

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH
NEW DELHI**

APPEAL NO. 19 OF 2015

(M. A. NO. 355 OF 2015)

IN THE MATTER OF:

Chadha Papers Limited
Having Registered Office at:
Chadha Estate, Nanital Road,
Tehsil Bilaspur, District Rampur,
Uttar Pradesh - 244921

.....Appellant

Versus

1. Uttar Pradesh Pollution Control Board
Through its Chairman
Building No. TC – 12V, Vibhuti Khand,
Gomti Nagar,
Lucknow - 244921
2. Union of India
Through Chairman
Central Pollution Control Board,
Parivesh Bhavan, CBD-Cum-Office Complex
East Arjun Nagar,
Delhi - 110032

.....Respondents

COUNSEL FOR APPLICANT:

Ms. Meenakshi Arora, Senior Advocate along with Mr. Ranjit Prakash, Ms. Garima Singh and Ms. Mahima Sareen, Advocates.

COUNSEL FOR RESPONDENTS:

Mr. Pradeep Mishra and Mr. Daleep Kr. Dhyani, Advocates for Respondent No. 1 (UPPCB)
Mr. Rajkumar, Advocate, Mr. Bhupendra Kumar, LA for Central Pollution Control Board and Mr. Abhishek Yadav, Advocate for State of UP (Respondent No. 2)
Mr. A.K. Prasad, Advocate for Respondent No. 6
Mr. B.V. Niren, Advocate for Respondent No. 7

JUDGMENT

PRESENT:

Hon'ble Mr. Justice Swatanter Kumar (Chairperson)

Hon'ble Mr. Justice Raghuvendra S. Rathore (Judicial Member)

Hon'ble Mr. Bikram Singh Sajwan (Expert Member)

Hon'ble Mr. Ranjan Chatterjee (Expert Member)

Reserved on: 7th September, 2016

Pronounced on: 20th September, 2016

1. Whether the judgment is allowed to be published on the net?
2. Whether the judgment is allowed to be published in the NGT Reporter?

JUSTICE SWATANTER KUMAR, (CHAIRPERSON)

The Uttar Pradesh Pollution Control Board (for short, "UPPCB") on 4th March, 2015 passed the following order against M/s. Chadha Papers Limited, Appellant herein:

"ANNEXURE A

UTTAR PRADESH POLLUTION CONTROL BOARD
Ref. No. F.56950/Circle-7/Direction/185/18(1)B
2015/Gen
4-3-15
Registered
04/3/2015

To,

M/s Chaddha Papers Ltd.
Chaddha Estate Nainital Road, Bilaspur
District – Rampur 244921

Sir,

That the addressee is a waste paper industry within the meaning of Section 47 of the Water (Prevention and Control of Pollution) Act, 1974.

That under the National Clean Ganga Mission for the control of pollution of the Ganga River, one comprehensive and time fixed programme had been created under which the Central Pollution Control Board to issue directions to the concerned industries for compliance of the aforesaid programme and even in past, such directions had been issued to the said industries under the provisions of Water (Pollution Control and Prevention) Act, 1974 as amended.

One workshop was organized by the Central Pollution Control Board on 24th September, 2014, wherein, amongst others, experts/representatives from the Pulp and Paper Industries and their associations, representative/officers also participated. In compliance of the decision taken in the aforesaid workshop, the 'Charter for Water Recycling and Polluting Prevention in Pulp and Paper Industries including Protocol for Operating Chemical Recovery Plants (CRPs) had been published, a copy of which is also available on the website (www.cpcb.nic.in) of the Central Pollution Control Board.

That, in compliance of the directions issued by the Central Pollution Control Board vide letter No. 23012/1/P.C.I.-III/dated 24.02.2015 to the U.P. Pollution Control Board under Section 18 (1)B of the Water (Pollution Control and Prevention) Act, 1974, the following directions are being issued by the U.P. Pollution Control Board, under Section 33A of the Water (Pollution Control and Prevention) Act, 1974 as amended:-

1(a). Your Pulp and Paper Industrial Unit operating in the State shall plan and secure the execution of the activities/action points/desired technology as prescribed under the 'Charter for Water Recycling and Pollution Prevention in Pulp and Paper Industry (Specific to Ganga River Basin States)' and comply with the fresh water consumption, wastewater generation and treated effluent quality norms with the time limits as prescribed under the Charter.

