



# JHARKHAND STATE POLLUTION CONTROL BOARD

T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI -834004  
Phone.: 2400851, 2400852, 2400979 Fax:0651- 2400850, Web Site – www.jspcb.nic.in

Ref No... B-47

Ranchi, dated 08/11/2021

## ACTION TAKEN REPORT BY THE JHARKHAND STATE POLLUTION CONTROL BOARD FOR COMPLIANCE OF THE HON'BLE NGT ORDER DATED 17/07/2020 IN O.A. NO. 809/2018, ANWAR HUSSAIN ANSARI, JHAMUMO ALPSANKHYAK MORCHA VERSUS STATE OF JHARKHAND.

1. The Hon'ble NGT Principal Bench, New Delhi vide its order dated 17/07/2020 directed the State PCB to file action taken report be filed before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).
2. The recommendations of the Joint Inspection Committee constituted by the Hon'ble NGT and the compliance status are as follows:-

S.No.	Recommendation	Compliance Status
1.	Unit shall ensure that no domestic wastewater discharged into Bhelwa River without proper treatment.	3 nos. of Sewage Treatment Plant (STP) each of 100 KLD has been installed and operational.
2.	Unit shall not be allowed to operate until new lagoon for storage of brine sludge is constructed, as the existing lagoon capacity is found exhausted.	<p>a. New Brine Sludge Lagoon of dimension 62m x 20m at bottom, 81m x 27m at Top and 9m slanting height has been constructed. Pumping system for leachate of the lagoon has been installed, leachate shall be sent to ETP for treatment.</p> <p>b. The unit has under gone agreement with TSDF facility for disposal of brine sludge and a total of 3725 MT brine sludge has been already sent to TSDF.</p>
3.	Unit shall make sure, no untreated/partially treated effluent and seepage/run-off from the Calcium Hypo Chlorite lagoon/dump sites are discharged into Chhaliya drain.	Abandoned Calcium Hypo lagoon of area 5500 sq. mtrs. (approx) has been capped in a scientific manner. The unit's representative informed that post leveling of dried sludge; sand was spread all around over the capping area with 1.5mm thick layer of HDPE sheet over it. Soil was spreaded up to 600 mm layers on the top of HDPE sheet.
4.	Unit shall get renewed water agreement from the office of Water Resource Department (WRD), Government of Jharkhand.	The unit has informed that the permission from Water Resource Department, Govt. of Jharkhand is under process. Although water charges has been raised by the Water Resource Department, Govt. of Jharkhand on enhanced rate.

5.	Authorization for all 13 types of Hazardous Wastes shall be obtained from JSPCB for generation, collection, utilization, storage and disposal and shall maintain the records.	The unit has been granted Hazardous Waste Authorization vide Ref. No. JSPCB/HO/RNC/HWM-7954881/2020/16 dated 06.05.2020 valid till 31.03.2021 for 14 types of wastes.
6.	Adequacy and performance of Effluent Treatment System/ ZLD system, effectiveness of sprinkler and ash handling system need to be verified once the unit came in operation.	ETP with additional equipments for achieving Zero Liquid Discharge (ZLD) via Multiple Effect Evaporator (MEE) + Agitated Thin Film Dryer (ATFD) were found operational. Adequacy assessment of ZLD system of the unit has been made by CSIR-NEERI, Nagpur.
7.	Flow meters at inlet of ETP, inlet and outlet of STPs shall be provided.	Flow meter has been installed at inlet of ETP, inlet and outlet of STPs. Web camera has also been installed at the outlet of the drain.
8.	Unit must maintain Logbook for the generation and disposal of bottom ash.	The unit has submitted copy of the log book related to fly ash and bottom ash. Fly ash is being disposed through cement industry and own Fly Ash Bricks Manufacturing Units.
10.	The disposal of Brine sludge shall be made in scientific manner.	New Brine Sludge Lagoon of dimension 62m x 20m at bottom, 81m x 27m at Top and 9m slanting height has been constructed. Pumping system for leachate of the lagoon has been installed and sent to ETP for treatment.
11.	The abandoned lagoon of Calcium Hypo sludge shall be capped scientifically so that run-off/seepage from the lagoon can be stopped.	Abandoned Calcium Hypo lagoon of area 5500 sq. mtrs. (approx) has been capped in a scientific manner. The unit's representative informed that post leveling of dried sludge, sand was spread all around over the capping area with 1.5mm thick layer of HDPE sheet over it. Soil was spreaded up to 600 mm layers on the top of HDPE sheet (Photograph taken at the time of inspection is attached)
12.	Provision for pumping and conveyance line for transfer of surface run off/ leachates from collection pit at Brine sludge storage lagoon to ETP for further treatment shall be provided.	Pumping system for leachate of the lagoon has been installed and leachate of the lagoon is being sent to ETP for treatment.
13.	The logbook for the generation and disposal of bottom ash shall be maintained.	The unit has submitted copy of the log book related to fly ash and bottom ash.
14.	Environmental Compensation of Rs. 2,07,37,500/- shall be levied for intentional discharges to the environment -on land and water resulting into acute injury or damage to the environment.	The Civil Appeal Diary No. (s) 35480/2019 is subjudice before the Hon'ble Supreme Court against the order of the Hon'ble Tribunal dated 15/12/2018, 03/05/2019 and 05/09/2019. No further hearing has taken place.

