution being caused in the river Chambal due to effluents from the industry. As per NGT order, Grasim Industries Ltd. Chemical Division received MPPCB directions, in compliance of which company has achieved ZLD in March, 2018. As on date no other case is due against the existing project.

10. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking

that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report and public hearing process. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

11. The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing has been properly addressed in the EIA/EMP report. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

12. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on **20-22 November, 2019**, wherein the project proponent and their accredited consultant presented the EIA/EMP Report. The Committee found the EIA/EMP report to be satisfactory, complying with the ToR, and **recommended** the project for grant of environmental clearance.

13. The Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments there to and hereby accords the environmental clearance under the provisions thereof to the above mentioned proposal of **M/s Grasim Industries Ltd. (Chemical Division) for Expansion of Caustic Chlorine Products from 2,70,000 TPA to 4,50,000 TPA of Caustic soda and Value Added Derivatives along with installation of new Chloromethane Plant (Para 2 of Page 1), located at Birlagram, Nagda, District Ujjain, Madhya Pradesh** subject to compliance of the followings terms and conditions and environmental safeguards mentioned below:-

A. Specific Conditions:

- (i) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, as may be applicable.**
- (ii) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (iii) As already committed by the project proponent, ZLD shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iv) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016; Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (v) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous

emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

- (vi) Solvent management, if any, shall be carried out as follows company shall undertake waste minimization measures as below:-
- (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- (vii) Odour shall be prevented at the source and effective odour management scheme shall be implemented.
- (viii) Total fresh water requirement shall not exceed 5400 m³/day proposed to be met from Chambal River. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ix) Rain water harvesting structures shall be provided to reduce dependency of fresh surface water for industrial purposes. In any case, no ground water shall be used for the plant.
- (x) The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- (xii) ETP sludge, process inorganic & evaporation salt shall be disposed through Captive Secured Landfill.
- (xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xiv) The company shall undertake waste minimization measures as below:-
- a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation.

- (xv) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi) As proposed ₹5 Crores shall be allocated for CER. The CER funds shall be utilized for greenbelt development, skill development and check dam construction, as suggested during public hearing. The CER plan shall be completed within a period of two years or before commissioning of the project.
- (xvii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xviii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (xix) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xx) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. For continuous discharge the unit shall install pH, TSS, BOD, COD and flow meter at the ETP outlet.
- (xxi) The energy sources for lighting purposes shall preferably be LED based.
- (xxii) Transportation of raw materials/products should be carefully performed using GPS enabled vehicles.
- (xxiii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act. PP shall submit the six monthly compliance report to the Regional Office of the Ministry.
- (xxiv) The project proponent shall conduct 3D modeling for risk management and mitigation measures as the flammable and hazardous chemicals are being stored and processed in the Plant. PP shall conduct a study comprise the details of detectors and its locations and outcome of the study shall be implemented and the compliance shall be submitted six monthly to the Regional Office of the Ministry.
- (xxv) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

14. The project proponent shall strictly comply the sector specific conditions as mentioned in the Ministry's Office Memorandum No. 22-34/2018-IA.III, dated 9th August, 2018. The said OM is available at the Ministry's website (PARIVESH portal i.e. www.parivesh.nic.in). The grant of Environmental Clearance is further subject to compliance of generic conditions as mentioned in the Ministry's Office Memorandum No. 22-34/2018-IA.III, dated 9th August, 2018.

15. The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest & Climate Change, its regional office, Central Pollution Control Board and State Pollution Control Board.

16. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

17. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

18. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

19. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

20. The above conditions will be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974; Air (Prevention & Control of Pollution) Act, 1981; Environment (Protection) Act, 1986; Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991, read with subsequent amendments therein and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Madhya Pradesh/Hon'ble NGT and any other Court of Law relating to the subject matter.

21. This issues with the approval of the competent authority.


(Dr. R. B. Lal)

Scientist 'E'/Additional Director

(डा. आर. बी. लाल)

(Dr. R. B. LAL)

वैज्ञानिक 'ई'/Scientist 'E'

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय

Min. of Environment, Forest and Climate Change

भारत सरकार, नई दिल्ली

Govt. of India, New Delhi

Copy to: -

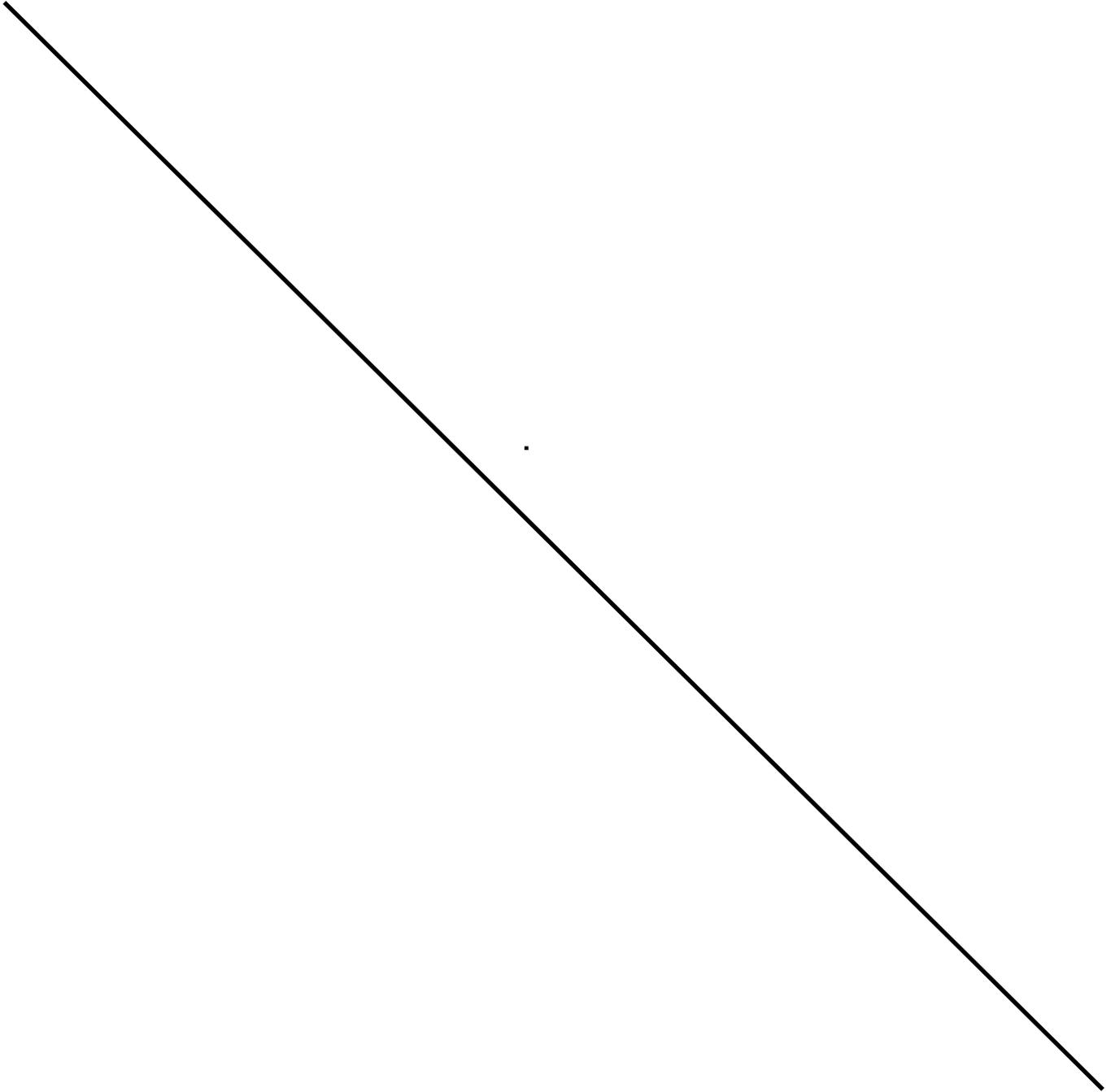
1. Principal Secretary, Environment, Forest and Climate Change Department, Govt. of Madhya Pradesh.
2. The Principal Chief Conservator of Forests (PCCF), Satpuda Bhawan, Bhopal, Madhya Pradesh.
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32.
4. The Chairman, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal - 462 016, Madhya Pradesh.
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 3.
6. Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Man Singh Road,

New Delhi-110011.

7. District Collector, Ujjain, Madhya Pradesh.

8. Guard File/ Record File/ Monitoring File/ Website of MoEF&CC


(Dr. R. B. Lal)
Scientist 'E'/Additional Director



Annexure-02

M.P. Pollution Control Board
E-5, Arera Colony
Paryavaran Parisar, Bhopal - 16 MP
Tele : 0755-2466191, Fax-0755-2463742



Consent Order

RED-LARGE

CCA-Renewal

Validity (A/W): 31.01.2024

CONSENT NO: ***

PCB ID: 25471

Outward No:116713,26/10/2022

Consent No:AW-56933

To,
The Occupier,
M/s. Grasim Industries Ltd., (Chemical Division),
Survey No.-22/1, Birlagram Nagda, Industrial Area Mehatwas,
Tal : Nagda, Dist : Ujjain (M.P.)- 456331

Subject: Grant of Renewal of Consent under section 25 of the Water (Prevention & Control of Pollution) Act,1974 & under section 21 of the Air (Prevention & Control of Pollution) Act,1981

Ref: Your Consent to Operate Application Receipt No. 1212131 Dt. 27/09/2022 and last communication received on Dt.24/09/2022

With reference to your above application for renewal of consent to operate has been considered under the aforesaid Acts and existing rules therein. The M. P. Pollution Control Board has agreed to grant consent up to **31/01/2024**, subject to the fulfillment of the terms & conditions, enclosed with this letter and-

SUBJECT TO THE FOLLOWING CONDITIONS :-

- a. Location: Survey No.-22/1, Birlagram Nagda, Industrial Area Mehatwas, Tal : Nagda, Dist : Ujjain (M.P.)- 456331
Latitude : 23.4373, Longitude : 75.4118
- b. The capital investment : Rs. 936.14 Cr.
- c. Product & Production Capacity:

S. No.	Product	CCA Qty / year
1.	Caustic Soda Lye	3,00,000.0 M.T
2.	Chlorine	2,39,111.0 M.T
3.	Hydrogen	7480.0 M.T
4.	Sodium Hypo	59,470.0 M.T
5.	Hydrochloric Acid	87,800.0 M.T
6.	Compressed Hydrogen	1070.0 M.T
7.	Stable Bleaching Powder	43800.0 M.T
8.	Poly Aluminium Chloride	36,500.0 M.T
9.	Chloro Sulphonic Acid	23,400.0 M.T
10.	Chlorinated Paraffin Wax	27,000.0 M.T
11.	Calcium Chloride	54,000.0 M.T
12.	Carbon Di Oxide	23,760.0 M.T
13.	DG – Set (Electricity Generation)	2X 2000KVA

Note :- (1) For any change in above industry shall obtain fresh consent from the board.

(2) This consent is being granted without prejudice to the Criminal proceeding pending against the industry in the Court of Law. This consent in no way be taken as measures of proof that the industry has not violated any pollution control laws at any time in the past. Hence, whatsoever may be decision of the Hon'ble Court shall be binding to the industry and this Board.

(3) The hydrochloric acid generated from air pollution control arrangement shall be treated as hazardous waste and same shall be handled and transported as per category 33.1 of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 and need to obtain permission under Rule 9 even used or treated within the plant.

The Validity of the consent is up to **31/01/2024** and has to be renewed before expiry of consent validity. Online application through XGN with annual license fees in this regard shall be submitted to this office **6 months before expiry of the consent**. Board reserves the right to amend/cancel / revoke the above condition in part or whole as and when required.

By the order of Chairman, MP PCB

Signature Not Verified

Digitally Signed by : A. A
Mishra, Member Secretary
Date: 26/10/2022 04:25:41 PM

ACHYUT ANAND MISHRA
Member Secretary

Digitally signed from UIDAI server
under Water Act
under Air Act
(Organic Authentication on AADHAR from UIDAI Server)
TPAV # 6B9SD8F9F6



Consent Order

M.P. Pollution Control Board
E-5, Arera Colony
Paryavaran Parisar, Bhopal - 16 MP
Tele : 0755-2466191, Fax-0755-2463742

CONDITIONS PERTAINING TO WATER (PREVENTION & CONTROL OF POLLUTION) ACT 1974 :-

1. The daily quantity of trade effluent of the unit shall not exceed **433.0 KL/day**, and the daily quantity of sewage of the unit shall not exceed **60.0 KL/day**.

2. Trade Effluent Treatment:-

The applicant shall operate comprehensive effluent treatment system including ETP, RO MEE & Dryer to remain Zero Liquid Discharge (ZLD) and in case of accidental discharge the waste shall be treated properly to achieve following standards

pH	Between	5.5 – 9.0	TDS	Not exceed	2100 mg/l.
Suspended Solids	Not exceed	100 mg/l.	Chlorides	Not exceed	1000 mg/l.
BOD ₃ Days 27 °C	Not exceed	30 mg/l.			
COD	Not exceed	250 mg/l.			
Oil and grease	Not exceed	10 mg/l.			

For other parameters general standards of discharge as notified under EP Act 1986 notified by MPPCB from time to time shall be applicable

3. Sewage Treatment :-

The applicant shall provide comprehensive sewage treatment system and maintain the same properly to achieve following standards-

pH	Between	6.5 – 9.0
Suspended Solids	Not exceed	100 mg/l.
BOD ₃ Days 27 °C	Not exceed	30 mg/l.
COD	Not exceed	250 mg/l.
Oil and grease	Not exceed	10 mg/l.
Fecal Coliform (MPN/100ml)	Not exceed	1000

4. The effluent shall be treated up to prescribed Standards and reuse in the process, for cooling and for green belt devolvement/gardening within premises. Hence **zero discharge condition** shall be practiced. In no case treated effluent shall be discharged outside of industry/unit premises.