(b). As per the requirement of the 'Charter for Water Recycling and Pollution Prevention in Pulp and Paper Industry, as promulgated by Central Pollution Control Board, the following time table should be complied with and an affidavit to that effect should be submitted by 31st March, 2015 to the Board.

Sl. No.	Activities/Action Points	Time Schedule/frequency
I.	Commissioning of continuous online effluent/emission monitoring system.	March 31, 2015
II.	Self Assessment: Inventory of existing process technologies and practices, identification of up-gradation of process technology with supporting documents and pert chart; submission to SPCB/CPCB.	April 2015
III.	Self Assessment: Preparation	April 2015

	of report of existing water consumption section wise, reuse/recycle practices; preparation of work plan to achieve fresh water requirements targets, submissions to SPCB/CPCB	
IV.	Self Assessment: Preparation of ETP adequacy assessment report, and proposed augmentation and up-gradation, design, drawing, along with monthly PERT chart, submission to SPCB/CPCB	April 2015
V.	Installation of sealed flow meter/running hours meter on bore well and inlet pipe line of different process section i.e. pulp mill, paper machine, boiler etc.	April 2015
VI.	Colour Coding of pipelines carrying recycled process water and fresh process water.	May 2015
VII.	Maintenance of log book to record daily drawl from bore well and water consumption unit wise after installation of meter and reporting to SPCB.	Monthly
VIII.	Self monitoring and Reporting: ETP performance monitoring by individual mills and maintenance of Log Book	Monthly
IX.	Submission of monthly progress report to SPCBs.	Monthly
X.	Verification of progress and reporting by third parties to SPCBs/CPCB	Quarterly
XI.	Up gradation/modification and augmentation of ETP upto territory treatment level.	31 st March, 2016
XII.	Compliance with the treated effluent discharge norms as prescribed under the Charter.	31 st March, 2016
XIII.	Compliance with short terms targets of fresh water consumption, effluent generation and pollution load through implementation of desired technology prescribed under the Charter (Volume	31 st March, 2106

	reduction by 50% - 70%) (pollution load 40% - 70%)	
XIV.	Compliance with short terms targets of fresh water consumption, effluent generation and pollution load through implementation of desired technology prescribed under the Charter (Volume reduction by 60% - 75%) (pollution load 40% - 70%)	31 st March, 2106
XV	Setting up of projects/infrastructure for utilisation of treated effluent, meeting with irrigation water quality norms, for irrigation within the command area as per the irrigation management plant, to achieve zero effluent discharge to river streams.	31 st March, 2106
XVI.	Industry shall dismantle all the digesters and Pulp washing facilities installed in the premises	With immediate effect.

You are also being informed that in case the Unit fails to submit the affidavit by March 31, 2015, the Consent to Operate issued/to be issued to the Unit shall stand withdrawn.

Kindly intimate the compliance of the aforesaid directions immediately to. Please be informed that any on-going actions against the industry will not be affected by this notice. Any permission granted to your Waste Paper based unit in relation to the Digester and Pulp washing facility in the past stands closed.

Yours faithfully,
Sd/-
(J.S. Yadav)
Member Secretary

Copy to:

1. Member Secretary, Central Pollution Control Board in compliance of direction given under Section 18 (1)B of the Water (Pollution Control and Prevention) Act, 1974 vide letter no. 23012/1/PC1-111 dated 24.02.2015.
2. Regional Officer, U.P. Pollution Control Board, Bijnor/Moradabad is to be informed of the aforesaid directions and their compliance on immediate basis.

