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October 28, 2016

To,

The Chairman,
West Bengal Pollution Control Board,
Paribesh Bhavan Building, No.10-A, Block -LA,
Sector 3, Salt Lake City, Kolkata - 700 091

DIRECTIONS UNDER SECTION 18(1)(b) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 REGARDING IMPLEMENTATION OF 'CHARTER FOR WATER RECYCLING AND POLLUTION PREVENTION IN PULP & PAPER INDUSTRY'.

WHEREAS, amongst others, under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs), constituted under the Water (Prevention & Control of Pollution) Act, 1974 is to plan a comprehensive programme for prevention, control or abatement of pollution of streams and wells in the State and to secure the execution thereof; and

WHEREAS, amongst others, under Section 16 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the Central Pollution Control Board (CPCB) constituted under the Water (Prevention & Control of Pollution) Act, 1974 is to coordinate activities of the SPCBs/ PCCs and to provide technical assistance and guidance to SPCBs/ PCCs; and

WHEREAS, the Central Government has notified standards for discharge of environmental pollutants from various categories of industries and common effluent treatment plants (CETPs), under the Environment (Protection) Act, 1986 and rules framed there under, and

WHEREAS, the SPCBs/ PCCs can stipulate standards for discharge of environmental pollutants from various categories of industries and common effluent treatment plants (CETPs) more stringent than those notified by the Central Government, under the Environment (Protection) Act, 1986 and rules framed there under; and

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WHEREAS, pulp & paper industries have been categorized under the 17 categories of highly polluting industries. Also, pulp & paper industries operating in West Bengal have been identified as grossly polluting industries (GPIs) discharging into river & lakes. The major environmental issues related to the Pulp & Paper Industry include high volume of fresh water consumption and waste water discharge, adverse impact on receiving stream due to high pollution load, and high colour in effluents; and

WHEREAS CPCB formulated the 'Charter for Water Recycling and Pollution Prevention in Pulp & Paper Industries' in consultation with experts from Pulp & Paper industries, Central Pulp & Paper Research Institute (CPPRI), Saharanpur and Department of Paper Technology, IIT, Roorkee in workshops/ meetings held on July 23, 2014, August 5, 2014, August 6, 2014 and September 23, 2014. A detailed Implementation & monitoring Programme (DIMP) of the Charter has also been formulated; and

WHEREAS a Workshop was held on 29th September, 2014 in New Delhi with representatives/ experts from SPCBS/ PCCs, National Mission for Clean Ganga (NMCG), CPPRI, Department of Industrial Policy & Programme (DIPP), IIT-Roorkee and Pulp & Paper industries and their Associations to discuss and finalize the Charter and programme for implementation of the Charter by the Pulp & Paper industries operating in the country; and

WHEREAS, the meeting with consensus resolved for implementation of the Charter by all the Pulp & Paper industries operating in the Country, as per the implementation programme; and

WHEREAS, the nine States of Uttar Pradesh, Uttarakhand, Haryana, NCT of Delhi, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, and West Bengal, located in the Ganga River Basin are primarily concerned with causing industrial pollution in the River Ganga; and

WHEREAS, the 'Charter for Water Recycling and Pollution Prevention in Pulp & Paper Industries' (*herein after referred to as 'the Charter'*) specific to Pulp & Paper industries operating in the nine Ganga River Basin States is formulated, which envisages upgradation of the status of Pulp & Paper industries in terms of process technology, practices and environmental performance, besides substantial reduction of fresh water consumption, wastewater generation and compliance with the prescribed environmental norms, to achieve desired level of environmental protection, zero discharge to recipient river streams through utilization of treated effluent, meeting the

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irrigation water quality norms, for irrigation and to meet objectives of the National Mission for Clean Ganga. However, programmes for implementation of advanced technological and managerial tools to achieve further higher technological and compliance status may further be required to meet the national/ state/ specific objectives; and

WHEREAS, CPCB issued directions under section 18 (1)(b) of the Water/ Air Acts on February 24, 2015 to West Bengal Pollution Control Board (WBPCB) for implementation of the 'Charter for water recycling & pollution prevention in pulp & paper industries (Specific to Ganga River Basin States)'; and

WHEREAS, WBPCB issued directions dated 18/03/2015 under section 33(A) of the Water Act, 1974 to the pulp & paper Units operating in the states of West Bengal for implementation of the 'Charter for water recycling & pollution prevention in pulp & paper industries (Specific to Ganga River Basin States)' (herein after referred to as 'the charter'); and

WHEREAS, the action plan /validation report submitted by the Unit for implementation of the charter was reviewed in the meetings held on July 30, 2015 and December 15-16, 2015 at Kolkata with the officers from CPCB, WBPCB, NEERI, IIT-Roorkee and Pulp & Paper representatives to finalise the individual action plans for implementation of the Charter in the prescribed time bound manner by the participating Units; and

WHEREAS, WBPCB vide memo no. 435(i)/270/WB/O&M/2015 dated 10.03.016 forwarded the finalised/suggestive individual action plans of 26 participating pulp & paper mills for their implementation; and

WHEREAS, review meeting was held on Sept 22-23, 2016, at Kolkata to review the implementation status of the Charter, assessment of progress made by individual mills in implementation of pollution control measures as prescribed in the individual action plan and to formulate further course of action for successful implementation of the Charter in the time bound manner; and

WHEREAS, based on discussion with participating industries and based on the information provided by them during the review meeting held on September 22-23, 2016, following observations were made:

1. Sixteen mills have reported to install online effluent monitoring system, however only 10 mills have provided connectivity to CPCB server, The list of the 10 mills are annexed at **Annexure-1**.

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2. Based on the information provided by the mills, it observed that 13 mills (**Annexure-2**) have commissioned two stage biological treatment system, out of which 10 mills have also commission tertiary treatment system.
3. About 11 mills have been reported to not having adequate ETP system at present, which are as under:

1.	M/s Deb Jyoti Pulp & Paper Pvt Ltd., Sitarampur, Burd	7	M/s Bardhaman Dharmaraj Paper Mill Pvt Ltd., Memari Panchayat Samity, Distt. Burdwan,
2	M/s Kamarhaty Company Ltd., PO Kamrhaty, Kolkata	8	M/s Debath Kagaj Udyog Pvt. Ltd., B.K.Road, Kshetia, PO Mirjapur, PS Burdwan
3	M/s Kohinoor Paper & Newsprint Pvt. Ltd., FIGC, PS - Falta, Kolkata	9	M/s Nayek Paper Industries Pvt. Ltd., Jayantigram, Chotkhanda, PS Memari, Burdwan
4	M/s Taraknath Paper Board Pvt. Ltd., PS Jandigpara, Hooghly	10	M/s Suniti Papers Pvt. Ltd., PO Orgram, PS Ausgram, Distt Burdwan
5	M/s Unitech Paper Mills Pvt. Ltd., Balichak, Distt. Medinipur	11	M/s S.R. International Paper Mills Pvt. Ltd., PS Bizpore, Distt.24, Parganas, West Bengal
6	M/s Unisavo Paper Mills Pvt. Ltd., PS.Jhargram		

4. One mill, namely, M/s Unitech Paper & Board Industries Pvt. Ltd., Bill Beltala, P.O-Rayabassa, PS-Jhargam, Medinapur has claimed ZLD.
5. Most of the mills could not report their proper freshwater consumption and effluent generation status as the information provided were contradictory. Proper metering and record keeping of freshwater consumption, effluent generation and treated effluent quality to be carried out by the mills. All mills to submit their water audit and mass balance reports to WBPCB & CPCB within 45 days.
6. 'Minutes' of the review meeting is annexed at **Annexure-3** for reference and necessary action.