5. Water meter preferably electromagnetic/ultrasonic type with digital flow recording facilities shall be installed separately for category wise consumption of water for Industrial cooling/boiler feed, process & domestic purposes and data shall be submitted online through XGN monthly patrak/statements. The industry/unit shall also monitor the treated wastewater flow and report the same online through monthly patrak/statements.

Sr	Water Code (Qty in KLD)	WC : 3293.0	WWG : 493.0	Water Source
1	Cooling Water	1510.0	345.0	Local Body
2	Domestic Purpose	93.0	60.0	Local Body
3	Manufacturing Process	1690.0	88.0	Local Body

6. Any change in production capacity, process, raw material used etc. and for any enhancement of the above prior permission of the Board shall be obtained. All authorized discharges shall be consistent with terms and conditions of this consent. Facility expansions, production increases or process modifications which result new or increased discharges of pollutants must be reported by submission of a fresh consent application for prior permission of the Board.

7. All treatment/control facilities/systems installed or used by the applicant shall be regularly maintained in good working order and operate effectively/efficiently to achieve compliance of the terms and conditions of this consent

8. The specific effluent limitations and pollution control systems applicable to the discharge permitted herein are set forth as above conditions.

9. Compilation of Monitoring data-

i. Samples and measurements taken to meet the monitoring requirements specified above shall be representative of the volume and nature of monitored discharge.

ii. Following promulgation of guidelines establishing test procedures for the analysis of pollutants, all sampling and analytical methods used to meet the monitoring requirements specified above shall conform to such guidelines unless otherwise specified sampling and analytical methods shall conform to the latest edition of the Indian Standard specifications and where it is not specified the guidelines as per **Consent No. 15693** the examination of Water and Waste latest edition of



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the American Public Health Association, New York U.S.A. shall be used.

iii. The applicant shall take samples and measurement to meet the monthly requirements specified above and report online through XGN the same to the Board.

10. Recording of Monitoring Activities & Results-

i. The applicant shall make and maintain online records of all information resulting from monitoring activities by this Consent.

ii. The applicant shall record for each measurement of samples taken pursuant to the requirements of this Consent as follows:

- (i) The date, exact place and time of sampling
- (ii) The dates on which analysis were performed
- (iii) Who performed the analysis?
- (iv) The analytical techniques or methods used and
- (v) The result of all required analysis

iii. If the applicant monitors any Pollutant more frequently as is by this Consent he shall include the results of such monitoring in the calculation and reporting of values required in the discharge monitoring reports which may be prescribed by the Board. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

iv. The applicant shall retain for a minimum of 3 years all records of monitoring activities including all records of Calibration and maintenance of instrumentation and original strip chart regarding continuous monitoring instrumentation. The period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the applicant or when requested by Central or State Board or the court.

11. Reporting of Monitoring Results:-

Monitoring Information required by this Consent shall be summarized and reported by submitting a Discharge Monitoring report on line to the Board.

12. Limitation of discharge of oil Hazardous Substance in harmful quantities:-

The applicant shall not discharge oil or other hazardous substances in quantities defined as harmful in relevant regulations into natural water course. Nothing in this Consent shall be deemed to preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities, or penalties to which the applicant is or may be subject to clauses.

13. Limitation of visible floating solids and foam:

During the period beginning date of issuance the applicant shall not discharge floating solids or visible foam.

14. Disposal of Collected Solid waste/sludge-

All hazardous waste/sludge shall be disposed of as per the Authorization issued under Hazardous & other waste (M&TM) Rules 2016. And/other Solids Sludges, dirt, silt or other pollutant separated from or resulting from treatment shall be disposed of in such a manner as to prevent any pollutant from such materials from entering any such water Any live fish, Shall fish or other animal collected or trapped as a result of intake water screening or treatment may be returned to eaters body habitat.

15. Provision for Electric Power Failure-

The applicant shall assure to the consent issuing authority that the applicant has installed or provided for an alternative electric power source sufficient to operate all facilities utilized by the applicant to maintain compliance with the terms and conditions of the Consent.

16. Prohibition of By pass system of treatment facilities-

The diversion or by-pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this Consent is prohibited except:

- i. where unavoidable to prevent loss of life or severe property damage, or
- ii. Where excessive storm drainage or run off would damage any facilities necessary for compliance with the terms and conditions of this Consent. The applicant shall immediately notify the consent issuing authorities in writing of each such diversion or by-pass in accordance with the procedure specified above for reporting non-compliance.

17. Industry management shall submit the information online through XGN in reference to compliance of consent conditions.

Additional Water condition:-

1. The industry shall take all the effluent through closed conduit to effluent treatment plant and ZLD system and maintain ZLD.
2. Domestic sewage shall be treated in STP up to the prescribed standards and shall be recycled/reused within the plant in process, cooling, gardening etc to remain ZLD unit.
3. The industry shall operate and maintain wastewater treatment plant (WWTP) each unit and inlet of ETP to ensure complete collection of



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wastewater for treatment.

- The industry shall operate and maintain CEQMS at inlet of ETP & MEE to monitor TDS, Flow, Chlorides, pH, COD etc and display the same in public domain through web based realtime display Board.
- The industry shall comply with the industry specific standards notified by the MoEF&CC.

CONDITIONS PERTAINING TO AIR (PREVENTION & CONTROL OF POLLUTION) ACT 1981 :-

1. The applicant shall provide comprehensive air pollution control system consisting of control equipments as per the proposal submitted to the Board with reference to generation of emission and same shall be operated & maintained continuously so as to achieve the level of pollutants to the following standards:-

Name of section	Capacity	Stack height (mtrs)	Fuel	Control equipment to be installed	(mg/NM ³)	CEMS
✓ Caustic unit-I	5.5 m ³ /Hr	32	---	Alkali Scrubber,	Chlorine-15 ✓	Online real-time emission monitoring systems to be installed and connected to MPPCB, ESC, Bhopal on or before application for CTO
	2 m ³ /Hr	34	---	Water Scrubber,	HCl mist-35 ✓	
	2 m ³ /Hr	34	---	Water Scrubber,	HCl mist-35	
Caustic Unit-II	0.5m ³ /Hr	34	---	Alkali Scrubber,	Chlorine-15	
	1 m ³ /Hr	34	---	Water Scrubber,	HCl mist-35	
	1 m ³ /Hr	34	---	Water Scrubber,	HCl mist-35	
Stable bleaching Powder (De-dusting unit)	2 m ³ /hr	30	---	Bag Filter, Cyclone ,Dust Collector, Gravity Settling Chamber, Hood Cover,	PM-50, Cl ₂ -15	
	2 m ³ /hr	30	---	Bag Filter, Cyclone ,Dust Collector, Gravity Settling Chamber, Hood Cover,	PM-50, Cl ₂ -15	
PAC Liquid	3.5 m ³ /hr	34	---	Water Scrubber	HCl Mist-35	
✓ PAC Dryer-I	6 m ³ /hr	34	---	Water Scrubber	HCl Mist-35	
✓ PAC Dryer-II	5.5 m ³ /hr	34	---	Water Scrubber	HCl Mist-35	
Chloro sulphonic Acid	1.5 m ³ /hr	30	---	H ₂ SO ₄ scrubber	SO ₃ -50	
	1.5 m ³ /hr	30	---	Water Scrubber,	HCl Mist-35, PM-50	
CPW Plant	5 m ³ /hr	34	---	Water Scrubber	HCl Mist-35	
				Alkali Scrubber	Cl ₂ -15	
Calcium Chloride Plant	5 m ³ /hr	34	---	Water Scrubber	HCl Mist-35	
✗ D.G. Sets	2 x 2000 KVA	30	Diesel	Acoustic enclosure, Muffler,	As per CPCB/MoEFCC	

2. Ambient air quality at the boundary of the industry/unit premises shall be monitored and reported to the Board regularly on quarterly basis: The Ambient air quality norms are prescribed in MoEF gazette notification no. GSR/826(E), dated: 16/11/09. Some of the parameters are as follows:

- Particulate Matter (less than 10 micron) - 100 µg/m³ (PM10 µg/m³ 24 hrs. basis)
- Particulate Matter (less than 2.5 micron) - 60 µg/m³ (PM2.5 µg/m³ 24 hrs. basis)
- Sulphur Dioxide [SO₂] (24 hrs. Basis) - 80 µg/m³
- Nitrogen Oxides [NO_x] (24 hrs. Basis) - 80 µg/m³
- Carbon Monoxide [CO] (8 hrs. Basis) - 2000 µg/m³

3. The industry shall take adequate measures for control of noise level generated from industrial activities within the premises less than 75 dB(A) during day time and 70 dB(A) during night time.

4. The industry/unit shall make the necessary arrangements for control of the fugitive emission from any source of emission/section/activities.

5. All other fugitive emission sources such as leakages, seepages, spillages etc shall be ensured to be plugged or sealed or made airtight to avoid the public nuisance.

6. The industry/ unit shall ensure all necessary arrangements for control of odour nuisance from the industrial activities or process within premises

7. All the internal roads shall be made pucca to control the fugitive emissions of particulate matter generated due to transportation and internal movements. Good housekeeping practices shall be adopted to avoid leakages, seepages, spillages

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etc.

8. Industry shall take effective steps for extensive tree plantation preferably of the local tree species within or around the industry/unit premises for general improvement of environmental conditions and as stated in below. **(Minimum number of plants to be planted by the unit:-59200)**

Additional Air condition:-

1. Online real-time emission monitoring systems shall be installed, operated and maintained at all emission points and shall remain connected to MPPCB, ESC, Bhopal all the time. For any break down, immediate intimation shall be sent.
2. The industry shall install adequate numbers of the HCl mist & Chlorine detection sensors within the plant premises and the same shall be connected to the public display system .
3. The industry shall submit the sources emission monitoring report to the Board regularly on monthly basis to ensure the emission within norms and effective performance of the scrubbers.

GENERAL CONDITIONS:

1. The non hazardous solid waste arresting in the industry/unit/unit premises sweeping, etc. be disposed off scientifically so as not to cause any nuisance/pollution. The applicant shall take necessary permission from civic authorities for disposal to dumping site. If required.

Non Hazardous Solid wastes:-

Type of waste	Quantity	Disposal
STP Sludge	4.167 MT	Composting and used as manure or land fill after composting
Food Waste	0.833 MT	
Glass Waste	0.167 MT	The materials to be sold to the authorized and consented actual users and the intimation of each dispatch shall be given to the Board
PVC Frills Cooling Tower	0.167 MT	
Paper wastes, Waste Carton, Discarded Poster, Carpet	0.833 MT	
Wooden Waste	8.330 MT	
General Trash/Refuse, Gardening Waste	8.330 MT	
Metal Scrap, Valve & Pipe, Copper & Aluminium Cables	83.330 MT	
Discarded Equipment/machinery	8.330 MT	
Construction and Demolition Waste	83.330 MT	As per Construction and demolition Rules 2016, disposal shall be ensured
Other Sludge (Drain & Pit)	25.00 MT	
CaCl ₂	291.670 MT	It shall be given to the actual users

2. The applicant shall allow the staff of Madhya Pradesh Pollution Control Board and/or their authorized representative, upon the representation of credentials:
 - a. To inspect raw material stock, manufacturing processes, reactors, premises etc to perform the functions of the Board.
 - b. To enter upon the applicant's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this Consent.
 - c. To have access at reasonable times to any records required to be kept under the terms and conditions of this Consent.
 - d. To inspect at reasonable times any monitoring equipment or monitoring method required in this Consent: or,
 - e. To sample at reasonable times any discharge or pollutants.
3. This consent is transferable in nature, in case of any change in ownership / management, the new owner / partner / directors / proprietor shall immediately apply for the consent with new requisite information.
4. The issuance of this Consent does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorise any invasion of personal rights, nor any infringement of Central, State or local laws or regulations.

Consent No:AW-56933



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5. Industry shall install separate electric metering arrangement for running of pollution control devices and this arrangement shall be made in such fashion that any non functioning of pollution control devices shall immediately stop electric supply to the production and shall remain tripped till such time unless the pollution control device/devices are made functional. The record of electricity consumption for running of pollution control equipment shall be maintained and submitted to the Board every month
6. This consent is granted in respect of Water pollution control Act 1974 or Air Pollution Control act, 1981 only and does not relate to any other Department/Agencies. License required from other Department/Agencies have to be obtained by the unit separately and have to comply separately as per there Act / Rules.
7. Balance consent fee, if any shall be recoverable by the Board even at a later date.
8. The applicant shall submit such information, forms and fees as required by the board not letter than 180 day prior to the date of expiration of this consent.
9. The industry/unit shall establish a separate environmental cell, headed by senior officer of the unit for reporting the environmental compliances. The industry/ Unit shall submit environmental statement for the previous year ending 31st March on or before 30th September every year to the Board.
10. Industry shall obtain membership of Emergency Response Center of the Board if needed.
11. Knowingly making any false statement for obtaining consent or compliance of consent conditions shall result in the imposition of criminal penalties as provided under the section 42(g) of the Water Act or section 38 (g) of the Air Act.
12. After notice and opportunity for the hearing, this consent may be modified, suspended or revoked by the Board in whole or in part during its term for cause including, but not limited to, the following :
 - (a) Violation of any terms and conditions of this Consent.
 - (b) Obtaining this Consent by misrepresentation of failure to disclose fully all relevant facts.
 - (c) A change in any condition that requires temporary or permanent reduction or elimination of the authorized discharge.
13. On violation of any of the above-mentioned conditions the consent granted will automatically be taken as canceled and necessary action will be initiated against the industry.