Sd/-
Member Secretary”

2. The present appeal is directed against the above order. The Appellant has primarily challenged the impugned order on the ground that the order is in violation of Principle of Natural Justice and is arbitrary. No reasons have been provided in the impugned order for withdrawing the consent in favour of the Appellant. On merits, the challenge is on the ground that the Appellant Company does not use any chemicals in the digesters and as such the digester does not discharge any polluting effluent. The Effluent Treatment Plant (for short 'ETP') has been installed and the effluent is treated before discharge. The digesters are used merely for softening of the wet strength paper by steaming and no effluent is discharged. It is also contended that the necessity to preserve ecology and environment should not hamper the economic and other development as held by the Supreme Court of India in the case of "*Essar Oil Limited v. Halar Utkarsh Samiti*" (2004) Vol. 1 2SCC 392.

3. The facts giving rise to the present appeal are held in a very narrow campus. Appellant is a Company registered under the Companies Act, 1956 and is engaged in the business of manufacture of 'News Print Paper' and 'Kraft Paper' of 18+ bursting strength from waste paper. The Appellant Company is a secondary fibre based unit i.e. the unit wherein fibrous materials which have previously undergone a manufacturing process are recycled as raw material for manufacturing of the said paper. According to the Appellant, approximately 1/3 of the paper products are recycled as secondary fibre. The fibre from natural resources, such as wood, is limited and in

such a scenario, recycling of waste paper becomes comparatively easier, more economical and eco-friendly. According to the Appellant Company, the process for manufacture of Newsprint paper and Kraft paper is as follows:

- i. **News Print Paper:** For making 'News Print Paper', manual sorting of indigenous and imported waste paper is carried out. Waste paper is then fed into a Pulper to produce pulp by gently slushing it with water. The pulp so obtained is screened (to remove fibre bundles and plastic), centricleaned (to remove sand and dirt particles) and the cleaned pulp, so obtained, is passed through a de ink cell to de-fibre the paper and to detach the ink particles from the fibre. The pulp is then thickened in a Poly Disc Filter. Thick Pulp is heated to a temperature of 80 °C and dispersed in Disperser to detach the residual attached ink. Dispersed pulp is again passed through Deinking cell to float and remove residual ink. Pulp is thickened and stored in storage tower to finally produce 'News Print Paper'. The entire operation releases a lot of water which is recycled back into the system and the excess water is sent to the Effluent Treatment Plant (hereinafter "**ETP**") for treatment. The ETP set up by the Appellant comprises of an equalization tank, primary clarification system, diffused aeration system and secondary clarification system followed by a tertiary treatment system. The ETP also has Sludge Drying Beds and a Sun dry Board Machine to handle primary and secondary clarifier sludge. The reclaimed/treated water is used for irrigation of the 65 acres green belt developed by the Appellant.
- ii. **Kraft Paper:** For making 'Kraft Paper', domestic corrugated boxes, paper core pipes and imported wet strength waste paper are slushed in Pulpers with backwater. However, imported wet strength waste paper has to be steamed in a spherical digester with only water, to break its' wet strength (fiber to fiber strong bond) before feeding it into the Pulper. The Appellant has, for softening of imported wet strength waste paper, employed Rotary Spherical Digesters with direct heating arrangement. The imported wet strength waste paper is loaded into the Digester with water in 1:1.6 ratio pursuant to which high pressure steam is released into the Digester till a pressure of 3.5

KG/cm² is achieved. At the said pressure, the Digester constantly rotates for 4-5 hours to break the wet strength properties of the paper. The Digester is then de-steamed and the softened imported wet strength waste paper (consistency around 35-40%) is off-loaded from the Digester for further processing. The steamed imported wet strength paper is then blended with other waste paper in the Pulper in requisite proportion. Thereafter, the slushed pulp from Pulper is screened, thickened, refined and centricleaned and then shifted to the paper machine for production of paper. The Appellant submits that most of the backwater generated from this process is recycled into the system and the excess water is sent to the ETP and the reclaimed water is used for irrigation of the 65 acre green belt developed by the Appellant.

The Appellant submits that, in the alternative, the Digester can also be used to produce pulp by using wood/cereal straw/bagasse (collectively referred to as agro waste) with chemicals which yields only 50% pulp and releases black liquor as effluent which is highly polluting. It is pertinent to mention that the Appellant does not use agro waste for making paper and only uses secondary fibre which yields almost 100% pulp with no effluent discharge. It is also pertinent to mention that no technology other than digesters is available in the market today which can soften imported wet strength paper without using chemicals.