3. The copy of the reply submitted by the Unit and the Inspection Report of the JSPCB Committee is annexed.

*Rajeev*  
(Rajeev Lochan Bakshi)  
Member Secretary

**JHARKHAND STATE POLLUTION CONTROL BOARD**

T.A. DIVISION BUILDING, DHURWA, RANCHI – 834004

**Inspection report of M/s Grasim Industries Limited, Chemical Division at Mauza – Rehla, P.O. –Rehla, District –Palamau on 08.09.2020 in light of JSPCB (HQ) office order No. B-112 Ranchi, dated – 04/09/2020.**

M/s Grasim Industries Limited, Chemical Division, At +Po- Rehla, District – Palamau was inspected on date 08.09.2020 by Sri R.N. Kashyap, Regional Officer, Ranchi, Sri B.K. Gupta, A.S.O., (HQ) and Sri Ashutosh, Consulting Executive, (HQ) in presence of Sri Vikram Mani, Assistant General Manager – Quality & Environment, Shri Neyaz Ahmed Khan, Senior Manager (Public Relations) of the unit.

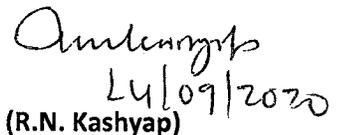
M/s Grasim Industries Limited, Chemical Division At +Po- Rehla, District – Palamau erstwhile M/s Bihar Caustic & Chemicals Ltd Rehla, Garwa Road was accorded Environment clearance for Expansion of Caustic Soda Lye Plant from 225 TPD to 550TPD and CPP from 30 MW to 60MW at Rehla, Garwa Road, District Palamu vide MoEF&CC, Govt. Of India, (IA Division) vide F. No. J-11011/1213/2007-I. II (I) Dated 11<sup>th</sup> February, 2009. The unit was granted Consent to Operate (C.T.O) for producing ( 1) Caustic Soda- 550MT/day, (2) Electricity Generation – 60 (MW) (3) Aluminium Chloride – 50 TPD (4) Hydrogen Boiler & Bottling Plant 4 TPH & Hydrogen Boiler 4 TPH (5) Stable Bleaching Powder – 50TPD by JSPCB vide Ref. No. JSPCB/HO/RNC/CTO/1024931/2016/1062 dated 23.12.2016 which is valid till 31.12.2021. The Chlor-alkali plant is based on membrane cell process. The unit has captive power plant of capacity – 2x30 MW. The unit was found to be operational at the time of inspection.