AND WHEREAS, pulp & paper mills operating in the state of West Bengal are required to carry out following pollution control measures, beside other measures as prescribed in the Charter in the time bound manner:

- (i) Implementation of individual action plan before March 2017.
- (ii) Proper metering & record keeping of freshwater consumption, effluent generation, and sample analysis of treated effluent quality to be carried out by the mills. All mills should submit their water audit and mass balance reports, duly verified by reputed institutions like CPPRI, NEERI, IITS, Jadavpur University, etc. to WBPCB & CPCB within 45 days.
- (iii) Water audit and mass balance report to be submitted by the mills claiming ZLD within 60 days.
- (iv) Effluent sampling, analysis and record verification of all the participating mills by reputed institute like CPPRI, NEERI, IITs, Jadavpur University for collection, collation & compilation of data & report preparation. WBPCB and local mill associations should coordinate.

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AND NOW THEREFORE, in view of the above referred observations and in exercise of the powers conferred under Section 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974, the following directions are issued for compliance:

1. The West Bengal Pollution Control Board (WBPCB) shall arrange inspection of the 11 aforementioned identified pulp & paper mills which have been reported as not having adequate ETP system, and shall take appropriate action under section 33A of the Water (Prevention and Control of Pollution) Act, 1974 to these mills so as to ensure installation and commissioning of adequate process technology and ETP system upto tertiary level and compliance with the Charter norms in a time bound manner which should not exceed March 31, 2017 and to submit action taken report to CPCB within 45 days.
2. WBPCB to issue direction under section 33A of the Water (Prevention and Control of Pollution) Act, 1974, to M/s Unitech Paper & Board Industries Pvt. Ltd., which claim ZLD, to submit water audit and mass balance report, duly validated by reputed institute like CPPRI, NEERI, IITs, Jadavpur University, to WBPCB & CPCB within 45 days.
3. The West Bengal Pollution Control Board (WBPCB) shall issue directions/instruction to :
 - (i) The remaining (**Annexure-2**) pulp & paper mills operating in West Bengal to complete the activities/action points/desired technologies as prescribed in 'the Charter' and to ensure compliance with the Charter norms in a time bound manner & forward the action taken report to CPCB.
 - (ii) All the mills (**Annexure-4**) operating in West Bengal shall have proper metering & record keeping of freshwater consumption, effluent generation and sample analysis of treated effluent quality. All mills to submit their water audit and mass balance report duly validated by reputed institute, to WBPCB & CPCB within 45 days.
4. The action taken report shall be sent by WBPCB to the CPCB within 45 days from the date of receipt of these directions. WBPCB shall also acknowledge the receipt of these directions to CPCB within one week from the date of their receipt.

(S.P. SINGH PARIHAR)
CHAIRMAN

Copy to:

1. **Shri U.P. Singh**
Mission Director,
National Mission for Clean Ganga,
(Ministry of Water Resource, River Development &
Ganga Rejuvenation,), Rear Wing, 3rd Floor, MDDS Building,
9 CGO Complex, Lodhi Road, New Delhi-110003

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2. **The Advisor (CP Division)**
Ministry of Environment, Forests & Climate Change
Prithvi Wing, 2nd Floor, Room No. 216
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3. **The Incharge, Zonal office -Kolkata,**
Central Pollution Control Board
Southernd Conclave, Block 502,
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Kolkata - 700 107 (W. B.)
- ✓ 4. I/c, IT, CPCB, Delhi
5. I/C NGRBA Cell, Delhi


(A.B. AKOLKAR)
MEMBER SECRETARY

Annexure-1

List of the 10 mills provided OCEMS data connectivity to CPCB server

1. M/s Emami Paper Mills Ltd., (Gulmohar Paper Ltd.), R.N.Tagore Raod, PS. Belgharia, Kolkata,
2. M/s ITC Limited, (Triveni Tissues Division), PO. Chandrahati, PS-Magra, Hooghly
3. M/s Supreme Paper Mills Ltd., Chakdah, Nadia
4. M/s Ballavpur Paper Manufacturing Ltd.;PO, Ballavpur, Ranugung, dist. Burdwan
5. M/s Kohinoor Paper & Newsprint Pvt.ltd.; FIGC, Phase -II, Sector-v, P.O.Kalatalahat, PS.Falta, 24-pgs(S)
6. M/s Universal Paper Mills Ltd., (Uniglobal Paper Mill Pvt. Ltd.) , PO. Jhargram, Paschim Medinipur
7. M/s East India Paper & Board Mills, 8, Belur Road, PO & PS Liluah, Distt. Howrah
8. M/s GRD Paper Industries Pvt. Ltd., NH-6, Chamrail, PO & PS – Liluah, Distt. Howrah
9. M/s Debnath Kagaj Udyog Pvt. Ltd., B.K.Road, Kshetia Gram Panchayet, Kshetia, PO Mirjapur, PS Burdwan
10. M/s Krishna Tissue Pvt. Ltd., Madari, P.O. Kantapurkur, PS Bagnan, Distt. Howrah, WB



**List of the mills remaining 13 mills operating in West Bengal and
requires to complete the Charter action points in a time bound
manner**

1. Ballavpur Paper Manufacturing Ltd., Ballaupr, Burdwan
2. Balaji Paper & Newprint (P) Ltd., Manikpara, Medinipur
3. RNRK Paper Mills, 9, Belur Road, Howrah
4. East India Paper & Board Mills, 8, Belur Road, PO & PS Liluah, Distt. Howrah
5. GRD Paper Industries Pvt. Ltd., NH-6, Chamrail, PO & PS – Liluah, Distt. Howrah
6. Indian Pulp & Paper Pvt. Ltd., Distt. 24, West Bengal
7. Madhubati Paper Pvt. Ltd., Uluberia, Vill. Mahesrekha, PO & PS – Ulberia, Distt. Howrah
8. Supreme Paper Mills Ltd., Vill. Raninagar, Distt. Nadia
9. Krishna Tissue Pvt. Ltd., Madari, P.O. Kantapurkur, PS Bagnan, Distt. Howrah
10. Uniglobal Paper Mills Pvt. Ltd., PO Jhargram, Distt. Medinipur
11. Pinax Paper Mills Pvt. Ltd., Bidbihar Gram Panchaet, Jambon, PO Shivpur-Arrah, PS Kanksa, Distt. Burdwan
12. Debath Kagaj Udyog Pvt. Ltd., PO Mirjapur, PS Burdwan, West Bengal
13. SKG Pulp & Paper Mills Pvt. Ltd., Bhandargacha Panchayet, PO Panpur, PS Amta, Distt. Howrah



List of the mills remaining 13 mills operating in West Bengal and requires to complete the Charter action points in a time bound manner