4. The Appellant Company was lying closed for several years and it changed its process from agro-based to waste paper and then had applied for obtaining consent of the Board(UPPCB) to operate vide its application dated 8th January, 2014. Respondent No. 1, UPPCB granted Consent to Operate in terms of Sections 25 and 26 of the Water (Prevention and Control of Pollution) Act, 1974 (for short, 'Water Act') vide its order dated 16th May, 2014 and the consent was made effective for the period from 10th January, 2014 to 31st December, 2015. The industry had deposited fee and applied for consent for the

period 2014-2015. Prior to grant of consent, the industry was inspected and it was found that industry is having 14 digesters. Thus, it was directed that industry should use only 4 digesters having capacity of 56 tonnes per day for steaming and softening the wet strength paper without using any chemicals or agro waste and the remaining 10 digesters should be dismantled and should be taken outside the premises. It was with these conditions that Consent to Operate was granted and the industry was expected to produce 90 tonne /day of News Print paper and 50 tonne/day Kraft paper without using agro waste for producing either of them. The dismantling of 10 digesters was to be completed within one month from the date of the order. Directions for upgrading of the ETP were also passed and industry was directed to run the stabilised ETP continuously and discharge effluent through Treatment Plant after meeting parameters as prescribed by the Board with maximum recycling. Rest of the effluent should be used for agriculture and irrigation of the green belt spread over 30 acres of land apart from plant land within the premises. The industry was to ensure compliance of the 'Charter for Water Recycling and Pollution Prevention in Pulp and Paper Industry in Ganga River Basin' by the Central Pollution Control Board (for short, 'CPCB') from time to time. In pursuance to the grant of Consent to Operate, the Appellant started manufacturing paper. It procured a stock of wet strength waste paper for the next few months in regular course of business which is lying at its premises. The industry on 10th March, 2015 received the communication from the Board dated 4th March, 2015. As is evident from the impugned order afore-referred,

the industry was directed to comply with certain conditions in a time bound manner and was required to dismantle all the digesters and pulp washing facility in the premises with immediate effect. This was required to be done completely by 31st March, 2015, failing which the 'Consent to Operate' granted to the industry would stand revoked and become ineffective. This order contained the directions issued by the Board under Section 33 of the Water Act, 1974. The Appellant Company has also pointed that in terms of Clause 10.3(v) of the Charter expressly provides that all pulp and paper industrial units operating in the State of Uttar Pradesh and Uttarakhand which do not have either operational chemical recovery plant or membership of operational common chemical recovery plant must dismantle and remove chemical pulping facilities, namely, digesters, pulp washing systems, etc. in their premises. According to the Appellant, as already noticed, it does not employ any chemical pulping facilities/digesters and in fact only use the digesters for softening of wet strength waste paper through use of steam and thus, review of the conditions of the 'Consent to Operate' was unjustified and without compliance to the Principle of Natural Justice. On 10th March, 2015 itself, the Appellant had sent a communication to the Board requesting that it be allowed to continue use of 4 digesters in terms of the 'Consent to Operate' and in view of the fact that the digesters were being used only for steaming and softening of the waste papers. However, no reply was received to the said communication. On 28th March, 2015, the Appellant tendered an affidavit to Respondent No. 1 stating that 10 digesters have been dismantled and the 4 were still in operation. Another detailed

representation was made on 28th March, 2015 to permit the industry to use 4 digesters and not to revoke the consent. Again there was no response to the said representation, resulting in filing of the present appeal on 8th April, 2015.