**During the inspection following major observations were made:**

1. Construction of New Brine Sludge lagoon has been completed. The unit's representative informed that the New Brine Sludge lagoon will be commissioned after inspection/verification of JSPCB team is completed. Dimension of New Brine Sludge lagoon is 62m X 20m at bottom, 81m X 27m at top and 9m slanting height (Photograph taken at the time of inspection is attached). Pumping system for leachate of the lagoon has been installed, leachate shall be sent to ETP for treatment.
2. Abandoned calcium lagoon of area approx-5500sq.mtrs. has been capped in a scientific manner. The unit's representative informed that post levelling of dried sludge, sand was spread all around over the capping area with 1.5 mm thick layer of HDPE sheet over it. Soil was spreaded up to 600 mm layers on the top of HDPE sheet (Photograph taken at the time of inspection is attached).

3. Automatic lime dosing system has been implemented in coal feeder.
4. 3 Nos. of Sewage Treatment Plant (STP), each of 100 KLD were found operational. Flow meter was installed at inlet and outlet of STP. The flow meter installed at inlet of STP (G-2) showed the reading 2.82m<sup>3</sup>/hour at the time of inspection.
5. Pucca covered storage yard for storing Hazardous and Non-hazardous waste was found.
6. ETP with additional equipments for achieving Zero Liquid Discharge (ZLD) via MEE + ATFD were found operational. Adequacy assessment of ZLD system of the unit has been made by CSIR- NEERI, Nagpur. Adequacy report of ZLD submitted by the unit is attached.
7. ATFD sludge generated during ZLD process is being sent to M/s Adityapur Waste Management Pvt. Ltd. Saraikela, Kharsawan.
8. Flow meters and Web camera has been installed at the outlet drain.
9. The house keeping of the plant premises was found to be satisfactory.

**Point wise compliance verification report is attached as annexure A.**

 (Ashutosh) 14/09/2020	 (B.K. Gupta) 14.09.2020	 (R.N. Kashyap) 24/09/2020
Consulting Executive, H.O.	ASO, H.O.	Regional Officer, Ranchi.



GIL-CDR/UH/JSPCB/2020-21/ 130

Date: 30<sup>th</sup> May, 2020

The Regional Officer,  
Jharkhand State Pollution Control Board,  
Regional Office, C.T.I. Colony,  
E-1, Dhurwa,  
Ranchi - 834 004

Dear Sir,

Sub: E-mail dated 28.05.2020, regarding compliance of recommendations given by the Joint inspection Committee of CPCB and JSPCB dated 16.01.2020 & 17.01.2020 constituted by Hon'ble NGT order dated 14.10.2019. Ref no. 615 dated 28.05.2020

With reference to the captioned letter received by Grasim Industries Ltd, Chemical Division, Rehla, Palamu, ("Unit") on 28.05.2020 vide e-mail, we respectfully submit as under;

	Recommendations	Unit response
1	Unit shall ensure that no domestic water is discharged into Bhelwa river without proper treatment.	At the time of inspection on 16.01.2020, there was a specific observation made with respect to the kitchen domestic waste from the guest house flowing into the nallah. Immediate action was taken by the unit. The said drain is connected to the STP with a strainer. The solid wet kitchen waste is collected from the strainer, composited and used as manure in the garden. Further, the treated water from 3 nos STP is reused for gardening purpose and is not discharged into the Bhelwa river.
2	Unit Shall not be allowed to operate until new lagoon for storage of brine sludge is constructed, as existing lagoon capacity is found exhausted	<ol style="list-style-type: none"> <li>Unit has undergone agreement with TSDF facility for disposal of brine sludge, From 11.05.20 till 28.05.20 a total of 3725 MT brine sludge has been shifted to the TSDF. <i>Refer to Attachment -1 for details</i></li> <li>Further, as per our commitment towards Direction No -5 for letter no B-82 dated 18/01/2019, construction for New SLF for Brine Sludge is in progress and would be completed as committed by 30<sup>th</sup> Sept 2020 for intermittent storage of brine sludge particularly during the Monsoon period.</li> <li>Unit has complied with the recommendations made during the site visits by the joint committee/JSPCB from time to time for usage of existing brine sludge lagoon till new SLF is constructed. Improvements included modification in surface runoff pit weep</li> </ol>