1. Ballavpur Paper Manufacturing Ltd., Ballaupr, Burdwan
2. Balaji Paper & Newprint (P) Ltd., Manikpara, Medinipur
3. RNRK Paper Mills, 9, Belur Road, Howrah
4. East India Paper & Board Mills, 8, Belur Road, PO & PS Liluah, Distt. Howrah
5. GRD Paper Industries Pvt. Ltd., NH-6, Chamrail, PO & PS – Liluah, Distt. Howrah
6. Indian Pulp & Paper Pvt. Ltd., Distt. 24, West Bengal
7. Madhubati Paper Pvt. Ltd., Uluberia, Vill. Mahesrekha, PO & PS – Ulberia, Distt. Howrah
8. Supreme Paper Mills Ltd., Vill. Raninagar, Distt. Nadia
9. Krishna Tissue Pvt. Ltd., Madari, P.O. Kantapurkur, PS Bagnan, Distt. Howrah
10. Uniglobal Paper Mills Pvt. Ltd., PO Jhargram, Distt. Medinipur
11. Pinax Paper Mills Pvt. Ltd., Bidbihar Gram Panchaet, Jambon, PO Shivpur-Arrah, PS Kanksa, Distt. Burdwan
12. Debath Kagaj Udyog Pvt. Ltd., PO Mirjapur, PS Burdwan, West Bengal
13. SKG Pulp & Paper Mills Pvt. Ltd., Bhandargacha Panchayet, PO Panpur, PS Amta, Distt. Howrah



Subject: Minutes of the meeting held on September 22-23, 2016 in Kolkata to assess the implementation of the individual Action Plans submitted by Pulp & Paper industries operating in West Bengal – regd.

A meeting was held on September 22-23, 2016 in West Bengal Pollution Control Board (WBPCB) Head Office in Kolkata to assess the implementation status of the individual Action Plans submitted by the Pulp & Paper industries operating in West Bengal. The meeting was attended by officials from WBPCB, CPCB, NEERI and representatives of pulp & paper industries operating in West Bengal. List of participants is annexed.

After threadbare discussion *with individual industries and based on the information provided by them* during the review meeting, suggestions/ observations made for individual industries are as under :

1. M/s Ballavpur Paper Manufacturing Ltd., P.O. Ballavpur, Ranigunj, Dstt. Burdwan, West Bengal – 713 323

- Producing kraft paper at production capacity of 3750T/month (120 -130 T/day) and it has one machine only.
- Installed bar screens and Hill screens before equalization tank.
- Provision for air mixing arrangement in the equalization tank having 100m³ capacity was made.
- The reported freshwater consumption is 820m³/day.
- Planned to install mechanical sludge handling system such as decanter of about 5m³/hr capacity.
- Modifications in aeration tank with diffused aeration system have been made by providing blowers -2nos. (1 no. standby) of 1700 kg/hr and fine diffusers 230 nos.
- Installed Krofta for fibre recovery.
- Installed pressure sand filter of about 15m³/hr capacity as tertiary treatment system.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and has engaged trained personnel for lab & ETP operations.
- Installed online monitoring system and provided linkage to CPCB server.
- Reported effluent generation is about 300m³/day.
- Reported treated effluent discharge quality as pH – 7.7, BOD – 8.0mg/l, COD – 75-80mg/l, TDS – 1700mg/l and TSS – 35mg/l.

2. M/s Balaji Paper & Newsprint (P) Ltd., P.O. Manikpara, PS-Jhargram, Distt. Medinipur, West Bengal – 721 513

- Recycled Fibre based producing Writing & Printing paper at a production capacity of 50TPD and it has one machine only.
- The reported freshwater consumption is about 1200m³/day (20m³/tonne of paper) while wastewater generation is about 850m³/day (12-13m³/tonne of paper).
- Installed bar screens - Coarse & fine before equalization tank.
- Provided equalization tank of about 70m³ capacity with air mixing arrangement.



- Installed adequate effluent treatment facilities consisting of Equalization tank, Clariflocculator of about 700m³ capacity, decanter for sludge handling system, Aeration tank of about 2500m³ capacity with diffusers of about 338nos. and blower of 100hp (standby blower to be installed).
- The ETP system consists of equalization tank, clariflocculator, aeration tank, secondary clarifier, facultative aerated lagoon and polishing pond. The aerated lagoon and polishing pond to be made of RCC by March, 2017.
- Planned to install tertiary treatment facility by January 2017.
- Reported installation of electromagnetic flow meters at ETP outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To install electro-magnetic flow meter at ETP inlet.
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Installed online monitoring system and connection to be made to CPCB server.
- To install two loop deinking with two floatation stages by March, 2017, intermediate fine screening and cleaning and one dispersing stage. The process water loops will be closed and recycled through efficient fibre recovery system such as PDF/DAF.
- Installed PDF of 150m³/hr capacity.
- The reported treated effluent quality shows pH – 7.5, BOD-16-20mg/l, TSS – 22-40mg/l, TDS – 1200-1400mg/l, COD – 125-150mg/l.

3. M/s Deb Jyoti Pulp & Paper Pvt. Ltd., Melakola, P.O. Sitarampur, PS – Salanpur, Distt. Burdwan, West Bengal – 713 359

- Producing kraft paper (recycle fibre based) at production capacity of 40TPD and it has one machine only. Present production level is reported as 20TPD.
- Installed bar screens - Coarse & fine before equalization tank.
- Provided equalization tank of 400m³ capacity, however provision of air mixing arrangement to be made.
- The reported freshwater consumption is about 3-4m³/tonne of paper while wastewater generation is about 145m³/day. About 116m³/day is recycled back into the process and remaining 29m³/day is discharged.
- Mechanical sludge handling system such as drum filter/decanter centrifuge/ belt press of adequate capacity to be installed.
- Aeration tank with (blowers 2x700m³/hr and 230nos. of diffusers) is under commissioning.
- Planned to install sedicell of about 150m³/hr for fibre recovery system by Nov., 2016 before ETP system to close the process water loops.
- Tertiary treatment system such as MMF/DMF/PSF/ACF of adequate capacity to be installed.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Installation of online monitoring system and linkage to CPCB server is to be made.
- The Unit does not have adequate ETP system at present.



4. M/s East India Paper & Board Mills, 8, Belur Road, PO & PS – Liluah, Distt. Howrah – 711 204 and M/s RNRK Paper Mills, 9, Belur Road, PO – Liluah, Howrah – 711 204

- Producing Kraft paper in case of M/s RNRK Paper Mills & Duplex Board in case of M/s East India Paper & Board Mills at production capacity of 30TPD & 25 TPD, respectively.
- There exists a Common ETP for both the mills
- Installed bar screens - Coarse & fine before equalization tank.
- Provision for air mixing arrangement in the equalization tank of about 75m³ capacity to be made.
- For East India Paper & Board Mills, the reported freshwater consumption is about 13-14m³/tonne of paper while wastewater generation is about 12-15m³/tonne of paper.
- For RNRK, the reported freshwater consumption is about 10-12m³/tonne of paper while wastewater generation is about 2m³/tonne of paper.
- Provided decanter of adequate capacity as sludge handling system.
- Modifications in aeration tank with fine diffused aeration system have been provided.
- Fibre recovery system such as PDF/DAF in both plants before ETP system to be installed by March, 2017 to close process water loops. Vibro screens have been installed in both plants.
- Tertiary treatment (multigrade sand filter) to be installed by Dec., 2016.
- To install electromagnetic flow meters at ETP inlet. Reported to install electromagnetic flowmeter at ETP outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and engaged trained personnel for lab & ETP operations.
- Installation of online monitoring system and linkage to CPCB server to be made.
- The reported treated effluent quality shows pH – 7.8-8.2, BOD-14-28mg/l, TSS – 22-40mg/l, TDS – 1200-1400mg/l, COD – 80-200mg/l.