Additional condition:-

1. The Industry shall operate & maintain Outdoor HD Industrial grade IP (Internet Protocol) Cameras with pan-Tilt Zoom (PTZ) feature, minimum focal length 20X with night vision facility and temper proof mechanism at suitable location to display all emission sources and effluent discharge point and connect the same with Environment Surveillance Centre, MP Pollution control board Bhopal for remote surveillance.
2. The industry shall inventorise the solid waste generation from the unit and submit the details within one month to the board and update same within 06 months for actual quantities.
3. The industry shall obtain the public liability insurance under Public Liability Act 1991 and shall maintain valid copy of the same.
4. The industry shall maintain valid Onsite Emergency Plan/ Disaster Management Plan duly approved by Department of Industrial Health & Safety.
5. The industry shall obtain membership of Emergency Response Center, MPPCB, Bhopal.
6. The industry shall comply with the all conditions of CREP Charter conditions, EC stipulations issued vide F No. 11011/119/2015- IA-I(I) dated 07/01/2020 and standards notified by Ministry of Environment, Forests and Climate Change, GoI, Dehli under EPA 1986 .
7. The industry shall not be permitted to store the hazardous wastes more than 90 days as prescribed in HOWM Rules, 2016 and firm arrangements shall be made with the end users and copy of MoUs shall be submitted within 03 months to the Board.
8. Based on hazard identification and risk analysis, risk mitigation measures, industry shall ensure all possible efforts with coordinations local bodies to reduce risk and enhance safety at the plant and its surroundings.
9. The industry shall maintain the material balance for each product and submit the same to the Board annually.

Consent No. AW-58935



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10. Information of each Mock drill shall be given to local body, local administration & MPPCB RO, Ujjain atleast 07 days in advance.
11. The fire safety arrangements shall be maintained properly and tested during each mock drill.

Renewal of Consent as required under the Water (Prevention & Control of Pollution) Act, 1974 & The Air (Prevention & Control of Pollution) Act, 1981 is granted to your industry subject to fulfillment of all the conditions mentioned above. For further renewal purpose you shall have to make an application to this Board through XGN at least Six months before the date of expiry of this consent. The applicant without valid consent (for operation) of the Board shall not bring in to use any outlet for the discharge of effluent and gaseous emission.

For and on behalf of
M.P. Pollution Control Board

By the order of Chairman, MPPCB

ACHYUT ANAND MISHRA
Member Secretary

Seeding from UIDAI
eSign SERVER
Digitally Sign with Aadhaar

(Organic Authentication on AADHAR from UIDAI Server)
TPAV # 6B9SD8F9F6

Consent No:AW-56933

2nd April 2018

The Member Secretary
Madhya Pradesh Pollution Control Board
Bhopal

Dear Sir,

Sub: Implementation of zero liquid discharge scheme at Grasim – Chemical Division, Nagda

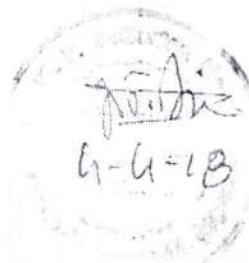
I am happy to inform that we have completed the Zero Liquid Discharge project at Grasim – Chemical Division, Nagda.

The project was mechanically complete on 30th March 2018 and trials were started from 31st March '18. We have started getting dry salt from MEE & ATFD section of the project. The project would be stabilized in next few days for operating the plant continuously and meeting zero liquid discharge status.

We thank you for your support in implementation of Zero Liquid Discharge project at Grasim – Chemical Division, Nagda.

Regards

Suresh Sodani
President & Unit Head
Grasim - Chemical Division



Copy to : The Regional Officer
Madhya Pradesh Pollution Control Board
17, Bharat Puri, Ujjain

Chemical Division



Annexure-06

भारत सरकार / Government of India
वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन /Petroleum & Explosives Safety Organisation (PESO)
ई - 7/77, द्वितीय तल, लाला लाजपत राय सोसाइटी, 12 नंबर बस स्टॉप के पास, अरेरा कालोनी
भोपाल- 462016
E - 7/77, IInd Floor, Lala Lajpat Rai Society, Near 12 No. Bus Stop, Arera Colony, Bhopal - 462016

ईमेल /E-mail : dyccebhopal@explosives.gov.in
दूरभाष /Phone/Fax No : (0755) 2445270/2420776/4293966 FAX
2429997

सं/No : G/HO/MP/05/158 & G/HO/MP/06/134(G20631)

दि/Dated : 20/07/2022

सेवा में /To,

M/S. GRASIM INDUSTRIES LTD,
BIRLAGRAM NAGDA,
Nagda,
Nagda,
Taluka: Nagda,
District: UJJAIN
State: Madhya Pradesh
Pin : 456331

विषय/Sub : Plot No. -, BIRLA GRAM NAGDA, BIRLA GRAM NAGDA, Nagda, Taluka: Nagda, District: UJJAIN, State: Madhya Pradesh, Pin : 456331 में सिलिण्डरों में CHLORINE गैस का भरण-एवं भण्डारण / स्टोराज- गैस सिलिण्डर, सं नियम, 2016 के अंतर्गत फार्म 'इ' एवं 'एफ' में जारी अनुज्ञप्ति सं. G/HO/MP/05/158 & G/HO/MP/06/134(G20631) नवीकरण के बारे में / Filling of CHLORINE and Storage of CHLORINE at Plot No. -, BIRLA GRAM NAGDA, BIRLA GRAM NAGDA, Nagda, Taluka: Nagda, District: UJJAIN, State: Madhya Pradesh, Pin : 456331 Licence No. G/HO/MP/05/158 & G/HO/MP/06/134(G20631) granted in Form E & F of Gas Cylinders Rules, 2016 - Renewal regarding

महोदय/Sir(s),

कृपया आपके दि. 20/07/2022 के पत्र सं. OIN1105819 का संदर्भ ग्रहण करें/ Please refer to your application No.OIN1105819 dated 20/07/2022 .

अनुज्ञप्ति संख्या G/HO/MP/05/158 & G/HO/MP/06/134 30th Septemebr, 2032 तक नवीनीकृत कर भेजी जा रही है / Licence Number: G/HO/MP/05/158 & G/HO/MP/06/134 is renewed and valid upto 30th Septemebr, 2032 as required under Rule 55(5) of Gas Cylinders Rules, 2016.

कृपया नोट करें कि गैस सिलिण्डर नियम, 2016 के नियम 55(5) के अनुसार, अनुज्ञप्ति के पुनः नवीकरण हेतु आवेदन The Jt. Chief Controller of Explosives, Bhopal Circle, Bhopal (M.P.) इस कार्यालय को इस अनुज्ञप्ति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2032 को या इससे पूर्व) जमा कर दें। दिनांक 30 सितम्बर 2032 के पश्चात परंतु दिनांक 30 सितम्बर 2033 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलिण्डर नियम, 2016 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचाराधीन होगा। दिनांक 30 सितम्बर 2033 तक कोई नवीनीकरण आवेदन प्राप्त नहीं होने की स्थिति में यह अनुज्ञप्ति स्वतः निरस्त हो जाएगी। /Please note that application for renewal of the licence should be submitted so as to reach the The Jt. Chief Controller of Explosives, Bhopal Circle, Bhopal (M.P.) before the licence expires (i.e. on or before 30th Septemebr, 2032) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for renewal of licence received after 30th Septemebr, 2032 but not later than 30th September, 2033 shall be considered only with late fee applicable vide Rule 55(7) (a)/(b) of said Rules. The licence will automatically expire if no application is received upto 30th Septemebr, 2033 .

कृपया इस पत्र की प्राप्ति की पावती दें/ Please acknowledge the receipt of the same.

भवदीय /Yours faithfully,

((तेजवीर सिंह)
(Tejveer Singh))
उप विस्फोटक नियंत्रक
Dy. Controller of Explosives
कृते संपुक्त मुख्य विस्फोटक नियंत्रक
For Jt. Chief Controller of Explosives
भोपाल/Bhopal

[अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए कृपया हमारी वेबसाइट <http://peso.gov.in> देखें।]
(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)

Note:-This is system generated document does not require physical signature.

Digitally signed by TEJVEER SINGH
Reason: Licence No. : G/HO/MP/05/158 & G/HO/MP/06/134
Location: Bhopal [G20631]
Date: 2022.07.20 04:58:33 +05:30



भारत सरकार /Government of India
वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन /Petroleum & Explosives Safety Organisation (PESO)
ई - 7/77, द्वितीय तल, लाला लाजपत राय सोसाइटी, 12 नंबर बस स्टॉप के पास, अरेरा कालोनी
भोपाल- 462016

E - 7/77, IInd Floor, Lala Lajpat Rai Society, Near 12 No. Bus Stop, Arera Colony, Bhopal - 462016

ईमेल/E-mail :
dyccebhopal@explosives.gov.in

दूरभाष/Phone/Fax No : (0755)
2445270/2420775/4293966 FAX
2429997

सं/No : G/CC/MP/06/748(G15845)

दि/Dated : 24/09/2021

सेवा में/To,

M/S GRASIM INDUSTRIES LTD. ,
BIRLAGRAM NAGDA,
City: Nagda,
Taluka: Nagda,
District: UJJAIN
State: Madhya Pradesh
Pin : 456331

विषय/Sub Plot No: -, BIRLAGRAM, Village/Town: BIRLAGRAM , City: Nagda, Taluka: Nagda,
District: UJJAIN, State: Madhya Pradesh, Pin : 456331 - में सिलेंडरों में CHLORINE गैस का
भंडारण- गैस सिलेंडर नियम, 2016 के अंतर्गत नवीकरण के बारे में/Storage of CHLORINE gas in
cylinders at Plot No: -, BIRLAGRAM, Village/Town: BIRLAGRAM , City: Nagda, Taluka:
Nagda, District: UJJAIN, State: Madhya Pradesh, Pin : 456331 - under Gas Cylinders
Rules, 2016 - Renewal regarding.

Sir(s),

कृपया आपके दि. 24/09/2021 के आवेदन सं. OIN863240 का संदर्भ ग्रहण करें/Please refer to your
application No.OIN863240 dated 24/09/2021 .

30th September 2026 तक विधिमान्य अनुज्ञप्ति संख्या G/CC/MP/06/748 इसके साथ नवीकरण कर
अप्रेषित की जा रही है।/ Licence Number: G/CC/MP/06/748 is renewed and valid upto
30th September 2026 is forwarded herewith.

कृपया नोट करें कि गैस सिलेंडर नियम, 2016 के नियम 55(5) के अनुसार, अनुज्ञप्ति के पुनः नवीकरण हेतु
आवेदन, इस कार्यालय को इस अनुज्ञप्ति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2026 को या इससे
पूर्व) जमा कर दें। दिनांक 30 सितम्बर 2026 के पश्चात परंतु दिनांक 30 सितम्बर 2027 से पूर्व प्राप्त
नवीनीकरण आवेदन, गैस सिलेंडर नियम, 2016 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही
विचाराधीन होगा। दिनांक 30 सितम्बर 2027 तक कोई नवीनीकरण आवेदन प्राप्त नहीं होने की स्थिति में यह
अनुज्ञप्ति स्वतः निरस्त हो जाएगी।/Please note that application for renewal of the licence should be
submitted so as to reach this office before the licence expires (i.e. on or before 30th
September, 2026) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for
renewal of licence received after 30th September, 2026 but not later than 30th September,
2027 shall be considered only with late fee applicable vide Rule 55(7) (a)(b) of said Rules.
The licence will automatically expire if no application is received upto 30th September, 2027.

कृपया इस पत्र की प्राप्ति की पावती दें।/Please acknowledge the receipt of the same.