5. The Respondent Board has really not disputed the above facts except to the extent that the inspection was carried on 29th September, 2014 wherein it was found that the industry was violating the terms of the 'Consent to Operate' and the industry was discharging its effluent in the drain. It was also found that the industry has a bypass arrangement through underground pipeline and the unit has not installed Tertiary Treatment System, Dual Media Filter and Sludge Press as per the Charter and also, a notice was issued by the Regional Office. The industry on 16th October, 2014 informed that it had closed the bypass arrangement and will comply with the standards mentioned in the Charter issued by the CPCB and it would achieve zero discharge by 30th October, 2014. In furtherance to the Charter issued by the CPCB, the Board had issued directions dated 4th March, 2015 which were communicated by the Regional Office letter dated 10th March, 2015 and against which the present appeal has been filed. According to the Board, another Joint Inspection was conducted on 24th March, 2015 wherein it was found that the Appellant has dismantled only 1 digester out of 14 digesters and in 9 digesters steam connection and motor has been removed. However, steam connection and motor has not been removed in 4 digesters. Thus, the unit has not dismantled 13 digesters from the foundation. As there was no compliance of the directions issued under

Section 33A of the Water Act, 1974, closure order dated 1st April, 2015 had been issued by the Board.

6. The CPCB has filed a detailed affidavit not only in relation to the Appellant industry, but the paper industry at large in Uttar Pradesh and Uttarakhand which are using waste papers as raw material and the issuance of the directions dated 24th February, 2015 provided that the industries which do not have either operational chemical recovery plant or membership of operational common recovery plant shall dismantle and remove chemical pulping facilities, namely, digesters, pulp washing systems, etc. from their premises. It is stated that though the mills claim use of water and heat with low pressure steam to absorb the water and soften the waxes, however, most of the mills use chemical for re-pulping of wet strength recovered paper to achieve satisfactory reject levels and save energy. The availability of these digesters in paper mills based only on recycled fibre can only provide ample opportunity for misuse of chemical pulping in agricultural residues without being supported by an environmentally sustainable chemical recovery system. More than 25 pulp and paper mills, including the Applicant mill in Uttar Pradesh were having rotary digesters before March 31, 2015. Some of these mills including the Applicant, were operating as agro based chemical pulping mills in 2010 or before. Later, they shifted to recycled fibre based production from the agro based production but still they have kept provision of rotary digesters on pretext of re-pulping of wet strength wastepaper. With dismantling of rotary digesters from all the pulp and paper mills,

CPCB and UPPCB have tried to enforce zero black liquor discharge for abatement of water/land pollution. The biomass and recovered waste paper are the two major sources of fibre for paper making. In the event, the rotary digesters are permitted to be used by industries including the Appellant, there is every possibility of its misuse. It is specifically stated that in spite of several measures taken for up-gradation of manufacturing process, technology and ETP system upto tertiary level, improvement in water quality of recipient streams/drain could not be achieved. The discharge of black liquor from operation of rotary digesters from pulp and paper mills, not having CRP, has been identified as one of the main causes.

7. During the course of hearing, the Tribunal had passed various orders. Vide order dated 17th April, 2015, the Tribunal after having noticed that according to the Appellant by that time all the 10 digesters had been removed fully and the remaining 4 digesters which were operated were not using any chemicals and they were being used for the purpose of softening waste paper by use of steam for preparing the raw material and no black liquor was generated. Thus, it was directed that the order dated 1st April, 2015 had not been given effect to. Vide order dated 20th April, 2015, while extending the benefit of the order dated 17th April, 2015, the Tribunal also directed that the study be carried out by Respondent Nos. 1 and 2 in order to ascertain whether effluent and sludge generated by the industry has presence of any hazardous substance, particularly the heavy metals. Study was also to include ascertainment of the amount of water consumed by the

industry from the ground water. Then vide order dated 14th August, 2015, it was directed that an inspection would be conducted by a team consisting of UPPCB, CPCB and a representative of IIT Roorkee and Central Pulp and Paper Research Institute, Saharanpur (for short, 'CPPRI'). In the comprehensive inspection report, the said team was required to deal with the following:

1. "Water consumption by the industry.
2. Whether it is using any chemical in its process?
3. How much imported waste paper is being used in the industry and whether any chemical is being used to convert the same into pulp including de-linking?
4. What is the point of discharge of effluent and whether there is any chemical in the waste paper being used for producing the final product."