5. M/s GRD Paper Industries Pvt. Ltd., NH-6, Chamrail, PO & PS – Liluah, Distt. Howrah – 711 114

- Producing Kraft paper using recycled fibre at production capacity of 60TPD and it has one machine only.
- Installed vibro screens (2nos.) before equalization tank.
- Provision of air mixing arrangement in equalization tank of capacity (80m³) shall be completed by Dec., 2016.
- The reported freshwater consumption is about 5m³/tonne of paper, whereas wastewater generation is about 1m³/tonne of paper.
- Modifications in aeration tank with fine diffused aeration system made.
- Fibre recovery system such as PDF/DAF before ETP system to be installed by March, 2017 to close process water loops.
- Provision for tertiary treatment (multigrade sand filter) to be installed by Dec., 2016.
- Installed electromagnetic flow meters at ETP outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To install electromagnetic flowmeter at ETP inlet.
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.



- The reported treated effluent quality shows pH – 7.5, BOD-16-30mg/l, TSS – 10-30mg/l, TDS – 1200-1300mg/l, COD – 80-160mg/l.
- Installed online monitoring system and provided linkage to CPCB server.

6. M/s Emami Paper Mills Ltd., [Gulmohar Paper Ltd.], R.N.Tagore Road, P.S. Belgharia, Kolkata – 35

- Producing Newsprint paper using recycled fibre at production capacity of 50TPD.
- Installed bar screens - Coarse & fine before equalization tank.
- Provision of air mixing arrangement in equalization tank was made.
- Installed adequate effluent treatment facilities and ETP consists of Equalization tank, Primary Clarifier, Decanter-centrifuge & krofta, Aeration tank with diffused aeration system, Secondary Clarifier and Tertiary treatment facility as per Charter action points.
- Installed Hydramics for fibre recovery before ETP system. Details to be provided.
- Installed electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and has engaged trained personnel for lab & ETP operations.
- Installed online monitoring system instrument and linkage to CPCB server completed.
- Reported fresh water consumption is 14m³/tonne of paper while effluent generation is about 9.5m³/tonne of paper.
- The reported treated effluent quality shows pH – 7.4, BOD-12-13mg/l, TSS – 14mg/l, TDS – 1015mg/l, COD – 100-102mg/l, Colour – 25PCU and SAR – 7.5.

7. M/s Indian Pulp & Paper Pvt. Ltd., P.O. Hazinagar, P.S.Naihati, Distt. 24, West Bengal – 743 135

- Producing Kraft paper using recycled fibre at production capacity of 150TPD.
- Installed bar screens - Coarse & fine before equalization tank.
- Provision for air mixing arrangement in the equalization tank made.
- The reported freshwater consumption is about 10m³/tonne of paper (800m³/day) while wastewater generation is about 5.35m³/tonne of paper (750m³/day).
- Primary Clarifier, alpha Decanter having 1.2T/hr capacity & Aeration tank with diffused aeration system (320 nos of diffusers and 3nos. of 1850m³/hr blowers), Secondary Clarifier of adequate capacity installed.
- Installed hill screens (60mesh) for fibre recovery before ETP system and proposed to install sedicell (250m³/hr) by Dec 2016.
- Installed MMF (100m³/hr capacity) as Tertiary treatment in March 2016.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at borewells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and has engaged trained personnel for lab & ETP operations.
- The reported treated effluent quality shows pH – 7.88, BOD-20mg/l, TSS – 20mg/l, COD – 80mg/l.
- Installed online monitoring system instrument and linkage to CPCB server to be provided.



8. M/s ITC Ltd., (Tribeni Tissues Division), P.O.Chandrahati, P.S-Magra, Hooghly

- Producing Speciality paper at a production capacity of 95TPD.
- Action plan to be submitted for reduction of fresh water consumption.
- The 75% of treated effluent is being used for irrigation purpose about 500 acres land.
- Provision for air mixing arrangement in the equalization tank made.
- Installed effluent treatment facilities consisting of Equalization tank, Primary Clarifier, Sludge handling system, fibre recovery system, Aeration tank with diffused aeration system and Secondary Clarifier.
- Installed tertiary treatment system as MGF and ACF.
- Installed open channel sensors at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- Installed environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Installed online monitoring system instrument and linked to CPCB server.
- To submit details of irrigation management plan.
- The reported treated effluent quality shows pH – 7.5, BOD-3-5mg/l, TSS <10mg/l, COD – 35mg/l, TDS – 500-550mg/l and colour – 50-60PCU.
- Freshwater consumption is about 57-58m³/tonne of paper while wastewater generation is about 48m³/tonne of paper.

9. M/s Kamarhatty Company Ltd., PO Kamrhatty, Kolkata – 700 058

- Producing Kraft paper using recycled fibre at production capacity of 28TPD.
- The Unit does not have adequate ETP system.
- The freshwater consumption of the Unit is about 7m³/tonne of paper (about 200m³/day) while the generated wastewater is reported to be directly being discharged into river Ganga.
- To install bar screens - Coarse & fine before equalization tank.
- Provision for air mixing arrangement in the equalization tank has made.
- Installed krofta (50m³/hr) as primary clarifier.
- Install Primary clarifier with adequate retention time and mechanical sludge handling system.
- Aeration tank of adequate capacity with diffused aeration system planned to be installed by Oct 31, 2016.
- To install tertiary treatment system such as MMF/DMF/PSF/ACF of adequate capacity.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Ordered online monitoring system instrument and linkage to CPCB server is to be made.
- The Unit does not have adequate ETP system.



10. M/s Kohinoor Paper & Newsprint Pvt. Ltd., FIGC, Phase-ii, Sector-V, P.O.Kalatalahat, PS – Falta, Kolkata – 743 504

- Producing newsprint paper using recycled fibre at production capacity of 150TPD.
- Installed krofta of about 300m³/hr capacity for fibre recovery before ETP system to close process water loops & recycle.
- The freshwater consumption is about 10m³/tonne of paper while wastewater generation is about 7m³/tonne of paper.
- Installed bar screens - Coarse & fine before equalization tank.
- Provision for air mixing arrangement in the equalization tank (2310m³) has made.
- Augmentation of primary clarifier capacity (297m³) has made.
- Provided Mechanical sludge handling system (centrifuge decanter) for sludge recovery.
- Modifications in aeration tank (1260m³) with diffused aeration system (diffusers – 280m³) have been completed.
- Upgraded Secondary clarifier capacity to 565 m³.
- To install tertiary treatment system such as coagulation-flocculation followed by DAF/tertiary clarifier of adequate capacity.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Installed online monitoring system provided linkage to CPCB server.
- To install two loop deinking with two flotation stages, intermediate fine screening & cleaning and one dispersing stage.
- The mill is not in operation since July, 2016. However, planned to resume operations from 2016.