भवदीय/Yours faithfully,

((वजी उद्दीन)
(Wajiuddin)

LIST OF SENSORS				
S NO	Sensor detail	Plant	Location	Detection Limit
1	Cl2	Cl2 MC2	Bullet Tank 701A Front	20 ppm
2	Cl2	Cl2 MC2	Bullet Tank 701A Rear	20 ppm
3	Cl2	Cl2 MC2	Bullet Tank 701C Front	20 ppm
4	Cl2	Cl2 MC2	Bullet Tank 701C Rear	20 ppm
5	Cl2	Cl2 MC2	Bullet Tank 701E Front	20 ppm
6	Cl2	Cl2 MC2	Bullet Tank 701E Rear	20 ppm
7	Cl2	Cl2 MC2	Near Bullet Tank Cl2 Pump	20 ppm
8	Cl2	Cl2 MC2	New Cl2 Comp	20 ppm
9	Cl2	Cl2 MC2	Cl2 Drying Tower	20 ppm
10	Cl2	Cl2 MC2	Cl2 Equaliser	20 ppm
11	Cl2	Cl2 MC2	Cl2 FPD Furnace	20 ppm
12	Cl2	Cl2 MC2	Cl2 Cl2 Comp	20 ppm
13	Cl2	Cell House MC-7	Cell House	20 ppm
14	Cl2	Cell House MC-7	Cell House	20 ppm
15	Cl2	Cell House MC-7	Cell House	20 ppm
16	Cl2	Cell House MC-7	Cell House	20 ppm
17	Cl2	Cell House MC-7	Cell House	20 ppm
18	Cl2	Cl2 MC2	H2 Analysis near Cl2 Dome	20 ppm
19	Cl2	Cl2 MC2	Sniff Trap	20 ppm
20	Cl2	Cl2 MC2	Steps 2/3 Floor	20 ppm
21	Cl2	Cl2 MC2	Cl2 Vaporiser	20 ppm
22	Cl2	Cl2 MC2	Cl2 Vaporiser	20 ppm
23	Cl2	MC-1	MC-1 HYPO PLANT	20 ppm
24	Cl2	MC-1	MC-1 Cl2 COMP	20 ppm
25	Cl2	MC-1	MC-1 Cl2 Between TK A/B	20 ppm
26	Cl2	MC-1	MC-1 Cl2 Between TK B/C	20 ppm
27	Cl2	MC-1	MC-1 Cl2 Between TK C/D	20 ppm
28	Cl2	MC-1	MC-1 Cl2 Between TK D/E	20 ppm
29	Cl2	MC-1	MC-1 Cl2 Between TK E/F	20 ppm
30	Cl2	MC-1	MC-1 Cl2 TK F - another side	20 ppm
31	Cl2	MC-1	MC-1 Cl2 TK A - another side	20 ppm
32	HCl	MC-1	MC-1 HCl Furnace C	20 ppm
33	HCl	MC-1	MC-1 HCl Furnace H	20 ppm
34	HCl	MC-1	HCl Tank 02	20 ppm
35	HCl	MC-1	HCl Tank 13	20 ppm
36	HCl	MC-1	HCl Tank 11	20 ppm
37	Cl2	MC-1	Main Gate	20 ppm
38	Cl2	MC-1	GyanKuteer	20 ppm
39	Cl2	MC-1	Laxess & Substation	20 ppm
40	Cl2	MC-1	Cl2 Equaliser	20 ppm
41	Cl2	MC-1	Laxess Vaporizer 04	20 ppm
42	HCl	MC-1	Laxess Vaporizer 01	20 ppm
43	HCl	MC-1	CSA PLANT	20 ppm
44	Cl2	MC-1	MC-1 Cell House	20 ppm
45	Cl2	MC-1	CSA PLANT	20 ppm
46	Cl2	VAP	Cl2 Bottling Near Degussa Header	20 ppm
47	Cl2	VAP	Cl2 Bottling Near Pass 47	20 ppm
48	Cl2	VAP	Cl2 Bottling Near Post 01	20 ppm
49	Cl2	VAP	Cl2 Bottling Cylinder Stacking Area	20 ppm
50	Cl2	VAP	Boundary wall near Swastik corner	20 ppm
51	Cl2	VAP	Steel plant security post	20 ppm
52	Cl2	VAP	At Stack Stower ladder	20 ppm
53	Cl2	VAP	At Boundary wall corner	20 ppm
54	Cl2	VAP	At road side security post	20 ppm
55	Cl2	VAP	Near Govil Gass	20 ppm
56	HCl	VAP	Near Govil Gass	20 ppm
57	Cl2	VAP	Peris Gate	20 ppm
58	HCl	VAP	3rd Dryer Area	20 ppm
59	Cl2	VAP	Liquid Area Near	20 ppm
60	Cl2	VAP	At 1st phase godown side 56	20 ppm
61	Cl2	VAP	At 1st phase godown railway track side 52	20 ppm
62	Cl2	VAP	At 1st phase godown railway track side 53	20 ppm
63	Cl2	VAP	At 1st phase godown railway track side 51	20 ppm
64	Cl2	VAP	At 3rd phase godown 1 & 2nd phase side 52	20 ppm
65	Cl2	VAP	At 3rd phase godown CACL2 side 52	20 ppm
66	Cl2	VAP	At 3rd phase godown CACL2 side 53	20 ppm
67	HCl	VAP	CP Plant NEAR BARDANA WALL	20 ppm
68	HCl	VAP	PAC Liquid plant	20 ppm
69	Cl2	VAP	SBP PLANT near III phase Cl2 tank	20 ppm
70	Cl2	VAP	SBP PLANT at III phase godown Air washery area 55	20 ppm
71	Cl2	VAP	SBP PLANT at III phase godown 1 & II nd phase side	20 ppm
72	Cl2	VAP	SBP PLANT AT III PHASE VACUUMS14	20 ppm
73	Cl2	VAP	SBP PLANT AT III PHASE FILLING AREA(S15)	20 ppm
74	Cl2	VAP	SBP PLANT AT III PHASE Cl2 HEAD R(S16)	20 ppm
75	Cl2	VAP	SBP PLANT AT III PHASE VACUUMS17	20 ppm
76	Cl2	VAP	SBP PLANT AT III PHASE FILLING AREA(S18)	20 ppm
77	Cl2	VAP	SBP PLANT AT III PHASE Cl2 HEAD R(S19)	20 ppm
78	HCl	VAP	HCl sensor in III plant towards govil gas	20 ppm
79	Cl2	VAP	Cl2 sensor in III plant towards govil gas	20 ppm
80	Cl2	VAP	Cl2 sensor at 3rd Gate	20 ppm
81	HCl	VAP	Near HCl pump in CPW	20 ppm
82	Cl2	VAP	CPW Plant Security post at Bardana wall	20 ppm
83	Cl2	VAP	CPW Plant reactor area	20 ppm
84	Cl2	VAP	CPW Plant Cl2 filter area	20 ppm
85	HCl	VAP	Middle of Bardana wall	20 ppm
86	Cl2	VAP	Cl2 Bottling Near Post R1	20 ppm
87	Cl2	VAP	Cl2 Bottling Near Unloading Area	20 ppm
88	Cl2	VAP	Cl2 Bottling Despatch Area	20 ppm

Total Cl2 Sensors	74
Total HCl Sensors	14





शंलतक-1

Annexure-10

GRCD/P&QC/06/

26.09.06

To,
Member Secretary
M.P Pollution Control Board,
Prayavaran Parisar,
E--5, Arera Colony
Bhopal

Ref: Closure of Mercury cell plant as per consent conditions for switchover of technology from Mercury Cell to Membrane Cell Caustic Soda plant technology.

Dear Sir,

As per condition no-4 mentioned in the note of your letter no. 3545/TS/MPPCB/2006 granting us the "Permission to establish the unit for switchover of technology from Mercury cell to Membrane cell technology, we wish to inform you that we have completely closed down our plant based on Mercury cell technology since 22nd September-2006.

Further we wish to submit that we have completed the entire civil, mechanical and instrumentation related erection works and we are ready for trial commissioning of plant.

We request you to kindly grant us "**Consent to operate**" at the earliest.

Thanking you

Yours faithfully

For Grasim Chemical Division

N.K. Dubey
General Manager (P&QC)

Cc: **REGIONAL OFFICER**
M.P. Pollution Control Board
17, Bharatpuri

Ujjain (M.P)
Cc: **SUB-REGIONAL OFFICER**
M.P. Pollution Control Board
HIG-1, Ingoriya road, Nagda (M.P)

GRASIM INDUSTRIES LIMITED (CHEMICAL DIVISION)

An ISO 9001, 14001, SA 8000 and OHSAS 18001 Certified Company
NAGDA 456 331 (M.P.) INDIA Tel. : 0091-7366 - 245501-03/245353/246760-66 Fax : 0091-7366-246767/245846/246097
E-Mail : grasimchem@adityabirla.com Website : www.grasimchem.com



ENVIRONMENTAL ASSESSMENT FOR EVALUATING THE STRENGTH OF ABANDONED SECURED LANDFILL SITE OF M/s. GRASIM INDUSTRIES LTD, NAGDA, MADHYA PRADESH

APRIL 2021

SPONSOR
CHEMICAL DIVISION,
GRASIM INDUSTRIES LTD.,
NAGDA, MADHYA PRADESH 57



6.0 SUMMARY & CONCLUSIONS

A systematic study on assessment for evaluating the strength of abandoned secured land fill (SLF) site of Grasim Chemical Division, Nagda was conducted through investigating the groundwater and sludge/soil quality in and around SLF site by monitoring the piezometers/bore wells/hand pumps/open wells as well as mercury bearing sludge and soils within 5km radius of the SLF. Two new borewells, one each in upstream and downstream were drilled near to the SLF site and groundwater samples were collected from various depths at each drilling site. The field work was conducted in the study area for collecting the groundwater samples from peizometers (6 nos.), wells (28 nos. of bore wells/tube wells/hand pumps/dug wells), new drilled wells (2 nos) and soil/sludge samples. The collected samples were analyzed for assessing the strength of SLF site and its impacts on groundwater and soil quality in the surrounding area.

The pH of water samples was normal and ranged from 6.82 to 7.87. Groundwater temperatures were recorded more than 25°C in majority of samples of study area and this may be attributed to local climatic conditions. The total dissolved solids values varied from 315 to 3535mg/l and high TDS levels may be due to leaching of major cations/anions from the underlying rocks in the study area. The underlying rocks consist of deccan trap basalts. Basalts (contains olivine, quartz, nepheline etc) chemically consist of aluminium, sodium, magnesium, calcium, potassium and iron oxides which increase the TDS of the groundwater samples. The alkalinity values in study area are ranged from 92 to 524mg/l. The sodium concentration ranged from 33 to 655mg/l.

The chloride concentration in groundwater ranged from 100 to 1220mg/l in the study area. The high chloride concentration may be attributed to the underlying rocks that make the water saline which increase the chloride concentration in water. The sulphate concentration varied from 2 to 177mg/l while the fluoride levels ranged from 0.1 to 1.18 mg/l in the study area and both parameters were within the permissible limits as per BIS. The total hardness content ranged from 60 to 1000mg/l and more than 12 locations exhibited the values above the BIS limits (600 mg/l). More than 95% of the samples displayed Mg and Ca levels above the permissible WHO permissible limit of 50mg/l and 75mg/l, respectively. High values of Na in ground water at few locations could be due to the underlying basaltic rocks in the study area. The heavy metal concentrations in groundwater of the study area revealed that all metals were within the limits of BIS except for the aluminium, cadmium, iron, manganese, lead. The high levels of these metals may be attributed to the underlying geological rocks that include weathered basalts and alluvium etc. All these rocks contain the heavy metals like aluminium, cadmium, iron, manganese and lead etc which contribute to the elevated levels in groundwater. Both Fe and Aluminium are the highly abundant metallic elements in groundwater of Nagda area due to the dissolution of underlying basaltic rocks.

The groundwater parameter analysis has been performed by the hydrochemical diagrams viz., Piper Plot, Gibbs Plot using AQUACHEM software for identifying the sources of the dissolved constituents in water. Piper plot revealed that most of the samples are in the order of mixed Na-Cl-CO₃ >Na-Mg-Ca-CO₃-Cl >Na-Ca-Cl. The vast majority of samples are mixed Na-Ca-Cl-HCO₃, Na-Mg-Ca-CO₃-HCO₃-Cl, Na-Ca-Cl water types suggest mineral dissolution, an interaction between rock and water. The cation and anion Gibbs plots indicates that the samples fall in the rock dominance. Thus, the hydrochemical diagrams displayed the mechanisms that control the chemistry of groundwater chemistry from the relationship of chemical components with their respective lithologies in the aquifer, representing the water-rock interaction.

The weighted arithmetic average method used for the calculation of groundwater quality index considering the maximum permissible limits of BIS. The groundwater quality index values in the study area ranged from 19 to 291, indicating the status of groundwater quality ranges from excellent to unsuitable for drinking.

Twenty soil samples were collected from sixteen locations to assess the soil quality in and around the SLF site. Samples were collected from various depths of 0-15 cm, 15-30 cm and 30-45 cm at each of the identified locations near SLF and from 15-30 cm depth from locations of surrounding area. Fine sand (29.95 to 68.28%) and coarse sand (1.18 to 44.47%) content are found to be higher followed by silt content (0.22 to 56.03 %) in the soils of study region. The porosity of soil samples found in the range of 32.2-56.4%, as the soils of the study area are mostly sandy loam in texture. Many soil samples are moderately alkaline to strongly alkaline in nature with pH variation from 7.2 to 9.0 and Non-Salinized to weakly salinized range with respect to Chloride. The heavy metal concentrations including mercury in the soils are below the screening level for Industrial area as per MoEF&CC Guidelines for contaminated sites in India.

The mercury bearing sludge, top soil and ash samples were collected from secured landfill site analyzed for various physico chemical parameters and heavy metals including mercury. Top soil, ash and sludge samples are strongly alkaline in nature with pH variation from 8.6 to 11. Electrical conductivity (EC) of sludge and ash layer have been observed to be 3.51 mS/cm and 4.2mS/cm, respectively, indicating both sludge and ash layer were observed to be highly saline. Concentration of Mercury in the sludge (9.44 mg/kg) were found to be more as compared to top soil (0.28 to 1.72 mg/kg) and ash layer (7.36 mg/kg). TCLP analysis of mercury bearing sludge and ash layer were carried out to determine inorganic analytes in the leachate and observed that heavy metals were below TCLP concentration Limit as per Hazardous and Other Wastes (Management &Transboundary Movement Rules, 2016).

Therefore, possibility of leaching of metals including mercury from the mercury bearing sludge and ash layers from the secured landfill is minimal. Two locations, one each in upstream and downstream of secured land fill site were identified for drilling borewells and groundwater samples were collected from various depths at each location in order to assess the strength of the SLF. Mercury levels in the groundwater, collected from drilled sites, were below detectable levels. The groundwater quality of the monitored locations in the path of groundwater flow from SLF indicates that mercury was below detectable level. Furthermore, the new drilled borewells also did not show mercury levels in the groundwater. Based on the TCLP analysis of mercury bearing sludge and the groundwater quality, no leaching of mercury from the SLF was observed. This indicates that the SLF has the capacity of not allowing the chemicals from sludge to the groundwater and the SLF site is intact.

The present study revealed that the mercury sludge in SLF is stabilized and there is no considerable evidence for leaching of mercury from SLF. Geologically, the study area is comprised of Basalts rocks and have no permeability. However, the groundwater as well as soil quality surrounding the SLF site need to be monitored on annual basis.