		<p>holes, staging and maintaining slope gradient of brine sludge. As stated above the brine sludge is lifted from the lagoon and transported to TSDF, resulting in reducing the brine sludge content in the lagoon. <u>Refer to Attachment 2 for work progress.</u></p> <p>Thus, having complied to all the commitments till date, and with shipment of Brine Sludge to TSDF facility, requesting to kindly reconsider this recommendation.</p>
3	Unit shall make sure, no untreated/partially treated effluent and seepage/runoff from the sodium calcium hypo chloride lagoon/ dump site are discharged into the chhaliya drain.	Calcium hypo lagoon is abandoned. Work is in progress for capping the sodium calcium hypo chloride lagoon with liner to ensure that there is no leachate. Work is estimated to be completed by Aug 2020. The delay is attributed due to Covid-19 Lockdown.
4	Unit Shall get the renewed water agreement from the office of water resource department (WRD), government of Jharkhand.	The unit is earnestly following up for renewal of Water agreement with Water resource dept., Govt. Of Jharkhand. There is no pendency from the unit's end. Water charges are regularly as raised by Dept and paid by the unit, lock down too has affected the active perseverance. <u>Refer to Attachment 4.</u>
5	Authorization for all the 13 types of hazardous waste shall be obtained from JSPCB for generation, collection, utilization, storage and disposal and shall maintain the records.	<ol style="list-style-type: none"> <li>1. Authorization "JSPCB/HO/RNC/HWM-7543080/2020/11 17/02/2020" was Approved in Feb 20 with 13 Category of waste.</li> <li>2. Unit obtained revised Authorization "JSPCB/HO/RNC/HWM-7954881/2020/16 06/05/2020" valid till 31/03/2021 for 14 type of waste.</li> </ol>
6	Adequacy and performance of effluent treatment system/ ZLD system, Effectiveness of Sprinkler and ash handling system needs to be verified once the unit came in operation.	Operation of modified ETP with ZLD components (MEE and ATFD), Sprinkler in approach road to coal handling plant and also the ash handling system has been completed and witnessed by visiting official post 20th Sept 2019. Requesting for a planned visit for reverification by your good office.
7	Flowmeter at inlet of ETP inlet and outlet of STPs shall be provided.	<p>Flow meter has been installed at major inlet line to ETP central Pit, where in pH correction occurs before pumping for TSS correction via Lamella Clarifier. Moreover, a combined flow meter is installed at inlet to Reverse Osmosis section to measure the total quantity of effluent being treated, post-secondary treatment via ultra-filtration and Activated carbon and Multi Grade filters.</p> <p>Flowmeter has been installed at outlet of all the 3 nos of STP and are functional, however the installed flowmeter at inlet to MBBR section of STP has been removed as frequent choking was occurring. New design flowmeter (metal tube rotameter with totalizer) is being explored and would be installed by Aug 20.</p>

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8	Unit must maintain the logbook for the generation and disposal of bottom ash.	Logbook is being maintained with disposal quantification for Bed Ash along with Fly Ash. <u>Refer to Attachment 3 for Fly Ash Generation and Utilization Yr. 2019-20.</u>
9	Disposal of Brine sludge shall be made in scientific manner.	Kindly refer to point no. 2
10	The abandoned lagoon of sodium hypo sludge shall be capped scientifically, so that runoff/seepage from the lagoon can be stopped.	Kindly refer to point no.3
11	Provision for pumping and conveyance line for transfer of surface runoff/ leachate from collection pit at brine sludge storage lagoon to ETP for further treatment shall be provided.	The unit practise is to install pumping facility during the monsoon season to pump the water from the lagoon, to transport the same by the tankers into the ETP for treatment. However, immediately after the inspection the pumping facility is restored as per the recommendation.
12	The logbook for the generation and disposal of bottom ash shall be maintained.	Kindly refer to point no.8

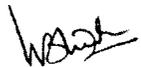
We assure our best co-operation and commit to adopt best operational practices for the protection of environment.