11. M/s Madhubati Paper Pvt. Ltd., Uluberia, Vill. Mahesrekha, PO & PS – ulberia, Distt Howrah – 711 315

- Producing Kraft paper using recycled fibre at production capacity of 80TPD.
- Installed bar screens - Coarse & fine before equalization tank.
- Modified equalization tank at about 343m³ capacity with a provision of air mixing diffusers.
- Freshwater consumption is about 3.4m³/tonne of paper while effluent discharge is about 1 m³/tonne of paper.
- Tube settlers of adequate capacity installed at a capacity of (2nos. of capacity - 6m³/hr and 8 m³/hr).
- Upgraded aeration tank capacity to 346m³ with 80 nos. of diffusers, blowers-1 (793m³/hr) and blower-2 (1195m³/hr).
- Installed belt press for sludge handling.
- Installed MGF of about 10m³/hr capacity as tertiary treatment system.
- Installed 'V'-notch at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To install electromagnetic flow meters at ETP inlet & outlet, colour coding of pipelines.
- Installed environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.



- The reported treated effluent quality shows pH – 7.6, BOD-20-25mg/l, TSS – 30mg/l, COD – 160mg/l and TDS- 1200mg/l.
- Online monitoring system to be installed and connectivity to CPCB server by Sept, 2016.

12. M/s Supreme Paper Mills Ltd., Vill. Raningar, P.O. & P.S. Chakdah, L.B.Chandurai, Distt. Nadia – 741 222

- Producing Writing & Printing paper using recycled fibre at production capacity of 675TPM (22 TPD). Presently, production capacity is 30TPD.
- The Unit to submit action plans to reduce fresh water consumption and the effluent generation as per the Charter by Sept 30, 2016.
- Freshwater consumption is about 45.5m³/tonne of paper (1000m³/day) while effluent generated is about 26m³/tonne of paper (800m³/day).
- Dismantled existing lagoons, anaerobic lagoons, polishing ponds.
- Equalization tank capacity augmented to 220m³ capacity and made provision for air mixing arrangement.
- Modifications in aeration tank with diffused aeration system (diffusers of 193nos. and 2nos. of blowers of capacity 1200m³/hr each) completed.
- Installed MGF of about 60m³/hr capacity as tertiary treatment system.
- Installed DAF of about 220m³/day capacity for fibre recovery before ETP system to close process water loops & recycle.
- Installed single loop deinking with three floatation stages, intermediate fine screening and cleaning and one dispersing stage from existing one loop floatation and one loop ink washing. Details to be provided.
- Installed electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and engaged trained personnel for lab & ETP operations.
- The reported treated effluent quality shows pH – 7.5, BOD-15-18mg/l, TSS – 25mg/l, COD – 140-150mg/l, TDS- 800-1100mg/l and MLSS-2500-3000mg/l.
- Installed online monitoring system, linkage to CPCB serves provided.

13. M/s Taraknath Paper Board Pvt. Ltd., Binodbati, PO Rahimpur, PS Jangipara, Hooghly – 712 408

- Producing Kraft paper/Board using recycled fibre at production capacity of 10 TPD.
- Installed sedicell, vibrating screens and hill screens before ETP system to close process water loops & recycle.
- Freshwater consumption is about 6m³/tonne of paper while effluent generated is about 5m³/tonne of paper, which is presently being discharged into paddy fields without treatment.
- Equalization tank with air mixing arrangements to be installed.
- Planned to install Primary clarifier (130m³ capacity), Aeration tank (capacity of about 260m³ with 90nos. of diffusers and one blower of 800m³/hr) and Secondary clarifier (capacity of about 130m³) by Nov., 2016.
- Provision for tertiary treatment with MGF/DMF/ACF to be made.
- To install mechanical sludge handling system.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size



& type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).

- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- The reported treated effluent quality shows pH – 7.5-7.8, BOD-10-20mg/l, TSS – 25-35mg/l, COD – 100-160mg/l and TDS- 1100-1300mg/l.

14. M/s Krishna Tissue Pvt., Ltd., Madari, P.O. Kantapukur, PS. Bagnan, Distt. Howrah – 711 303

- Producing Duplex Board using recycled fibre at production capacity of 250 TPD.
- Installed bar screens - Coarse & fine before equalization tank.
- Installed Equalization tank of capacity (80m³) however, air mixing arrangement yet to be provided. Planned to augment capacity of equalization tank to 500m³ by Dec., 2016.
- Installed Primary clarifier of capacity of about 703m³.
- Installed 2 nos. of decanters and 1 nos. of screw press as mechanical sludge handling system.
- Aeration tank (2400m³) modified with aspirators 5nos x 25hp.
- Tertiary treatment system of adequate capacity such as coagulation & flocculation followed by DAF/tertiary clarifier/tube settlers to be installed by March, 2017.
- Installed electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and engaged trained personnel for lab & ETP operations.
- Installed online monitoring system and linkage to CPCB server to be provided by Oct., 2016.
- Reported freshwater consumption is 1100m³/day (5-6m³/tonne of paper) and effluent generation is about 360m³/day (1.5m³/tonne of paper).
- The reported treated effluent quality shows pH – 7.5-7.6, BOD-10-20mg/l, TSS –25-35mg/l, COD – 100-160mg/l and TDS- 1100-1300mg/l.

15. M/s Unitech Paper Mills Pvt. Ltd., Balichak, PS Debra, Chakshyampur, Distt. Medinipur, West Bengal – 721 124.

- Producing Kraft paper using recycled fibre at production capacity of PM1 - 60 TPD. Planned to commission another Paper Machine/unit in the same premises with capacity of 80 TPD and common ETP.
- To install efficient fibre recovery system such as PDF/DAF of adequate capacity before ETP system to close process water loops & recycle. Order placed for Sedicell (160m³/hr) to be installed by March 2017.
- Installed bar screens - Coarse & fine before equalization tank.
- Installed Equalization tank of capacity (125m³ and 225m³) with recirculation arrangements.
- Installed centrifuge decanter.
- Existing aerated lagoons has 2nos. of aerators of 10hp each followed by Polishing pond (700m³).
- Planned to commission aeration tank of capacity upgraded to 1400m³ and install diffusers by March, 2017.
- Planned to install tube settlers of adequate capacity as secondary clarifier by March 2017, 80% of work completed.



- Provision for tertiary treatment facility (with MMF/DMF/PSF/ACF) has to be made. Work order to be placed by Oct, 2016.
- To install electromagnetic flow meters at ETP inlet & outlet. Reported to install water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Installed online monitoring system and connectivity to CPCB server to be provided.
- The Unit does not have adequate ETP system.