Online Pollution Monitoring Portal

Annexure-12

Site Name: Grasim Industries Ltd. New Caustic Soda

From Date: 2023/08/01 To Date: 2023/08/25

Report Name: Custom Report

Report Created by GILNCSU on 2023-09-02 15:44:47

SI No.	Time	AQMS_GRCD Campus- PM10_U	AQMS_GRCD Campus- PM2.5_U	AQMS_GRCD Campus- CO_U	AQMS_GRCD ampus-SOx_U	AQMS_GRCD Campus- NOx_U	AQMS_GRCD Campus- HCL_U	AQMS_GRCD Campus- Chlorine_U	AQMS_Durga pura-HCL_U	AQMS_Durgapura- Chlorine_U	AQMS_Temple GH-HCL_U	AQMS_Temple GH-Chlorine_U
1	2023-08-01 00	68.56	15.14	0.14	0.71	1.28	0	0	0	0.01	0	0.03
2	2023-08-02 00	73.14	20.24	0.16	0.73	1.25	0	0	0	0.01	0	0.03
3	2023-08-03 00	74.13	22.93	0.15	0.69	1.25	0	0	0	0.01	0	0.03
4	2023-08-04 00	76.35	34.57	0.16	0.71	1.8	0	0	0	0.01	0	0.03
5	2023-08-05 00	69.61	22.02	0.16	0.73	1.25	0	0	0	0.01	0	0.03
6	2023-08-06 00	70.88	22.92	0.16	0.68	1.25	0	0	0	0.01	0	0.03
7	2023-08-07 00	52.89	21.92	0.15	0.75	1.24	0	0	0	0.01	0	0.03
8	2023-08-08 00	67.29	22.57	0.16	0.74	1.26	0	0	0	0.01	0	0.03
9	2023-08-09 00	65.63	30.4	0.15	0.75	1.26	0	0	0	0.01	0	0.03
10	2023-08-10 00	57.05	24.59	0.15	0.7	4.35	0	0	0	0.01	0	0.03
11	2023-08-11 00	85.21	28.29	0.15	0.73	1.27	0	0	0	0.01	0	0.03
12	2023-08-12 00	64.74	27.15	0.16	0.74	1.26	0	0	0	0.01	0	0.03
13	2023-08-13 00	57.88	23.77	0.16	0.69	1.25	0	0	0	0.01	0	0.03
14	2023-08-14 00	51.75	20.8	0.17	0.7	1.27	0	0	0	0.01	0	0.03
15	2023-08-15 00	68.01	27.49	0.16	0.69	1.86	0	0	0	0.01	0	0.03
16	2023-08-16 00	101.8	27.82	0.15	0.69	1.26	0	0	0	0.01	0	0.03
17	2023-08-17 00	96.21	44.82	0.16	0.7	1.26	0	0	0	0.01	0	0.03
18	2023-08-18 00	105.62	38.33	0.15	0.69	1.82	0	0	0	0.01	0	0.03
19	2023-08-19 00	135.75	41.63	0.15	0.7	1.31	0	0	0	0	0	0.03
20	2023-08-20 00	78.9	33.96	0.15	0.69	1.27	0	0	0	0	0	0.03
21	2023-08-21 00	44.59	22.15	0.15	0.71	1.29	0	0	0	0.01	0	0.03
22	2023-08-22 00	71.14	51.59	0.16	0.71	1.25	0	0	0	0.01	0	0.03
23	2023-08-23 00	51.8	23.63	0.16	0.66	1.29	0	0	0	0.01	0	0.03
24	2023-08-24 00	55.37	17.91	0.15	0.73	1.26	0	0	0	0.01	0	0.03
25	2023-08-25 00	67.4	24.82	0.16	0.68	1.27	0	0	0	0.01	0	0.03
26	Prescribed	0 -	0 -	0 -	0 -	0 -	0 -	0 -	0 -	0 -	0 -	0 -
27	Maximum Value	135.75	51.59	0.17	0.75	4.35	0	0	0	0.01	0	0.03
28	Maximum Value	2023-08-19	2023-08-22	2023-08-14	2023-08-07	2023-08-10	2023-08-01	2023-08-01	2023-08-01	2023-08-01 00	2023-08-01 00	2023-08-01 00
29	Minimum Value	44.59	15.14	0.14	0.66	1.24	0	0	0	0	0	0.03
30	Minimum Value	2023-08-21	2023-08-01	2023-08-01	2023-08-23	2023-08-07	2023-08-01	2023-08-01	2023-08-01	2023-08-19 00	2023-08-01 00	2023-08-01 00
31	Geometric Mean	72.47	27.66	0.16	0.71	1.46	0	0	0	0.01	0	0.03
32	Median	68.56	24.59	0.16	0.7	1.26	0	0	0	0.01	0	0.03
33	Standard	20.12	8.76	0.01	0.02	0.63	0	0	0	0	0	0
34	Valid Data Points	25	25	25	25	25	25	25	25	25	25	25
35	Total Data Points	25	25	25	25	25	25	25	25	25	25	25
36	Data Availability %	100	100	100	100	100	100	100	100	100	100	100



GRCD/EHS/04

06.10.2021

To,
1-8/CGWB/NCR/TS/794
Central Ground Water Board
North Central Zone
Block I, Floor-IV, Paryavas Bhawan
Jail Road, Bhopal

Reference: Letter no. 1-8/CGWB/NCR/TS/794 received on 30.09.2021 via email.

Subject: Related to receiving of CGWA NOC, if extracting ground water.

Sir,

With reference to the above letter on the matter of applying CGWA NOC, we herewith submitting that Grasim Industries Limited, Chemical Division, Nagda does not have any borewell inside our plant premises and not extracting any ground water for any purpose. Hence the requirement for application of NOC from CGWA is not applicable for us.

Apart from this, we are having five numbers of Piezometer's installed in entire complex in past as per the consultation with MPPCB for the purpose and requirement of ground water quality monitoring.

Best Regards,

Vijay Ajmera
Caustic Soda Membrane Cell Unit-1
Grasim Industries Ltd,
Chemical Division
Birlagram Nagda

Grasim Industries Limited

Chemical Division

Birlagram, Nagda - 456 331 (M.P.) INDIA Telephone : + 91 7366 246760-66

E-mail : grasimchem@adityabirla.com Website : www.grasim.com CIN : L17124MP1947PLC000410

Regd. Office : P.O. Birlagram, Nagda - 456 331 (M.P.) India

कार्यालय कार्यपालन यंत्री, जल संसाधन संभाग, उज्जैन

पत्र क्र. 3634 / राजस्व / 2011-12 /

उज्जैन दिनांक 7/9/11

प्रति,

प्रबंधक,
ग्रेसिम उद्योग
नागदा।

विषय - अनुबंध 30 वर्षों के लिये मान्य करने बाबत।

संदर्भ - इस कार्यालय का पत्र क्रमांक 3821 / राजस्व / ग्रेसिम / 06 /
दिनांक 31-08-2006।

संदर्भित पत्र द्वारा औद्योगिक कार्य में उपयोग आने वाले जल का अनुबंध दिनांक 01-06-2006 से प्रथम बार दिनांक 31-05-2007 तक किया था, जो कि शासन के आदेशानुसार दिनांक 01-06-2006 से आगामी 30 वर्षों के लिये मान्य है। अनुबंध का भी अवलोकन करें, जिसमें 30 वर्ष के अनुबंध का प्रावधान है।

शासन द्वारा समय-समय पर जो भी जल दर निर्धारित/ पुनर्निर्धारित की जावेगी उसी के अनुरूप भुगतान बंधनकारी होगा।

सहपत्र :- शुन्य

[Signature]
कार्यपालन यंत्री,
जल संसाधन संभाग, उज्जैन
उज्जैन दिनांक

पृ. पत्र क्र. / राजस्व / 11 /
प्रतिलिपि:-

- (1) अधीक्षण यंत्री, जल संसाधन मण्डल उज्जैन।
- (1) अनुविभागीय अधिकारी जल संसाधन उपखण्ड खाचरोद की ओर सूचनार्थ प्रेषित।

[Signature]
कार्यपालन यंत्री,
जल संसाधन संभाग, उज्जैन

Copy of letter to Raj on 22/11/11
733

Copy of GM (Law)

Copy of agreement as decided. 4/7/11

AGREEMENT FORM FOR SUPPLY OF WATER TO INDUSTRIAL / POWER PLANTS
FORM-7 A
(See rule 71-A)

This agreement made on this day **01.04.2011** between the Governor of Madhya Pradesh acting through **Executive Engineer** Water Resources Department (here in after referred to as M.P.W.R.D.) which expression shall where the context so admits, include his successors assigned in the office of the first part and **Grasim Industries Ltd.** A company registered under the Indian Companies Act 1955 (No. 1 of 1956) and having its registered office at **Birgaon, Nagda** (herein after referred to as "the Company") which expression shall unless excluded by or repugnant to context meaning there of be deemed to include its successors assigned of the other part.

Where as the company has applied to the Government for permission to draw **1.25 Mcum (1250000 Cum)** of water per month from the **Chambal River at Nagda** (herein after referred to as "the said self constructed water source") for the use by the company's **Grasim Industries Ltd.** Plant located at **Birgaon, Nagda, district Ujjain** (herein after referred to as "the said plant" and laying underground and surface pipes and drains for discharge of factory effluent).

And where as the Government has agreed to grant the aforesaid permission to the company to use water from "the said self constructed water source" at their own cost on the terms and conditions hereafter appearing.

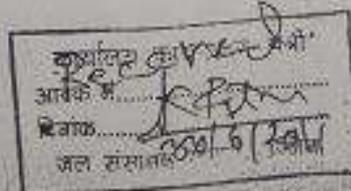
And whereas prior to the execution of these presents, the company has deposited with the Government, the sum of **Rs 37.50 Lakhs (Rs Thirty seven lakh Fifty Thousand Only)** being the water rates for the quantity of water to be drawn by the company in three months.

And whereas it has been agreed that the said sum of **Rs 37.50 Lakhs (Rs Thirty Seven Lakh Fifty Thousand Only)** will not bear any interest,

Now this agreement witness as under,

- (1) In Consideration of the company duly making payment to the government as herein after specified and duly observing and performing the covenants and conditions both herein contained Government hereby give permission to the company to draw **1250000 Cum** of water per month from the said self constructed water source to the company's said plant commencing six months before commissioning of the plant and for a term 30 years from the date of commissioning of the last unit. But during the pre commissioning period charges will be recovered as per actual use of water. The permission hereby granted shall be subject to the provisions of Madhya Pradesh Irrigation act 1931 (3 of 1931) amendments thereof and any executive orders issued in this behalf by the government from time to time and for the time being in force.


Dr. Prakash Maheshwari
Group Executive President
Grasim Industries Limited
Birgaon - 456331 (M.P.)

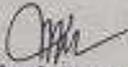


परमिशन देना
इसमें अंतर्भूत है
बताया गया है कि
(8 M) 125000 Cum

- (2) The company shall pay to the government water rates for water drawn by it from said self constructed water source at the rates fixed by water resources department memo no. 18/1/91/m/31/400 dated 14.02.2006 which is Fifteen paise per cum.
(Note: the rates, which are going to apply to the company, must be shown and not other rates). For the quantities drawn in excess of agreed quantities and for any unauthorized draw of water, 50% (Fifty percent) additional rates shall be charged in addition to the normal rates as specified above.

Government hereby reserves the right to revise the rates from time to time the said water rates to be paid by the company and company shall pay such revised water rates as may be fixed by government from time to time. Excepting the circumstances or short water supply specified in clause 4, the company shall any event, pay water charges for at least 90% of the total quantum of water to be drawn by under clause (1).

- (3) Where ever needed the company shall make its own arrangements at its own cost to use water either by construction of any civil engineering work which may include construction of pick up weir, barrage, dam, dug well, tube well etc. the design and drawing of such civil engineering facility will be prepared and submitted by the company for approval of the Water Resource Department. The concerning Chief engineer will give his decision with in thirty days. The decision of chief engineer shall be final.
- (4) Subject to the terms and conditions of this agreement nothing herein contained shall be deemed to imply any guarantee on the part of the government the uninterruptability in the supply of water during an event of force Majeure. The government shall also not responsible for such non supply or inadequate supply of water as a result of any event of force Majeure or for damages or for losses due to any event of Force Majeure. During an event of Force Majeure, the company shall not be liable for payment of any water charges except those pertaining to water already received for by the company for which payment is due and unpaid, which amount shall remain due and payable in accordance with terms of this agreement. Force Majeure shall include droughts and other similar natural disasters, war or other disasters which are beyond control of state government.
- (5) The company/corporation shall pay adequate compensation as determined by the competent authority to any person/persons affected due to submergence of land, property, public facilities etc. by the construction of the civil engineering works for creating the source of water supply.
- (6) The water from said self constructed water source shall be used by the company for the purposes of the company's said plant including water supply to the colony and shall not be misused by the company by sale of water to other customer. In event of any such sale of water by the company, without prejudice to the government's right to revoke this

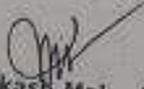


Dr. Prakash Maheshwari
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Grasim Industries Limited
Bhilai - 456331 (M.P.)

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Group Executive President
Grasim Industries Limited
Bhilai - 456331 (M.P.)

license, government shall be entitled to recover from the company, the proceeds of such sale of water realized by the company.