Thank you,

Yours sincerely,

Yours faithfully,

For Grasim Industries Ltd  
Chemical Division, Rehla

  
(Vivek V. Bhide)  
Unit Head

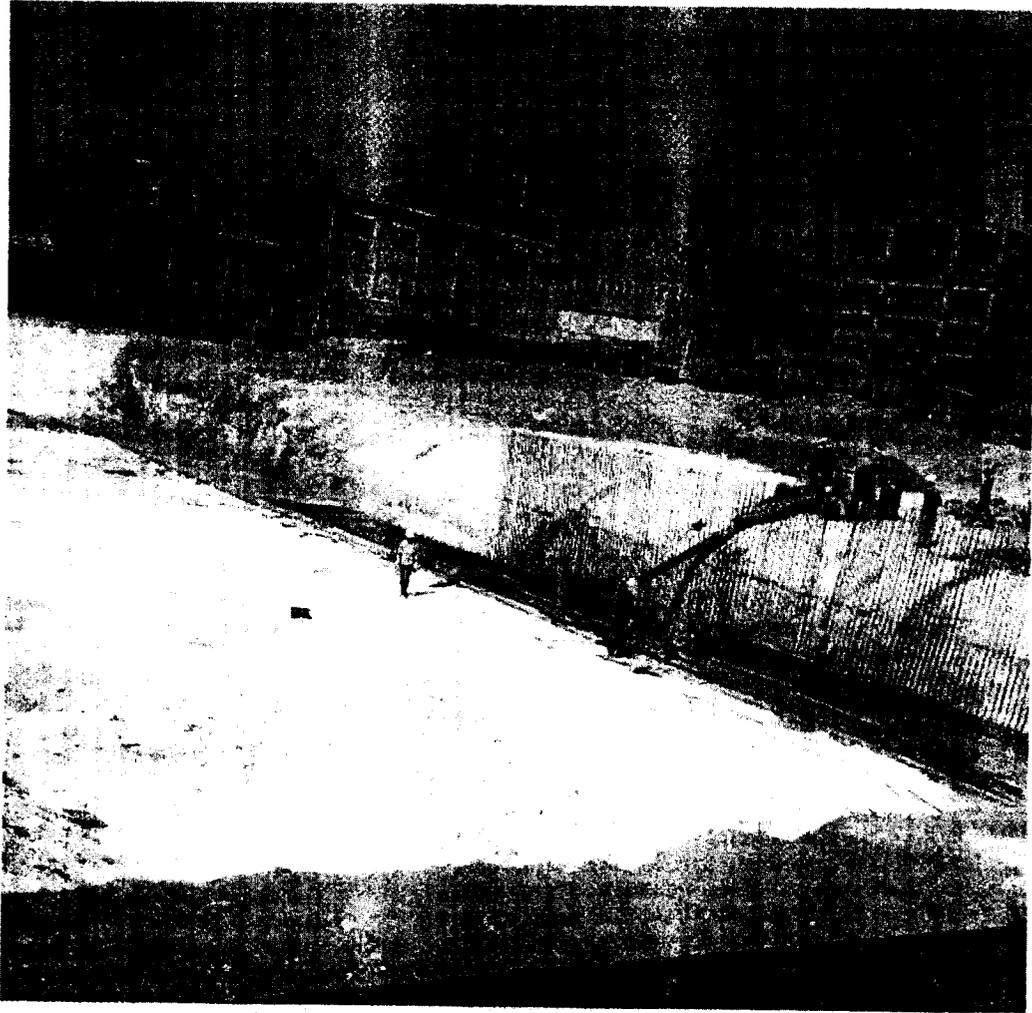
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Attachment -1: Brine Sludge to TSDF