8. Various directions were issued to the Joint Inspection Team which would be evident from the content of the order itself, which reads as under:

"The inspection of the Applicant industry would be conducted by a team consisting of U.P. Pollution Control Board, Central Pollution Control Board, a representative of IIT Roorkee and Central Pulp and Paper Research Institute, Saharan Pur. The CPCB shall be the Nodal Agency of the Committee. They shall prepare a comprehensive report particularly dealing with the following:-

1. Water consumption by the industry
2. Whether it is using any chemical in its process?
3. How much imported waste paper is being used in the industry and whether any chemical is being used to convert the same into pulp including deinking?
4. What is the point of discharge of effluent and whether there is any chemical in the waste paper being used for producing the final product?

The Committee shall also state if any unknown chemicals are being used in the process and would also comment upon the dismantling of the chemical dozing tanks and the digesters which are stated to have been dismantled except the 4 which are in operation. The

sample shall also be collected from digesters to confirm if they have chemicals or not. It shall also report whether chemicals are being used at any stage of the process including at the time of pulping.

Learned counsel appearing for CGWA accepts Notice. She will take a clear instruction with regard to whether the Applicant industry have permission for extraction of ground water or not and the conditions imposed thereto.

The report shall also refer the excessive production above the sanctioned capacity, if any.

The Unit will work to its optimum capacity during the course of the inspection.

List this matter on 09th September, 2015.”

9. The Joint Inspection Report was submitted to the Tribunal and even the effluents collected were subjected to the analysis and thereafter, the inspection report with analysis reports was filed. After the first inspection was conducted, in furtherance to the above order dated 19th February, 2016, the Joint Inspection Team was further directed to conduct another inspection and to specifically deal with the questions in relation to the use of chemical, whether complete mechanism for treating paper for creating steam pulp for processing is in existence or not and what is the other mode available for treating the paper and what is the other alternative mechanism with the industry as provided in its own system. The industry was directed to produce all the relevant records and it was also directed to operate to its optimum capacity from 20th February, 2016 onward. This inspection report was filed and response/objections thereto were also filed by the applicant.

10. The first inspection of the Appellant industry was conducted after the Consent to Operate had been granted to the industry on 29th

September, 2014. In that inspection report, various deficiencies were noticed but most importantly it was pointed out that the industry had a bypass arrangement through the underground pipeline. It had not installed Tertiary Treatment System besides; it had violated the Charter issued by the CPCB. Notice was issued on 29th September, 2014. The industry had informed that it had closed the bypass and will achieve zero discharge by 30th October, 2014 which never happened. Thereafter, the industry was subjected to inspection by the Joint Inspection Team consisting of CPCB and UPPCB. During the visit, the team made the observations that all the 4 digesters were found non-operational as no stocks of wet strength paper/imported KCB paper were available to the unit. The stocks had finished 15 days earlier and they were operating the mills on indigenous waste papers as raw material for producing Kraft and Newsprint paper. During the visit, it was observed that the unit still has chemical dosing facilities, like dosing tank containing white lumps of substance, near the digester and unit representative could not explain the presence of chemical dosing tank. The chemical dosing tank was directed to be dismantled immediately as the unit claimed that they are not using any chemical for cooking the imported wastepaper. It was noticed that the remaining 10 digesters have been dismantled by the unit. It was observed that there was poor sludge handling facility. The sludge was lying outside the drying beds. The final treated effluent was being used for irrigation purposes. The equalisation tank was having significant amount of fibre/sludge which needed to be removed. It was directed that the industry needs to install proper Sludge Handling

System for the ETP sludge management and its disposal. The sludge sample analysis shows that the heavy metals are below the threshold limit and are not 'hazardous waste' in accordance with the criteria prescribed under the Hazardous Waste Rules of 2008. In conclusion, the team directed as follows:

“In view of the above, it is to submit that the Unit claims of using only steam (without any chemical) for cooking of imported KCB paper (wet strength paper) could not be verified during the visit, conducted by CPCB and UPPCB, as the Unit was not operating their digesters in the absence of raw material (since 15 days as informed by the unit representatives). The presence of chemical dosing tank above the digesters could not be explained by the unit representatives. The unit needs to dismantle all the chemical dosing tanks. The unit found complying with the effluent discharge norms and found ETP sludge are not hazardous. The unit needs to install proper sludge handling system and its disposal, submission of proper irrigation management plan, adequate capacity of fiber recovery plant.”