- (7) The permission hereby granted shall not in any manner prejudicially affect the existing water rights vested in the upstream riparian owners nor shall it in any way, prejudice government's right to hereafter launch or implement any new scheme or schemes of its own at, on or in connection with the present source of the said self constructed water source. However Government of Madhya Pradesh hereby assures that any other water rights granted by them for the purposes of irrigation or any other industrial purposes shall be granted in a manner so as not to affect the availability of required water for the project through out the term of this agreement.
- (8) The company shall not construct the civil engineering works viz pickup weir, barrage, reservoir, dam, dug well, tube well and lifting arrangements etc in the said water source unless the proposals, plant drawings, specifications, estimates and all other details thereof are previously submitted to and approved in writing by an officer authorized in that behalf by the government and while granting its approval to the construction of the civil engineering works viz pickup weir, barrage, reservoir, dam, dug well, tube well and lifting arrangements etc government may impose such conditions as it may in its absolute discretion think fit.
- (9) The arrangement for measurement of water drawn by the company from the said water source shall be made by the company in such a manner as may be directed by the government. The automatic measuring device shall be installed and maintained by the company at its own cost after obtaining prior approval there to in writing from the executive engineer. In event of measuring device so installed by the company as aforesaid, ceases to function or goes out of order, the charges which the company would be liable to pay to government in respect of consumption of water for the days measuring device does not work shall be calculated alternatively on the basis of maximum hourly pumping capacity multiplied by the number of hours of operation of those pumps for which it will be obligatory for the company to maintain the records.
- (10) The company shall treat the effluent (Discharge of water after use) for all the impurities ferrous and other chemicals and shall appropriately purify the water as per Central Government Public Health Environmental Engineering Organisation water supply manual, which specifies the standard of potable water.
- (11) Within thirty days from the date monthly demands are received by the company from Executive Engineer, the company shall pay to the Executive Engineer the amount of water rates for the water drawn by the company during the proceeding month. Interest at the rate of 24% (Twenty Four percent) per year shall be recovered if the payment is not done within three months from the date of the bill for water supplied. Non payment of




Dr. Prakash Maheshwari
Group Executive President
Grasim Industries Limited
Bilaspur - 456331 (M.P.)

the bills upto three months from the due date of payment shall be treated as the breach of agreement.

- (12) The company shall always keep deposit with the Executive Engineer the said sum of **Rs 37,50,000/-** (Three times of contracted monthly bill of contracted quantity of water) as security for due and proper payment of the water rates and due observance and performance of the terms and conditions herein. In event of failure by the company to duly pay the aforesaid dues, the outstanding due from the company shall be adjusted against the said deposit. On default of the company to punctually the water rates for a period of three months as aforesaid, the government shall with out prejudice to its any other rights and remedies, be entitled to terminate this agreement forthwith.
- (13) Without prejudice to any other, its remedies and powers of the government, any sum due and payable by the company, under these presents shall be recoverable from the company in the same manner as an arrear of land revenue under the provisions of law for the time being in force in that behalf.
- (14) No existing irrigation interests under the river, spring, channels and irrigation wells, shall be prejudiced. If in the opinion of the government such existing interests are prejudiced, the company shall pay such compensation to the concerned person or persons whose interests are affected as may be determined by the government.
- (15) The company shall all times allow an officer of Water Resource Dpartment of the government of Madhya Pradesh authorized in that behalf, to inspect the measuring device as well as the water accounts and furnish to the government, copies of entries from the records maintained by the company.
- (16) Any notice or other documents to be given to or served upon the company there under, may be given or served by the government and any such notice or documents shall be deemed to have been duly given to or served upon the company if it is sent by registered post or delivered at the registered office of the company.
- (17) If company commits a breach of any of the terms and conditions hereof government shall be entitled to terminate this agreement after giving it opportunity to being heard and there upon the company shall discontinue draw water from "the said self constructed water source" with out government being liable for payment of any compensation whatsoever to the company.
- (18) On the expiry of the term of this agreement government may renew this agreement for such further period and on such terms and conditions as the government may as per provisions of law or mutual agreements deem fit.


Dr. Prakash Maheshwari
Group Executive President
Grasim Industries Limited
Birlagram - 456331 (M.P.)

(19) The cost and incidental charges incurred in the execution of this agreement including stamp duty shall be borne and paid by the company.

(20) Order No.....dated.....(for water allocation and executive instruction etc.) will also form the part of this agreement.

(21) SETTLEMENT OF DISPUTES

(21.1) Mutual Discussions

The parties to the agreement agree that all disputes touching upon or arising out of this agreement including interpretation of Any of the clauses of this agreement, the respective rights and obligation of the parties or non performance of obligations on the part of any party shall be amicably resolved by mutual negotiations.

(21.2) Arbitration

If after sixty days of commencement of such negotiations, the parties have been unable to resolve amicably a contract dispute, such dispute or difference shall be referred to Arbitration under the provisions of the " Arbitration and Conciliation Act 1996". The award of arbitration panel shall be final and binding on the parties.

(22) SPECIAL CONDITIONS

(22.1) Company shall draw water from the four dams constructed by the company across non perennial river Chambal and the reservoir at village Takrawada. The source of water shall termed as " Self Constructed water source" in view of water resources Department memo no. 18/1/91/m/31/400 dated 14.02.2006 for the purpose of payment of water charges.

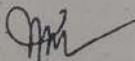
(22.2) As per state government's order no. CB/31/karya/Rast/03/1190 Dated 08.10.2003 issued by the Water Resource Department of Government of Madhya Pradesh the said "Self Constructed water Source" as described above in point no 22.1 has been created solely to meet company's industrial and drinking water requirement of industrial township, Birlagram. Moreover, Nagda and Khachrod Municipalities and Western Railways at Nagda are permitted to draw drinking water from company's Self Constructed water source.

(22.3) Subject to change in quantity monthly drawl of water by the company every year, this agreement shall be valid for a period of 30 years commencing from 01.05.1998, the date from which rates of water charges for " Self Constructed Water Source" are notified by the government.

(22.4) The quantity of water drawn shall be measured at intake well of the company.

(22.5) The Company shall comply with the conditions for treating effluent as prescribed by M.P. Pollution Control Board.




Dr. Prakash Maheshwari
Group Executive President
Grasim Industries Limited
Birlagram - 456331 (M.P.)

(23) Assignment of this agreement
Pursuant to the provisions of assignment in the PPA and implementation of the agreement, the company may also assign any of its rights hereunder to the extent such assignment is made to the lenders subject to the terms and conditions of the consent agreement between GOMP and such lenders.

(24) Waiver

24 (a) No waiver by either party of any default by the other in the performance of any of the provisions of this agreement.

- a. Shall operate or be construed as a waiver of any other or further default whether of a like or different character; or
- b. Shall be effective unless on any occasion to insist upon the performance of such party.

24 (b) The failure of either party on any occasion to insist upon the terms, conditions and provisions of this agreement, or time or other indulgence granted by one party to the other, shall not constitute a waiver of such breach or acceptance of any variations.

(25) IN WITNESS WHERE OF Executive Engineer W.R.D. UJJAIN Division has for and behalf of Government of Madhya Pradesh hereto set his hand and affixed the seal of the office and common seal of the here upto affixed on the day and year first herein above written.

SIGNED

SEALED

DELIVERED

(by Executive Engineer, Water resource division, UJJAIN For and on behalf of Governor of Madhya Pradesh in presence of)

1.....

2.....

(THE COMMON SEAL OFwas pursuant to the resolution of the board of the directors of the company dated the.....and.....Directors of the company who in token thereof have hereto set their respective hand in presence of).

Witness signature

Dr. Prakash Maheshwari
Group Executive President
Grasim Industries Limited
Birlagram - 456331 (M.P.)

1.

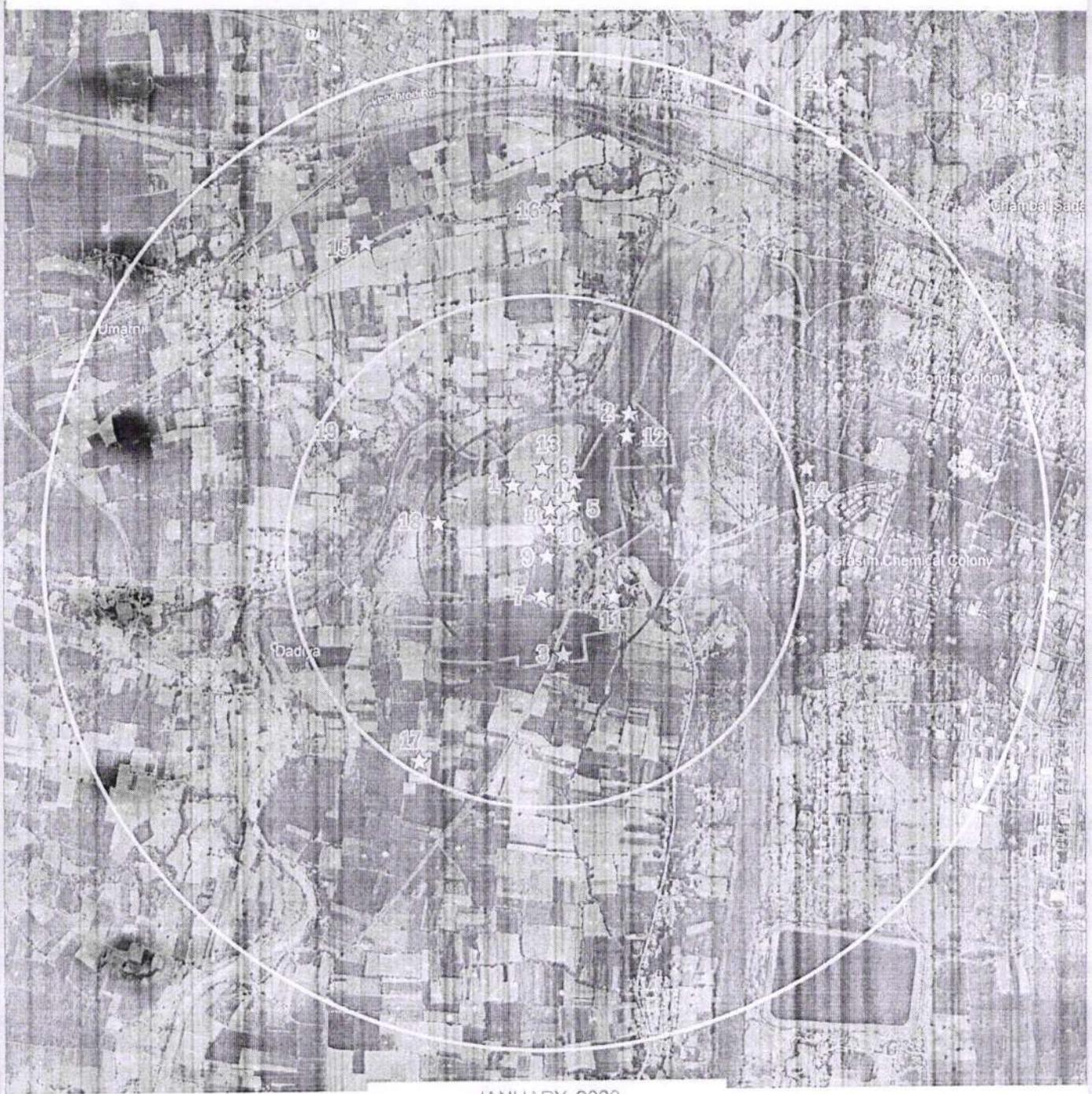
2.
(Rajesh Sharma)

By order and in the name
Of the Governor of
Madhya Pradesh

मध्य प्रदेश सरकार
जल संसाधन विभाग
उज्जैन
(M.P.) 456331

REPORT
ON
MONITORING OF ODOUR AND ODOUROUS COMPOUND
AT
Grasim Industries Limited
(Chemical Division)

Birlagram, Nagda, District: Ujjain (Madhya Pradesh)



JANUARY, 2020



J.M. ENVIRONET PVT. LTD.

202-A, ABW Tower, MG Road, IFFCO Chowk,
Sector-25, GURUGRAM-122 001 (HARYANA)
E-mail: jmenviron@hotmail.com
Website: www.jmenvironet.org

10. CONCLUSION

M/s. Grasim Industries Limited (Chemical Division) does not have any major source of odour generating compounds viz. hydrogen chloride, chlorine other volatile compounds. The monitoring station indicated maximum odour concentration to the tune of 115.0 ouE/m³ with an odour intensity of 2.53 in Near chlorine filling Station & Near Effluent treatment plant, while minimum odour concentration was 7.5 ouE/m³ with an odour intensity of 1.05 at Fabrication area, Near admin Block (Inside Plant boundary in west Direction).

The odour concentration was also monitored in residential areas and odour concentration was found to be in the range of 3.5 to 83.0 ouE/m³ and corresponding odour intensity is in the range of 0.63-2.35. These odour concentration in these residential areas may be attributed to improper disposal of house hold waste and collection of sewage and due to other industrial activities.

Further it is worthy to mention that the panellist of the olfactometric monitoring team perceived the odour nuisance with an odour concentration of 83.0 ouE/m³ having odour intensity of 2.35 at Vill. - Methwas (Near to Plant) but similar type of odour not perceived in the vicinity of M/s. Grasim Industries Limited (Chemical Division).

**MADHYA PRADESH POLLUTION CONTROL BOARD****Paryawaran Parisar, E-5, Arera Colony, Bhopal - 462 016 (M.P.)**

Phone : (0755) 2466191/ 24664428 Fax : (0755) 24663742 E-mail : it_mppcb@rediffmail.com

Annexure-03

No. 856 /HO/MPPCB/CPCB-Dir/2020
To,

Bhopal, dt. 13/05 /2020

The Occupier,
M/s. Grasim Industries Ltd.,
Chemical Division,
Survey No.-22/1, City : Birlagram Nagda,
Tehsil : Nagda, Dist : Ujjain, (M.P.)