Brine Sludge To TSDF - Dispatch Details								
Date of Dispatch	Manifest Doc .No	QTY (in MT)	Date of Dispatch	Manifest Doc .No	QTY (in MT)	Date of Dispatch	Manifest Doc .No	QTY (in MT)
11-May-20	1247	31.28	19-May-20	1768	41.14	25-May-20	1853	32.32
11-May-20	1248	40.16	19-May-20	1769	41.24	25-May-20	1854	39.84
11-May-20	1249	30.54	20-May-20	1770	32.9	25-May-20	1855	38.52
11-May-20	1250	30.9	20-May-20	1771	32.08	25-May-20	1856	43.12
11-May-20	1701	38.98	20-May-20	1772	31.52	25-May-20	1857	31.22
13-May-20	1703	40.1	20-May-20	1773	32.48	25-May-20	1858	39.5
14-May-20	1704	32.04	20-May-20	1774	32.52	26-May-20	1859	31.46
14-May-20	1705	31.74	21-May-20	1775	38.12	26-May-20	1860	32.4
14-May-20	1706	41.14	21-May-20	1776	40.06	26-May-20	1861	30.9
14-May-20	1707	31.82	21-May-20	1777	32.32	26-May-20	1862	39.46
14-May-20	1708	30.78	21-May-20	1778	32.26	26-May-20	1863	38.7
14-May-20	1709	42.32	21-May-20	1779	40.98	26-May-20	1864	39.1
14-May-20	1711	32.92	21-May-20	1780	40.48	26-May-20	1865	37.98
15-May-20	1713	40.72	21-May-20	1781	31.1	26-May-20	1866	31.34
15-May-20	1710	31.84	22-May-20	1782	40.9	26-May-20	1867	32.12
15-May-20	1712	31.42	22-May-20	1783	40.24	27-May-20	1868	31.02
15-May-20	1714	31.44	22-May-20	1784	39.78	27-May-20	1869	31.74
16-May-20	1715	30.989	22-May-20	1785	40.52	27-May-20	1870	31.58
18-May-20	1716	32.52	22-May-20	1786	30.8	27-May-20	1871	31.34
18-May-20	1751	31.58	22-May-20	1787	32.42	27-May-20	1872	32.28
18-May-20	1752	40.96	23-May-20	1788	32.94	27-May-20	1873	32.88
18-May-20	1754	41.56	23-May-20	1789	33.18	27-May-20	1874	39.28
18-May-20	1755	43.26	23-May-20	1790	31.62	27-May-20	1875	41.66
18-May-20	1759	39.82	23-May-20	1791	38.08	27-May-20	1876	32.84
18-May-20	1758	31.28	23-May-20	1792	38.72	27-May-20	1877	32.64
18-May-20	1753	32.32	23-May-20	1793	38.96	27-May-20	1878	30.56
18-May-20	1756	31.22	23-May-20	1794	32.32	27-May-20	1879	42.08
18-May-20	1757	32.54	23-May-20	1795	31.64	28-May-20	1880	31.48
18-May-20	1760	32.7	25-May-20	1796	41.42	28-May-20	1881	32.48
19-May-20	1761	40.64	25-May-20	1797	32	28-May-20	1882	32.06
19-May-20	1762	41.02	25-May-20	1798	32.28	28-May-20	1883	32.34
19-May-20	1763	31.38	25-May-20	1799	32.68	28-May-20	1884	31.88
19-May-20	1764	33.12	25-May-20	1800	33.36	28-May-20	1885	32.32
19-May-20	1765	39.94	25-May-20	1851	39.38	28-May-20	1886	40.34
19-May-20	1766	32.68	25-May-20	1852	30.66	28-May-20	1887	31.58
19-May-20	1767	40.4						
<b>Total</b>								<b>3725.53</b>

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Attachment -2: New Brine Sludge SLF work progress.