11. The Appellant industry was subjected to another Joint Inspection on 16th September, 2015 and the report had been submitted to the Tribunal. In this inspection report, reference was made to the observations during the course of the inspection and it was observed that the sludge analysis result shows that the heavy metals are below the minimum threshold limit. Reference was also made to the studies carried out by CPPRI, which followed the methodology to study the repulping potential of collected waste paper and the Joint Inspection Team concluded as follows:

“7.0 CONCLUSIONS:

Following are the major observations:

1. During the visit, **the Unit was operational** and manufacturing Kraft and Newsprint paper using waste paper as raw material.

2. The Unit could not provide the specification and other details of imported wet strength wastepaper.
3. The Unit has not shown authorization from Central Ground Water Authority for abstraction of ground water.
4. Fresh water consumption was 24.54 m³/ton of production of paper and Unit requires to further reduce it to meet the 'Charter for water recycling and pollution prevention in pulp & paper industry in Ganga River basin' norms as prescribed by CPCB in Ganga basin States.
5. During the visit, **chemical dosing facilities**, like chemical tanks etc. **were found dismantled** which was observed in the last inspected dated 25.06.2015.
6. The Unit is constructing a hi-consistency hydra-pulper near digesters site for pulping of the KCB grade waste paper.
7. During inspection, it was observed that no chemical was added in the digester and the KCB grade wastepaper was being used by the mill in digesters and cooked under steam only.
8. The final **ETP treated effluent composite sample analysis showed compliance with discharge norms** having **pH-8.44**, **BOD-13.0 mg/l** (against the norms of 30 mg/l), **COD-134.0 mg/l** (against the norms of 350 mg/l), **TSS-23.0 mg/l** (against the norms of 50 mg/l). The **MLSS** concentration in the aeration tank showed **2778 mg/l**.
9. The Sludge sample analysis shows that the **heavy metals are below the minimum threshold limit** in accordance to the criteria prescribed under Hazardous Rules, 2008.

CONCLUSION ON DIGESTER COOKING OF IMPORTED WASTE PAPER

1. During inspection, the raw material used by Unit for cooking of digester was KCB grade waste paper, however it does not contain wet strength as per the lab analysis report. However, the Unit claims that they use wet strength wastepaper for cooking/pulping in digesters with steam and water.
2. Three digesters were operational out of the 04 digesters. No chemical was added during cooking of the waste paper in digester.
3. The **recovered fiber yield** of KCB wastepaper during high-consistency Hydra-pulper (*without steam*) is **90%** which **is comparable** to the recovered fiber yield during digester cooking + slusing (**78%**) simulated to mill pulp condition.
4. **CPPRI Lab report showed that the high consistency hydra pulping (*with 99% fiber yield*)**

is equally suitable for pulping of KCB grade wastepaper as like digester cooking (*with 77% & 78% yield*) of KCB wastepaper.

5. It may be concluded that, the wet strength wastepaper can be pulped in high-consistency hydra-pulper, without using digester for cooking.

- **Therefore, there is no requirement of digesters for cooking of KCB grade waste paper, which the Unit is using, and the same KCB grade waste paper can be efficiently pulped in high consistency hydra-pulper (the Unit is constructing a high-consistency pulper).**