SPEED POST

Sub: Direction under 33-A of Water (Prevention and Control of Pollution) Act 1974 –reg.
Ref: CPCB Directions to MPPCB vide letter B-29016/04/06/IPC-I/ February 19,2020

WHEREAS, you are operating an industry M/s. Grasim Industries Ltd., (Chemical Division) at Survey No. 22/1, City : Birlagram Nagda, Tehsil : Nagda, Dist : Ujjain, (M.P.) against the provisions of Water (Prevention and Control of Pollution) Act, 1974 ; and

WHEREAS, M.P. Pollution Control Board has granted conditional consent u/s 25/26 of Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of Air (Prevention and Control of Pollution) Act 1981; and

WHEREAS, CPCB has received a reference from Hon'ble Member of Parliament (Lok Sabha) Ujjain, Madhya Pradesh dated December 30, 2019 regarding water pollution in the river Chambal caused by industries located in Nagda region, Madhya Pradesh; and

WHEREAS, the Chambal river stretch from Nagda to Rampura has been identified by Central Pollution Control Board as polluted river stretch and Madhya Pradesh Pollution Control Board (MPPCB) has prepared an action plan for rejuvenation of river Chambal in compliance of the Hon'ble NGT order dated 20.09.2018 in the matter of O.A. 673/2018; and

WHEREAS, a team of officers from CPCB Head office Delhi and Regional office Bhopal along with a representative nominated by Hon'ble M.P. inspected the area during January 07.08.2020 to investigate the matter and observed the following :

- The pH values found 5.9 & 5.5 at 02 locations of river Chambal i.e. 200m downstream after confluence of industrial domestic & 3.5 km downstream of river Chambal near Parmarkhedhi village respectively, which indicate water is not fit for irrigation as per designated best use Water Quality Criteria.
- High Level of Mercury in the range of 0.0025 mg/l 0.0364 mg/l (more than 0.001 mg/l) found in 06 water samples, Lead in the range of 0.015 mg/l, 0.375 mg/l (more than 0.01 mg) found in 7 water samples & Aluminum in the range of 0.04 mg/l – 2.565 mg/l (more than 0.03 mg/l) found in 10 water samples collected from river Chambal, dug well(s) and hand pump(s) and which indicates water is not fit for drinking purpose as per BIS-10500:2012.
- High level of Mercury in the range of 0.004 mg/l 0.0364 mg/l (more than 0.001 mg/l) found in 03 water samples, Lead 0.025 mg/l (more than 0.01mg/l) found in 03 water samples, & Aluminium in the range of 0.06 mg/l – 0.735 mg/l (more than 0.03 mg/l) found in 6 water samples collected and which indicates contamination with old secured land fill (SLF) containing mercury bearing brine sludge.
- M/s. Grasim Industries Ltd., (Chemical Division) has installed peizometers in North & South direction of industry to assess any leakage from new SLF site and it was observed that river Chambal is flowing in West direction of industry.
- A study was conducted by CSIR-NEERI, Hyderabad on "Assessment of groundwater quality in



MADHYA PRADESH POLLUTION CONTROL BOARD

Paryawaran Parisar, E-5, Arera Colony, Bhopal - 462 016 (M.P.)

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and around M/s. Grasim Industries Limited, (Chemical Division), Nagda in May 2018, which mentioned that lead concentration in the ground water samples many time higher than the desirable limits (0.01 mg/l) under BIS 10500:2012 at buffer zone of 5 km surrounding the industry.

- f. M/s. Grasim Industries Ltd., (Chemical Division) and M/s. Ixness India Pvt. Ltd., have achieved zero liquid discharge (ZLD).
- g. High values of Sulphate i.e. 3161 mg/l was found in river Chambal water sample at downstream of the M/s. Grasim Industries Ltd., (staple Fiber Division) which due to discharge of industrial effluent after treatment to the industrial drain joining to river Chambal. M/s. Grasim Industries Ltd., (SFD) Nagda has submitted action plan to fulfill zero liquid discharge (ZLD) conditions till January 2021 & deposited bank guarantee of Rs. 15 crore to MPPCB, Bhopal on 30.11.2019. Currently, industry is restricted by MPPCB to discharge up to 12500 KLD.
- h. The Municipal council of Nagda has prepared DPR of Rs. 61.40 Crore for the sewerage line & treatment of domestic waste water generated from Nagda Town. The project is pending for sanctioning & tendering in M.P. Urban Development Company Bhopal (MPUDC).
- i. The water Resources Department, Ujjain informed that Barrage-Cum-diversion scheme of Rs. 64.14 Cr. is proposed at Ninawada Kheda (about 7 km downstream of Nagda town) and will be used for dilution purpose of polluted water coming from Nagda town.
- j. The Public Health Engineering Department (PHED) & the M.P. Jal Nigam Maryadith Periyogna ahs prepared scheme of Rs. 29.29 Crore to supply potable water coming from Nagda town.
- k. The Regional office, MPPCB has prepared & submitted a study project named "Study of Underground water quality in adjacent villages of River Chambal from village Pipoloda (Dist Ujjain) to village. Tal (Dist. Ratlam of Rs. 1.14 Crore for sanctioning from MPPCB, Bhopal Head Office.

WHEREAS, water quality of the surrounding area including river Chambal has been deteriorated due to the discharge of industrial effluent as well as domestic effluent; and

WHEREAS, in view of the above, CPCB in exercising the powers conferred to them under Section 18(1) (b) of the Water (Prevention & Control) of Pollution Act, 1974, has issued mandatory directions to Madhya Pradesh Pollution Control Board (MPPCB) to issue necessary directions u/s 33 A of the Water Act, 1974 to the industries of Nagda i.e. M/s. Grasim Industries Ltd., (Chemical Division) (ii). M/s. Grasim Industries Ltd., (SFD) (iii) Lanxess India Pvt. Ltd., and also to the local bodies of Madhya Pradesh for compliance.

In light of the above facts and mandatory directions of CPCB, now therefore in exercise of the power conferred upon under section 33 A of the Water (Prevention and Control of Pollution) Act 1974, you are hereby directed as follows :-

- (i) Industry shall establish piezometers in proper direction of river Chambal to detect the groundwater contamination. The unit shall carry out a detailed leak detection study around the old SLF w.r.t. damage liners of old SLF leakages to be repaired immediately for prevention of further contamination of ground water.
- (ii) Industry shall include their by-product acids in hazardous waste authorization immediately.
- (iii) Industry shall maintain the installed PTZ camera and online flow meter at ETP area and remain connected with MPPCB server without failure.
- (iv) Industry in consultation with the Public Health Engineering Department, Nagda shall ensure supply drinking water immediately in affected villages along the bank of Chambal River & help PHED to identify and seal the water source where increased concentration of Lead (Pb)



MADHYA PRADESH POLLUTION CONTROL BOARD

Paryawaran Parisar, E-5, Arera Colony, Bhopal - 462 016 (M.P.)

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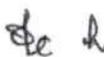
was found in CSIR-NEERI (2018) report.

- (v) The hazardous waste generated from the industry shall be transported only through GPS enable transport vehicles and MPPCB shall keep a vigil on the same.
- (vi) Industry shall keep complete track record of acid and wastes generated in the unit and shall submit on monthly basis to Local administration to ensure vigil on illegal discharge of acid/industrial waste in river Chambal in closed co-ordination with Emergency Response Centre, MPPCB, Bhopal and Sub-regional office of MPPCB, Nagda.
- (vii) Industry shall submit plan of remediation measures of ground water contamination in Nagda & adjacent villages immediately.
- (viii) A detailed health study for Nagda region to be carried out in light of synergistic health effects of pollutant like Cl₂, HCl etc. by engaging any reputed government institute working in the field of Research in Environmental Health in consultation with MPPCB and Regional Director, Health services within 6 months.

You are hereby directed to submit an action plan for the compliance of above directions within a period of 15 days from the date of issue of these directions failing which the interlia action shall be initiated against the industry and all responsible occupiers under section 41 of the Water (Prevention & Control of Pollution) Act, 1974.

For and on behalf of
M.P. Pollution Control Board,


(R.S. Kori)

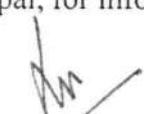
 Member Secretary

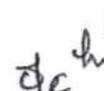
Copy to:

Endt. No. **857** /HO/MPPCB/CPCB-Dir/2020

Bhopal, dt. **13/05/2020**

1. Shri Dilip Gaur, Managing Director, M/s. Grasim Industries Limited, Aditya Birla Centre, S. K. Ahire Marg, Worly Mumbai (India)-400030 for compliance.
2. Shri Shushil Agarwal, Director, M/s. Grasim Industries Limited, Aditya Birla Centre, S. K. Ahire Marg, Worly Mumbai (India)-400030 for compliance.
3. The Collector, Ujjain for information and necessary action please.
4. Sub-Divisional Magistrate, Nagda, District Ujjain for information and necessary action please.
5. The Executive Engineer, Public Health Engineering Department, Ujjain for information and necessary action please.
6. The Regional officer, Regional Office, M.P. Pollution Control Board, Ujjain, for information necessary action please.
7. Incharge, Legal Section, M.P. Pollution Control Board, Bhopal, for information please.


(R.S. Kori)

 Member Secretary



GRCD/6

Date: 27.05.2020

To,
Member Secretary
MP, Pollution Control Board,
Paryavaran Parisar, E-5, Area Colony,
Bhopal-462016

Dear Sir,

Subject: Direction issued by MPPCB under 33-A of Water (Prevention and Control of Pollution) Act 1974 regarding reference CPCB direction to MPPCB vide letter B-29016/04/06/IPC-I/February 19,2020

This is in reference to your letter No. 856/HO/MPPCB/CPCB-Dir/2020, Bhopal dated 13th May 2020, we would like to respectfully submit pointwise action plan as under;

Direction	Reply
<p>1. Industry shall establish Piezometers in proper direction of river Chambal to detect the groundwater contamination.</p> <p>The unit shall carry out a detailed leak detection study around the old SLF w.r.t. damage liners of old SLF leakages to be repaired immediately for prevention of further contamination of ground water</p>	<p>Unit has contacted Central Ground Water Authority, Bhopal for inspection of existing locations of Piezometers and establish the right direction. Also for installation of new Piezometers around the secured land fill site if required. The request submitted vide letter No. GRCD/699 dated 14.03.2020 under copy to MPPCB, Bhopal and waiting for the response from their end. We also requesting MPPCB to advise us on the same accordingly so that the same can be execute on priority (Copy of the letter is attached as Annexure:1)</p> <p>To carried out the leak detection study for liners of old SLF. Site has contacted NEERI, Nagpur and received proposal, enclosed as Annexure 2 for reference.</p> <p>Unit also in contact with IIT Delhi & IIT Kanpur, through mail to Mr. Manoj Dutta and Mr. Mukesh Sharma respectively for above study. Response awaited.</p>
<p>2. Industry shall include their by-product acids in hazardous waste authorization immediately.</p>	<p>The acids manufactured by Unit are Co – Product and by product. Acids produces under controlled and well established graphite absorption system having superior quality and used in all processes. The details of manufacturing process are enclosed as Annexure 3 for reference. Being the by</p>

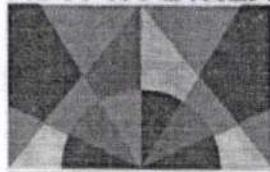
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Grasim Industries Limited
Chemical Division

Birlagram - 456 331, Nagda (M.P.) INDIA Tele: +91 7366 246760-66 Fax: +91 7366 246176, 246767
E-mail: grasimchem@adityabirla.com Website: www.adityabirlachemicals.com CIN: L17124MPI947PLC000410

Regd. Office: P.O. Birlagram, Nagda - 456 331 (M.P.)

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75



	<p>product and Co – Product these acids not covered under the Hazardous Waste Rules 2016.</p> <p>In reference to the CPCB guidelines for identification of material as Waste or by Product as per hazardous Waste Rule 2016, we are planning for the comprehensive analysis for characterization of these Acids from MoEF approved laboratory, share the report with MPPCB once the sample get analysed.</p>
3. Industry shall maintain the installed PTZ camera and online flow meter at ETP area and remain connected with MPPCB server without failure.	Site has already installed PTZ Camera as well as flow meter as per guidelines and real time connectivity well established with MPPCB & CPCB server. The report of online connectivity enclosed as Annexure 4 for reference.
4. Industry in consultation with the Public Health Engineering Department, Nagda shall ensure supply drinking water immediately in affected villages along the bank of Chambal River & help PHED to identify and seal the water source where increased concentration of Lead (Pb) was found in CSIR-NEERI (2018) report	<p>Lead is not used in any of our manufacturing process of either as raw material or as catalyst or in any other processes.</p> <p>However, Grasim Industries Limited our group Unit already installed drinking water RO plant in Parmarkhedi village and we are providing drinking water in Pardi village through pipeline. For further action Unit will discuss with Public Health Engineering Department, Nagda.</p>
5. The hazardous waste generated from the industry shall be transported only through GPS enable transport vehicles and MPPCB shall keep a vigil on the same.	<p>GIL is transporting the hazardous waste to Common TSDF M/S Ramky Waste Management, Pithampur through GPS enabled vehicles and Monthly Report is being submitted regularly to MPPCB along with Manifest details (Copy of March 2020 report enclosed as Annexure 5).</p> <p>Presently Unit transporting all Chemicals produced through GPS enabled vehicles only.</p>
6. Industry shall keep complete track record of acid and wastes generated in the unit and shall submit on monthly basis to Local administration to ensure vigil on illegal discharge of acid/industrial waste in	Unit from last several year preparing details monthly report for acid and waste generation, dispatch to various customer with details and disposal, submit the same to MPPCB. From



river Chambal in closed co-ordination with Emergency Response Centre, MPPCB, Bhopal and Sub-regional office of MPPCB, Nagda.	May 2020 the same report will submit to Local Administration, Nagda as per direction.
7. Industry shall submit plan of remediation measures of ground water contamination in Nagda & adjacent villages immediately	Unit have already contracted with CSIR -NEERI for comprehensive and detailed assessment of ground water quality with the consultation of MPPCB (Work order is enclosed as Annexure 6) for 5 years. Report of year 2018 already with MPPCB, while report of year 2019 awaited and will receive very soon as per NEERI. Based on NEERI recommendation Unit will prepare the remediation plan to improve the ground water quality.
8. A detailed health study for Nagda region to be carried out in light of synergistic health effects of pollutant like Cl ₂ , HCl etc. by engaging any reputed government institute working in the field of Research in Environmental Health in consultation with MPPCB and Regional Director, Health services within 6 months	Being a Corporate Citizen Unit is requesting your good self to advise us for engaging the reputed government institute working in the field of Research in Environmental Health. In the meantime Unit will also contact with Regional Director Health Services to complete the study within time frame.