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Attachment – 3: Fly Ash Generation and Utilization Yr. 2019-20

Details related to Fly Ash (FY 2019-20)									
Month	Opening Balance (MT)	Generation (MT)	Total Ash (MT)	Clearance to Cement Manufacturer (MT)	Brick Plant (MT)	Bottom Ash		Closing Stock (MT)	Utilization in %
						To Nearby Community (MT)	To Project Site (MT)		
Apr-19	99.12	8156.24	8255.36	6455.85	330	1284.00	0.00	185.51	100 %
May-19	185.51	10583.94	10769.45	7957.79	0	1884.00	0.00	927.66	100 %
Jun-19	927.66	6056.01	6983.67	5358.04	120	1452.00	0.00	53.63	100 %
Jul-19	53.63	10986.87	11040.50	8091.58	0	0.00	2172.00	776.92	100 %
Aug-19	776.92	11600.00	12376.92	9314.66	110	0.00	2376.00	576.26	100 %
Sep-19	576.26	11219.16	11795.41	7922.84	180	0.00	2772.00	920.57	100 %
Oct-19	920.57	11981.01	12901.58	8772.40	830	0.00	2578.61	720.57	100 %
Nov-19	720.57	11420.41	12140.98	9740.13	0	0.00	2083.07	317.78	100 %
Dec-19	317.78	12322.38	12640.16	11016.32	20	0.00	1286.06	317.78	100 %
Jan-20	317.78	6091.74	6409.52	4837.98	340	0.00	913.76	317.78	100 %
Feb-20	317.78	8912.63	9230.41	8616.21	0	0.00	296.42	317.78	100 %
Mar-20	317.78	8739.09	9056.87	6027.16	0	0.00	2829.71	200.00	100 %
<b>Total</b>	<b>5531.35</b>	<b>118069.47</b>	<b>123600.82</b>	<b>94110.96</b>	<b>1930.00</b>	<b>4620.00</b>	<b>17307.63</b>	<b>5632.23</b>	<b>100 %</b>

कार्यपालक अभियंता का कार्यालय  
जलपथ प्रमण्डल, मेदिनीनगर

पत्रांक 146

मेदिनीनगर

दिनांक 04.03.2020

प्रेषक,

कार्यपालक अभियंता,  
जलपथ प्रमण्डल, मेदिनीनगर

Received on  
04.03.2020

सेवा में,

सरथान प्रमुख,  
ग्रासिम इन्डस्ट्रीज लिमिटेड,  
केमिकल डिविजन, गढ़वा रोड, रेहला,  
जिला-पलामू (झारखण्ड)

विषय :- दिनांक-01.04.2020 से संशोधित एवं बर्द्धित दर पर जलकर राशि भुगतान करने के  
संबंध में।

प्रसंग :- विशेष सचिव, जल संसाधन विभाग, झारखण्ड, राँची का पत्रांक-272 एवं 273,  
दिनांक-01.04.2011

महाशय,

विषयांकित प्रासंगिक पत्र के आलोक में कहना है कि दिनांक-01.04.2020 से  
आपको उत्तर कोयल नदी से जल ग्रहण के एगज में बर्द्धित दर 7.5% की दर से Water Tax का  
भुगतान करना वांछित है। यानि पूर्व वित्तीय वर्ष में 16.237/1000 Gallon में 7.5% की दर से वृद्धि  
कर  $16.237 + 16.237 \times 7.5\% = 17.454/1000$  गैलन की बर्द्धित दरानुसार अप्रैल 2020 से Water  
Tax का भुगतान करने हेतु स्मारित किया जाता है।

अतः उपर्युक्त परिप्रेक्ष्य में अनुरोध है कि अप्रैल 2020 से बर्द्धित दर 16.237/1000  
Gallon की दर से Water Tax का भुगतान निर्दिष्ट समयान्तर्गत करना सुनिश्चित करें।

विश्वासभाजन

Mr. Giring Gupta

Copy to Mr. H.N. Mishra/Vikram/Mr. N.A. Khan

कार्यपालक अभियंता  
जलपथ प्रमण्डल, मेदिनीनगर

MSJ  
14/03/2020