16. M/s Uniglobal Paper Mills Pvt. Ltd., PO Jhargram, Distt. Medinipur, West Bengal – 721 507.

- Producing Duplex board using recycled fibre at production capacity of 80 TPD.
- Installed sedicell of about 180m³/hr capacity for fibre recovery before ETP system to close process water loops & recycle.
- Installed bar screens - Coarse & fine before equalization tank.
- Freshwater consumption is about 500m³/day (7m³/tonne of paper) while effluent generation is 3000m³/day, part of which is recycled and remaining being discharged.
- Installed Equalization tank of capacity (28m³) with air mixing arrangements.
- Mechanical sludge handling system to be installed by Dec., 2016.
- Modified aeration tank with capacity 1000m³ and provided diffusers of 122nos. and one blower of 40hp motors. One standby blower to be commissioned by Dec., 2017.
- Installed MGF (50m³/hr capacity) as a tertiary treatment facility.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and engaged trained personnel for lab & ETP operations.
- The reported treated effluent quality shows pH – 6.8-7.5, BOD-15-23mg/l, TSS – 22-35mg/l, COD – 120-140mg/l, TDS- 900-1200mg/l and MLSS-2600-3000mg/l.
- Installed online monitoring system and provided connectivity to CPCB server however location to be changed, as per guidelines.

17. M/s Pinax Paper Mills Pvt Ltd., Bidbihar Gram Panchaet, Jambon, PO Shivpur-Arrah, PS Kanksa, Distt. Burdwan – 713 212.

- Producing kraft paper using recycled fibre at production capacity of 100 TPD.
- Freshwater consumption is about 3.4m³/tonne of paper while effluent generation is about 1.2m³/tonne of paper.
- Installed double hill screens before equalisation tank for fibre recovery before the ETP system to close process water loops & recycle.
- Installed Equalization tank of capacity (245m³) with air mixing arrangements.
- Mechanical sludge handling system to be installed.
- Installed tube settlers followed by primary clarifier of about 350m³ capacity.
- Installed aeration tank of about 450m³ capacity with diffusers of 226nos. and blowers of 2nos. (1000m³/hr each).
- Provided MGF of about 120m³/day capacity as tertiary treatment.



- Installed hill screen followed by tube settler for fibre recovery system.
- Planned to install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed), by Dec., 2016.
- Provided environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and has engaged trained personnels for lab & ETP operations.
- The reported treated effluent quality shows pH – 6.9, BOD-17-18mg/l, TSS – 26-29mg/l, COD – 130-142mg/l and TDS- 1100-1300mg/l.
- Installed online monitoring system & linkage to CPCB server to be provided by Dec 2016.

18. M/s Unisavo Paper Mills Pvt. Ltd., Vill. Jitusole, PO Garhsalboni, PS. Jhargram, West Bengal – 721 507.

- Producing Kraft paper using recycled fibre at production capacity of 25 TPD.
- The Unit does not have adequate ETP system.
- Installed Hill screen for fibre recovery before equalization tank.
- Fresh water consumption is about 3.5m³/tonne of paper while effluent generation is about 1.5m³/tonne of paper.
- Installed Equalization tank of about 50m³ capacity with air mixing arrangements.
- Mechanical sludge handling system such as drum filter of adequate capacity to be installed.
- Primary clarifier of adequate capacity to be installed.
- To install aeration tank with diffused aeration system with adequate capacity.
- Provision for tertiary treatment facility such as MMF/DMF/PSF/ACF to be made.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Online monitoring system to be set up.

19. M/s Bardhaman Dharmaraj Paper Mill Pvt. Ltd., Memari Panchayat Samity, Konerpara, PO Kala Nabagram, PS Memari, Distt. Burdwan, West Bengal – 713 124.

- Producing Kraft paper using recycled fibre at production capacity of 100 TPD.
- Installed hill screen for fibre recovery system before the ETP system by Dec 2016 to close process water loops & recycle.
- Bar screens - Coarse & fine before equalization tank to be installed.
- Fresh water consumption is about 7.5m³/tonne of paper and effluent generation is about 1.8m³/tonne of paper.
- Equalization tank capacity to be augment and provision of air mixing arrangements to be done by Dec. 2016.
- Installed primary clarifier of about 1000m³ capacity.
- Planned to commission aeration tank with 3000m³ capacity, diffusers – 160 nos., blowers – 2 nos. (1100m³/hr each) by October, 2016.
- Provided Secondary clarifier of about 1000m³ capacity.
- Planned to install DMF of 180m³/hr capacity (2nos. of DMF of about 90m³/hr each) as tertiary treatment facility by Dec., 2016.



- Mechanical sludge handling system such as sludge press of about 3T/day capacity, to be installed by Dec., 2016.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed) by Dec., 2016.
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations by Nov., 2016.
- Installed online monitoring system and connectivity to be made by Sept 30, 2016.
- At present, the Unit does not have adequate ETP system.

20. M/s Debath Kagaj Udyog Pvt. Ltd., B.K.Road, Kshetia Gram Panchayet, Kshetia, PO Mirjapur, PS Burdwan, West Bengal – 713 101.

- Producing Kraft paper using recycled fibre at production capacity of 50 TPD.
- Installed bar screens - Coarse & fine before equalization tank.
- Freshwater consumption is about 3m³/tonne of paper (150m³/day) while effluent generation is about 2m³/tonne of paper (100m³/day).
- Installed equalization tank of capacity of about 50m³ with air mixing arrangements.
- Installed drum filter for sludge handling.
- Installed aeration tank of about 150m³ capacity provided with diffusers – 60 nos and blowers – 2 nos (600m³/hr each).
- To install secondary clarifier of adequate capacity.
- Provision for tertiary treatment facility such as MMF/DMF/PSF/ACF of adequate capacity to be installed by Dec. 2016.
- Efficient Fibre recovery system such as PDF/DAF before the ETP system to close process water loops to be installed.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed) by Dec. 2016.
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- At present, ETP system is not adequate.
- Installed online monitoring system, however, connectivity to CPCB server to be made.

21. M/s Unitech Paper & Board Industries Pvt. Ltd., Vill. Beltala, PO Rajabasa, PS Jhargram, Distt. Medinipur, West Bengal – 721 513.

- Producing Grey Board using recycled fibre at production capacity of about 15 TPD and claimed ZLD.
- Installed bar screens - Coarse & fine before equalization tank.
- Installed primary clarifier of adequate capacity of about 100m³.
- Installed Secondary clarifier of adequate capacity of about 200m³.
- Installed Hill screen – 2 nos. for fibre recovery system.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed) by October 2016.



- The mill does not have ETP system.
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- To install online monitoring system.
- As the Unit has claimed ZLD, it should submit water audit and mass balance report, daily verified by reputed institutions like NEERI, IITs, CPPRI and submit to CPCB/WBPCB by Dec., 2016.

22. M/s Nayek Paper Industries Pvt. Ltd., Bagial Gram Panchayet, Nuipur, Jayantigram, PO Chotkhanda, PS Memari, Distt. Burdwan, West Bengal – 713 146.

- Producing Kraft paper using recycled fibre at production capacity of about 60 TPD.
- The Unit does not have adequate ETP system.
- To install bar screens - Coarse & fine before equalization tank.
- Installed Equalization tank of capacity of about 500m³ however air mixing arrangements to be installed by Dec., 2016.
- To install primary clarifier of adequate capacity.
- Planned to commission aeration tank of about 500m³ capacity with diffused aeration system by January, 2017.
- To install Secondary clarifier of adequate capacity.
- Provision for tertiary treatment facility such as MMF/DMF/PSF/ACF of adequate capacity to be made.
- To install mechanical sludge handling system such as drum filter of adequate capacity.
- Installed Sedicell of about 500m³/hr capacity for fibre recovery system before the ETP system to close process water loops & recycle.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Installation of online monitoring system to be made.
- It was reported that the Unit resumed operations 3-4 months back, the Unit should submit the time bond action plan.