We assure our best co-operation and commit to adopt best operational practices for the protection of environment.

Thank you

Yours sincerely,

Prem Tiwari
Unit Head
Grasim Chemical Division
Birlagram, Nagda

CCTO: [1] R O, MP Pollution Control Board, Ujjain
[2] Collector office Ujjain: for Kind Information Please
[3] SDM office Nagda: for Kind Information Please
[4] Executive Engineer, PHED Ujjain: for Kind Information Please

Encl: as above



To: GRCD/ENV/152
 Member Secretary
 MP, Pollution Control Board,
 Paryavaran Parisar, E-5, Area Colony,
 Bhopal-462016

Date: 2nd Sept 2020

Dear Sir,

Subject: Direction issued by MPPCB under 33-A of Water (Prevention and Control of Pollution) Act 1974 regarding reference CPCB direction to MPPCB vide letter B-29016/04/06/IPC-I/February 19,2020

This is in continuation to our letter GRCD/6/dated 27th May 2020 in reference to your letter No. 856/HO/MPPCB/CPCB-Dir/2020, Bhopal dated 13th May 2020 and subsequent to our last virtual meeting dated 16th June 2020 and your letter no. 1163 dt. 30.06.2020 and 1490 dt. 31.08.2020 we would like to respectfully submit the present progress status of action plan as of 2nd September 2020 as under:

Direction	Reply
1. Industry shall establish Piezometers in proper direction of river Chambal to detect the groundwater contamination.	Unit continuously follow up with Central Ground Water Authority, Bhopal under copy to MPPCB regarding inspection of existing locations of Piezometers and establish the right direction. Also, for installation of new Piezometers around the secured land fill site if required.
	Letter received from Regional Director of CGWA and copy to you and they advised approach to MPPCB for guidance.
The unit shall carry out a detailed leak detection study around the old SLF w.r.t. damage liners of old SLF, leakages to be repaired immediately for prevention of further contamination of ground water	For carrying out leak detection study for leakages of liners at old SLF, we have received and submitted proposal from NEERI Nagpur for your kind perusal & approval. We are also in contact with IIT Delhi but due to COVID-19 situation, they are unable to visit site for further discussion and assessment before moving forward to next stage.



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2. Industry shall include their by-product acids in hazardous waste authorization immediately.	As discussed/informed during last virtual meeting on 16 th June 2020, we have submitted our request to CPCB to provide clarification on hydrochloric acid manufactured by Unit is not a waste and also not covered under the Hazardous Waste Rules 2016. Response/guidance from CPCB is awaited.
3. Industry shall maintain the installed PTZ camera and online flow meter at ETP area and remain connected with MPPCB server without failure.	Complied.
4. Industry in consultation with the Public Health Engineering Department, Nagda shall ensure supply drinking water immediately in affected villages along the bank of Chambal River & help PHED to identify and seal the water source where increased concentration of Lead (Pb) was found in CSIR-NEERI (2018) report	<p>We are providing drinking water in Pardi village through pipe line and Grasim Industries Limited already installed drinking water RO plant in Parmarkhedi.</p> <p>For further action Unit awaited guidance from Public Health Engineering Department, Nagda.</p>
5. The hazardous waste generated from the industry shall be transported only through GPS enabled transport vehicles and MPPCB shall keep a vigil on the same.	<p>Presently Unit transporting hazardous waste through GPS enabled vehicles only.</p> <p>We have provided connectivity to Regional Office Ujjain for tracking of acid transportation.</p>
6. Industry shall keep complete track record of acid and wastes generated in the unit and shall submit on monthly basis to Local administration to ensure vigil on illegal discharge of acid/industrial waste in river Chambal in closed co-ordination with Emergency Response Centre, MPPCB, Bhopal and Sub-regional office of MPPCB, Nagda.	<p>Unit started submitting acid dispatched and waste generation report to Local Administration, Nagda as per direction from May 2020 under copy to MPPCB.</p> <p>As per Letter of Regional officer Ujjain we have agreed three no's camera installation for tracking the tankers movement of acid and connectivity to Police station Nagda. The proposal of the same has been sent to RO Ujjain for approval.</p>

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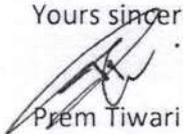


7. Industry shall submit plan of remediation measures of ground water contamination in Nagda & adjacent villages immediately	Unit waiting for response and guidance from Central Ground Water Authority, Bhopal regarding ground water remediation measures.
	Letter received from Regional Director of CGWA and copy to you and they advised approach to MPPCB for guidance.
8. A detailed health study for Nagda region to be carried out in light of synergistic health effects of pollutant like Cl ₂ , HCl etc. by engaging any reputed government institute working in the field of Research in Environmental Health in consultation with MPPCB and Regional Director, Health services within 6 months	A proposal from NIREH, Bhopal (ICMR) is submitted for your kind perusal & approval regarding detailed health study.

As a responsible corporate house, we assure our best co-operation and commitment to adopt best operational practices for the protection and preservation of environment. This is for your kind perusal and further guidance.

Thank you

Yours sincerely,



Prem Tiwari
Unit Head
Grasim Chemical Division
Birlagram, Nagda

CCTO: R O, MP Pollution Control Board, Ujjain

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Employees State Insurance Corporation

(Deposit this certificate within 3 days with the appropriate Branch Office to avoid possible loss of benefit under Regulation 64)



REG. Form-7
(CONFIDENTIAL)

FIRST-INTERMEDIATE/ FINAL CERTIFICATE

Biragram, Nagda, MP (ESIS Disp.)

(Regulation 57, 58, 59)

Serial No. ESIGDSMPNABIR02301045

६-दिनेको लागि बीमा/सहाई
६-दिनेको लागि बीमा/सहाई
Stamp Dispensary

Signature or Thumb Impression of the I.P. _____

Employer's Code No. _____

Branch Office _____

Name Mr. GOVIND S/W/O DEVILAL Ins. No. 1B14900520

Date of First Certificate of Sickness or Disability 23-Mar-2023

Certified that I Have Examined you today and that in my opinion:

Attestation by Med. Officer	(1)* You now need medical treatment/attendance & abstention from work on medical grounds by the reason of (diagnosis) Fracture of unspecified body region, Burn of unspecified degree of head and neck, No Remarks, No Remarks, No Remarks, No Remark.
(2)* You have continued to need medical attendance & abstention from work on medical grounds upto and including this day by reason of (diagnosis):	_____
(3)* In my opinion you will be fit to resume work tomorrow/on	<u>17-Apr-2023</u>

Any other remarks by the Medical Officer _____

NOTE: The date of fitness must in no case be later than the third day after the date of the examination in case of First and Final Certificate.

Date: 15-Apr-2023

Signature 

Insurance Medical Officer

Name in Block Letter DR. JAGDISH MALHAN

Rubber Stamp

IMPORTANT:

1. Any person who makes false statement or representation for the Purpose of obtaining benefit whether for himself/ some other person shall be punishable with imprisonment upto 6 months or fine upto Rs. 2,000/- of both.
2. This form should be completed and submitted WITHOUT DELAY to the appropriate Branch Office to escape penal deduction of benefit under regulation 64 read with regulation 99 of ESI (General) Regulation 1950.
3. Insured person must sign, with date, the claim form to avoid delay and inconvenience.

Print Date: 15-Apr-2023



Employees State Insurance Corporation



DO NOT WRITE IN THIS BOX

REG. Form-7
(CONFIDENTIAL)

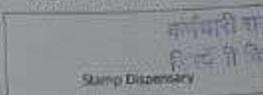
This certificate valid for 3 days with the appropriate office to avoid possible loss of benefit under Regulation 64)

FIRST/INTERMEDIATE/FINAL CERTIFICATE

Birlagram, Nagda, MP (ESIS Disp.)

(Regulation 57, 58, 59)

Serial No. ESICDSMPNABIRD2300977



Signature or Thumb Impression of the LP.

Employer's Code No.

Branch Office

First Certificate of Sickness or Disablement: 23-Mar-2023

Mr. RAJESH DHANAK

SW/D/a

Ins. No. 1815880886

that I have Examined you today and that in my opinion:

Certification by Med. Officer	(i)* You now need medical treatment attendance & abstention from work on medical grounds by the reason of (diagnosis): <u>Burn of unspecified degree of head and neck. No Remarks. No Remark.</u>
	(ii)* You have continued to need medical attendance & abstention from work on medical grounds upto and including this day by reason of (diagnosis):
	(iii)* In my opinion you will be fit to resume work tomorrow/on <u>06-Apr-2023</u>

Other remarks Medical: DOA: 23-Mar-2023, DOD: 31-Mar-2023

The date of fitness must in no case be later than the third day after the date of the examination in case of First and Final Certificate.

06-Apr-2023

Signature

Insurance Medical Officer

Name in Block Letter

DR. JAGDISH MALHAN

Rubber Stamp

ATTENTION:

Any person who makes false statement or representation for the Purpose of obtaining benefit whether for himself/ some other person shall be punishable with imprisonment upto 6 months or fine upto Rs. 2,000/- or both.

This form should be completed and submitted WITHOUT DELAY to the appropriate Branch Office to escape penal deduction of benefit under regulation 64 read with regulation 93 of ESI (General) Regulation 1990.

Insured person must sign, with date, the claim form to avoid delay and inconvenience.

Print Date: 06-Apr-20



Employees State Insurance Corporation

(Deposit this certificate within 3 days with the appropriate Branch Office to avoid possible loss of benefit under Regulation 64)

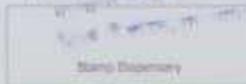


ESIC Form-7 (CONFIDENTIAL)

FIRST/INTERMEDIATE/FINAL CERTIFICATE

Birjagram, Nagda, MP (ESIS Disp.)

(Regulation 17, 18, 19)



Serial No. ESIC06MPNABR02301045

Signature or Thumb Impression of the I.P.

Employee's Code No.

Branch Office

Date of First Certificate of Spell of Sickness or Displacement: 23-Mar-2023

Name: Mr. SHRI RAM

SW/Ds: DILEEP VERMA

Ins. No. 1812046058

Certified that I have Examined you today and that in my opinion:

Attestation by Med. Officer	(1)* You now need medical treatment attendance & abstention from work on medical grounds by the reason of (diagnosis): Burn of unspecified degree of head and neck, No Remarks, No Remark.
	(2)* You have continued to need medical attendance & abstention from work on medical grounds upto and including this day by reason of (diagnosis):
	(3)* In my opinion you will be fit to resume work tomorrow/on: 17-Apr-2023

Any other remarks by the Medical Officer: DOA: 23-Mar-2023, DOD: 05-Apr-2023

NOTE: The date of fitness must in no case be later than the third day after the date of the examination in case of First and Final Certificate.

Date: 15-Apr-2023

Signature

Insurance Medical Officer

Name in Block Letter: DR. JAGDISH MAHAN



IMPORTANT:

- Any person who makes false statement or representation for the Purpose of obtaining benefit whether in himself or some other person shall be punishable with imprisonment upto 6 months or fine upto Rs. 2,000/- of both.
- This form should be completed and submitted WITHOUT DELAY to the appropriate Branch Office to escape penal deduction of benefit under regulation 64 read with regulation 95 of ESI (General) Regulation 1950.
- Insured person must sign, with date, the claim form to avoid delay and inconvenience.

Print Date: 15-Apr-2023



प्रति,

Annexure-18

अपर कलेक्टर,
उज्जैन, जिला - उज्जैन

विषय : - नागदा शहर की जलप्रदाय एवं सीवरेज के संबंध में।

संदर्भ : - श्रीमान् द्वारा दिये गये निर्देशानुसार।

—00—

उपरोक्त विषय में लेख है कि नागदा नगरीय सीमा क्षेत्र में जलप्रदाय एवं सीवरेज की जानकारी निम्नानुसार प्रस्तुत है : -

01) जलप्रदाय व्यवस्था : - नागदा शहर में पूरे वर्ष जलप्रदाय चम्बल नदी से किया जाता है। जिस हेतु निकाय का 16.0 MLD क्षमता का जलशोधन यंत्रालय स्थापित किया गया है, जो पूर्ण क्षमता से कार्यरत है। शहर में प्रतिदिन दोनों समय जलप्रदाय किया जाता है।

02) सीवरेज योजना : - नगर पालिका परिषद् द्वारा अमृत 2.0 योजनान्तर्गत सम्पूर्ण शहर की सीवरेज परियोजना राशि 75.00 करोड की तैयार कर शासन को प्रेषित की गई है। जिसकी सैद्धांतिक स्वीकृति प्राप्त हो चुकी है। कार्य की प्रशासकीय स्वीकृति प्राप्त होना अपेक्षित है।

अतः चाही गयी जानकारी प्रस्तुत है।


मुख्य नगर पालिका अधिकारी
नगर पालिका परिषद् नागदा