23. M/s SKG Pulp & Paper Mills Pvt. Ltd., Bhandargacha Panchayet, PO Panpur, PS Amta, Distt Howrah – 711 401.

- Producing Duplex Board & grey Board using recycled fibre at production capacity of about 70 TPD.
- The Unit does not have adequate ETP system.
- To install bar screens - Coarse & fine before equalization tank.
- Installed Equalization tank of capacity of about 300m³ with air mixing arrangements.
- Installed primary clarifier of adequate capacity.
- Installed aeration tank of adequate capacity with diffused aeration system. Details to be provided by Sept. 2016.
- Installed Secondary clarifier of adequate capacity.
- Installed sand filters as tertiary treatment system.
- Filter press installed for sludge handling.
- Installed sedicell and hill screen as fibre recovery system.



- Installed electromagnetic flow meters at ETP inlet, water meters at bore wells however flow meter at ETP outlet, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed) to be installed.
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Installed online monitoring system however connectivity to CPCB server to be provided.
- The mill is not in operation since June 2015 and planned to resume operations since Dec., 2016.

24. M/s Suniti Papers Pvt. Ltd., PO Orgram, PS Ausgram, Distt Burdwan – 713 167.

- Producing Duplex Board using recycled fibre at production capacity of 50 TPD.
- The Unit has not installed ETP system.
- To install bar screens - Coarse & fine before equalization tank.
- Installed Equalization tank of about 50m³ capacity and has done air mixing arrangements.
- Installed primary clarifier of about 113m³ capacity.
- Installation of aeration tank of about 75m³ capacity with diffused aeration system shall be completed by Oct., 2016.
- Installed Secondary clarifier of about 113m³ capacity.
- Tertiary treatment facility such as MMF/DMF/PSF/ACF of adequate capacity to be installed.
- Fibre recovery system such as PDF/DAF to be installed before the ETP system to close process water loops.
- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.
- Installation of online monitoring system to be made.

25. M/s S.R. International Paper Mills Pvt. Ltd., Jetia Gram Panchayet, Bijna, PO. Madarpur, PS. Bizpore, Distt. 24, Parganas, West Bengal – 743 166.

- Producing Kraft paper using recycled fibre at production capacity of 50 TPD.
- The Unit does not have adequate ETP system.
- To install bar screens - Coarse & fine before equalization tank.
- To install Equalization tank of adequate capacity with air mixing arrangements.
- To install primary clarifier of adequate capacity or tube settler/ lamellar settler of adequate capacity
- To install aeration tank of adequate capacity with diffused aeration system. Details to be provided.
- To install Secondary clarifier / tube settler/ lamellar settler of adequate capacity.
- To install tertiary treatment facility such as MMF/DMF/PSF/ACF of adequate capacity (say, 40m³/hr).
- To install mechanical sludge handling system such as drum filter/decanter centrifuge/belt press etc. of adequate capacity.
- Fibre recovery system such as PDF/DAF to be installed before the ETP system to close process water loops.



- To install electromagnetic flow meters at ETP inlet & outlet, water meters at bore wells, running our meters at pipelines carrying process water, colour coding of pipelines, use of optimum size & type of nozzles in wire cleaning showers (<0.6-0.7mm self-cleaning & oscillating nozzles, depending upon machine speed).
- To set up environmental lab for analysis of parameters, namely, DO, pH, BOD, COD, TSS, TDS, MLSS & MLVSS and to engage trained personnel for lab & ETP operations.

Based on the above mentioned suggestions/observations made for individual industries, following issues emerged for follow up action by WBPCB and industries:

1. Out of 26 pulp & paper mills covered under the Charter, only 3 mills are covered under the list 764 GPI discharging into river Ganga main stream. These Units are

i.	i	Emami Paper Mills Ltd. [Gulmohar Paper Ltd.], R.N.Tagore Road, P.S.Belgharia, Kolkata-35
ii.	i i	ITC Ltd. (Tribeni Tissues Division), P.O.Chandrahati, P.S.Magra, Hooghly
iii.	i i i	Supreme Paper Mills Ltd.; Vill-Raninagar, P.O. & P.S.Chakdah, L.B.Chanduria, District Nadia Pin 741 222

2. Nine pulp & paper units are covered into the revised list of 995 GPIs discharging into river Ganga main stem. These Units are:

i.	Emami Paper Mills Ltd. [Gulmohar Paper Ltd.], R.N.Tagore Road, P.S.Belgharia, Kolkata-35
ii.	ITC Ltd. (Tribeni Tissues Division), P.O.Chandrahati, P.S.Magra, Hooghly
iii.	Supreme Paper Mills Ltd.; Vill-Raninagar, P.O. & P.S.Chakdah, L.B.Chanduria, District Nadia Pin 741 222
iv.	Ballavpur Paper Manufacturing Ltd., PO.Ballavpur, Ranigunj, Dist.Burdwan, Pin 713 323
v.	Kohinoor Paper & Newsprint Pvt.Ltd.; FIGC, Phase-II, Sector-V, P.O.Kalatalahat, PS.Falta, District 24- Pgs(S), Pin-743504
vi.	M/s Krishna Tissue Pvt., Ltd., Madari, P.O. Kantapukur, PS. Bagnan Distt. Howrah – 711 303
vii.	M/s Unitech Paper Mills Pvt. Ltd., Balichak, PS Debra, Chakshyampur, Distt. Medinipur, West Bengal – 721 124
viii.	M/s Universal Paper Mills Pvt. Ltd., (Uniglobal Paper Mills Pvt. Ltd.), PO Jhargram, Pashim Medinipur, West Bengal – 721 124
ix.	Indian Pulp and Paper Pvt. Ltd. P.O. Hazinagar, P.S. Naihati, Dist. 24 Pgs(N) PIN 743 135



3. It appears that still a few mills, which are discharging into river Ganga main stem are missing from the revised GPI list, Ex.: Kamarhaty Company Limited, PO Kamarhatty, Kolkata- 700 058
4. Though 16 mills have reported to install online effluent monitoring system, however only 9 mills have provided connectivity to CPCB server.

i.	Emami Paper Mills Ltd. [Gulmohar Paper Ltd.], R.N.Tagore Road, P.S.Belgharia, Kolkata-35
ii.	ITC Ltd. (Tribeni Tissues Division), P.O.Chandrahati, P.S.Magra, Hooghly
iii.	Supreme Paper Mills Ltd.; Vill-Raninagar, P.O. & P.S.Chakdah, L.B.Chanduria, District Nadia Pin 741 222
iv.	Ballavpur Paper Manufacturing Ltd., PO.Ballavpur, Ranigunj, Dist.Burdwan, Pin 713 323
v.	Kohinoor Paper & Newsprint Pvt.Ltd.; FIGC, Phase-II, Sector-V, P.O.Kalatalahat, PS.Falta, District 24- Pgs(S), Pin-743504
vi.	M/s Universal Paper Mills Pvt. Ltd., (Uniglobal Paper Mills Pvt. Ltd.), PO Jhargram, Pashim Medinipur. West Bengal - 721 124
vii.	EAST INDIA PAPER & BOARD MILLS 8,Belur Road, Po & Ps-Liluah, Dist-Howrah,Pin-711204
viii.	GRD PAPER INDUSTRIES PRIVATE LIMITED NH- 6,Chamrail, PO &PS -Liluah, Dist-Howrah, Pin-711114.
ix.	Debath Kagaj Udyog Pvt. Ltd. B.K. Road, Kshetia Gram Panchayet, Kshetia, PO Mirjapur, P.S. Burdwan,

5. Based on the information provided by the mills, it appears that about 14 mills have commission two stage biological treatment system, out of which 10 mills have also commissioned tertiary treatment system. Details enclosed at Annexure-I.
6. About 11 mills do not have adequate ETP system at present. These mills are as under:

i.	Deb Jyoti Pulp & Paper Pvt. Ltd. Melakola,Po-Sitarampur,Ps-Salanpur, Dist-Burdwan, Pin 713359
ii.	Kamarhaty Company Limited PO Kamarhatty, Kolkata- 700 058
iii.	Kohinoor Paper & Newsprint Pvt.Ltd.; FIGC, Phase-II, Sector-V, P.O.Kalatalahat, PS.Falta, District 24-Pgs(S), Pin-743504
iv.	Taraknath Paper Board Pvt. Ltd. Vill/City:-Binodbati,Po-Rahimpur,Ps-Jangipara, Dist-Hooghly, Pin - 712408
v.	Unitech Paper Mills (Pvt.) Ltd., Balichak, PS.Debra, Chakshyampur, Dist.Medinipur(W)

vi.	UNISAVO PAPER MILLS PVT LTD Vill/City:-Jitusole,Po-Garhsalboni,Ps-Jhargram, Pin-721507
vii.	Bardhaman Dharmaraj Paper Mill Private Limited Memari Panchayat Samity, Konerpara, Po-Kala Nabagram,Ps-Memari, District Burdwan Pin-713124
viii.	Debnath Kagaj Udyog Private Limited B.K.Road,Kshetia Gram Panchayet, Kshetia,Po-Mirjapur,PS- Burdwan,Pin-713101
ix.	Nayek Paper Industries Private Limited Bagial Gram Panchayet, Nudipur-Jayantigram, PO-Chotkhanda, PS-Memari, District Burdwan,Pin-713146
x.	Suniti Papers Private Limited Po-Orgam,Ps-Ausgram, District Burdwan Pin-713167
xi.	S. R. International Paper Mills Pvt. Ltd. Jetia Gram Panchayet, Bijna,Po-Madarpur,Ps-Bizpore, District 24 Parganas (N) Pin-743166

7. One mill, namely M/s Unitech Paper & Board Industries Pvt. Ltd., Bill Beltala, PO- Rayabasa, PS Jhargram, Medinipur has claimed ZLD.
8. Most of the mills still require implementation of a few action points as per their individual action plans before March 2017.
9. Most of the mills could not report their proper freshwater consumption and effluent generation status as the information provided contradictory. Proper metering & record keeping of fresh water consumption, effluent generation and treated effluent quality to be carried out by the mills. All mills to submit their water audit and mass balance reports to WBPCB & CPCB within 45 days.
10. Effluent sampling, analysis and record verification of all the participating mills by reputed institute like NEERI, IIT, Jadavpur University for collection, collation and compilation of data and report preparation. WBPCB and local industry to identify the institute.
11. WBPCB should issue letters/directions to participating pulp & paper mills for implementation of the remaining action points of the individual action plans in a time bound manner.
12. Monitoring of all participating mills for data generation and report preparation by WBPCB.
13. WBPCB should arrange inspection of the 11 identified mills which have been reported as not having adequate ETP system; to issue appropriate directions under section 33(A) of the Water Act, 1974 to these mills to ensure installation & Commissioning of adequate process technology and ETP system upto tertiary level and to comply with the Charter norms in a time bound manner and to submit action taken report to CPCB within 45 days.

The meeting ended with vote of thanks to all the members of the committee and the participants.



List of the mills 26 mills operating in West Bengal

1. M/s Ballavpur Paper Manufacturing Ltd., Ballaupur, Burdwan
2. M/s Balaji Paper & Newprint (P) Ltd., Manikpara, Medinipur
3. RNRK Paper Mills, 9, Belur Road, Howrah
4. East India Paper & Board Mills, 8, Belur Road, PO & PS Liluah, Distt. Howrah
5. GRD Paper Industries Pvt. Ltd., NH-6, Chamrail, PO & PS – Liluah, Distt. Howrah
6. Indian Pulp & Paper Pvt. Ltd., Distt. 24, West Bengal
7. Madhubati Paper Pvt. Ltd., Uluberia, Vill. Mahesrekha, PO & PS – Ulberia, Distt. Howrah
8. Supreme Paper Mills Ltd., Vill. Raninagar, Distt. Nadia
9. Krishna Tissue Pvt. Ltd., Madari, P.O. Kantapurkur, PS Bagnan, Distt. Howrah
10. Uniglobal Paper Mills Pvt. Ltd., PO Jhargram, Distt. Medinipur
11. Pinax Paper Mills Pvt. Ltd., Bidbihar Gram Panchaet, Jambon, PO Shivpur-Arrah, PS Kanksa, Distt. Burdwan
12. Debath Kagaj Udyog Pvt. Ltd., PO Mirjapur, PS Burdwan, West Bengal
13. SKG Pulp & Paper Mills Pvt. Ltd., Bhandargacha Panchayet, PO Panpur, PS Amta, Distt. Howrah
14. Emami Paper Mills Ltd., [Gulmohar Paper Ltd.], R.N.Tagore Road, P.S. Belgharia, Kolkata
15. ITC Ltd., (Triveni Tissues Division), P.O. Chandrahati, P.S. – Magra, Hooghly
16. M/s Deb Jyoti Pulp & Paper Pvt Ltd., Sitarampur, Burd
17. M/s Kamarhaty Company Ltd., PO Kamrhaty, Kolkata
18. M/s Kohinoor Paper & Newsprint Pvt. Ltd., FIGC, PS – Falta, Kolkata
19. M/s Taraknath Paper Board Pvt. Ltd., PS Jandigpara, Hooghly
20. M/s Unitech Paper Mills Pvt. Ltd., Balichak, Distt. Medinipur
21. M/s Unisavo Paper Mills Pvt. Ltd., PS Jhargram
22. M/s Bardhaman Dharmaraj Paper Mill Pvt Ltd., Memari Panchayat Samity, Distt. Burdwan,
23. M/s Debath Kagaj Udyog Pvt. Ltd., B.K.Road, Kshetia, PO Mirjapur, PS Burdwan
24. M/s Nayek Paper Industries Pvt. Ltd., Nuipur, Jayantigram, PO Chotkhanda, PS Memari, Distt. Burdwan
25. M/s Suniti Papers Pvt. Ltd., PO Orgram, PS Ausgram, Distt Burdwan
26. M/s S.R. International Paper Mills Pvt. Ltd., Jetia Gram Panchayet, Bijna, Madarpur, PS Bizpore, Distt.24, Parganas, West Bengal