8.0 INSPECTION DATE: September 16, 2015”

12. The third and final Joint Inspection of the industry was conducted on 6th April, 2016. The UPPCB vide its letter dated 3rd March, 2016 had granted consent from 1st January, 2016 to 31st December, 2016 for production of 280 tonne/day Kraft & Newsprint paper production. The consent order was for expanded production. The unit had no permission from the Central Ground Water Authority regarding abstraction of fresh water from borewells. From January, 2016 to March, 2016, the industry was abstracting on an average of 2821.m³/day. It was noticed that the unit had three Hydra pulpers for producing Kraft paper. The indigenous waste paper is mixed with cooked pulp produced from the digesters and fresh water/recycled water/black water is added in it and due to mechanical action the waste paper gets converted into suspension of fibers. The unit had four Rotary digesters for imported waste paper cooking. 10 digesters had been dismantled out of the 14 digesters. In its observations, the Committee noticed that the cooked pulp was found lying below the digesters and significant amount of spent liquor is generated and lying below the digesters. The samples of the cooked pulp and black spent

liquor were taken. The unit had dismantled the chemical tanks, as even noticed in earlier inspections. The analysis of the spent liquor generated from digesters showed pH-5.71, BOD-7094mg/l, COD-13483 mg/l, TSS-360mg/l and TDS-11828 mg/l. The analysis report from IIT-Roorkee laboratory showed somewhat similar results with little variations. It was noticed that the quantity of spent liquor was significant and needs to be collected and treated in ETP for safe disposal. It was also noticed that the flow meter had not been installed at the inlet of the ETP system. The unit needs to install adequate Sludge Handling System and its disposal as sludge was found lying outside the sludge drying beds and in open area. The unit also needs to provide an additional Dual Media Filter for tertiary treatment. The inspecting team recorded its major observations and conclusions as follows:

“C Conclusion drawn by IIT-Roorkee:

- 1.The type of waste paper being used by the mill can be called as '*wet strength paper*'. No alkali (*caustic soda*) or any other chemicals were added to the digester by the Unit.
- 2.This type of waste paper can be pulped easily in hydra pulper without requiring any chemical treatment of cooking.
- 3.The digester cooking should be avoided as it involves additional costs of labour, electrical energy, and steam on one hand and produces pulp of lower strength and darker appearance on the other hand.
- 4.The digester cooking of waste paper also gives higher pollution load in comparison to the pulping without cooking.
- 5.Studies have been reported in the literature where some wet strength paper grades are found difficult to re-pulp in hydra pulper. Such paper grades require pre-treatment with some chemicals such as NaOH, persulphate, peroxide, hydrochlorite etc. at elevated temperature (≈ 60 °C) under atmospheric pressure conditions (1-7). We have not come

across any literature where cooking of waste paper in a digester before use of hydra pulper has been recommended.

8.0 MAJOR OBSERVATIONS AND CONCLUSIONS:

Following are the major observations:

10. During the visit, **the Unit was operational** and manufacturing Kraft and Newsprint paper using waste paper as raw material.
11. The Unit has not shown authorization from Central Ground Water Authority for abstraction of ground water.
12. Fresh water consumption was **12.57** m³/ton of production of paper.
13. During the visit, **chemical dosing facilities near the digesters**, like chemical tanks etc. **were found dismantled.**
14. The Unit has constructed a hi-consistency hydra pulper near digester house for pulping of the '*KCB grade waste paper*'.
15. During inspection, it is observed that no chemical was added in the digester by the Unit.
16. **The Unit needs to take following pollution control measures:**
 - (i) To de-foam and de-sludge the inlet effluent carrying channel and primary clarifier.
 - (ii) To install 'flow meter' at the inlet of the ETP so as to quantify the effluent generated from Kraft and news print production.
 - (iii) To install adequate capacity of fiber recovery system in the ETP such as sedicell so as to arrest the fibers and sludge from entering into the ETP system.
 - (iv) To provide air mixing arrangement in the equalization tank.
 - (v) To not bypass any effluent from the primary clarifier to any collection tank.
 - (vi) To install adequate sludge handling system and its disposal.
 - (vii) To install additional dual media filter (DMF) before the final discharge point.
 - (viii) To treat the '*spent liquor*' generated from digester cooking for the safe disposal.
 - (ix) To calibrate their online monitoring system from NABL accredited/EPA recognized lab and submit calibration certificate to CPCB/SPCB.
17. **The final ETP treated effluent** samples analysis showed compliance with desired discharge norms and the results is pH-8.13, **BOD-21** mg/l (against the norms of 30 mg/l), **COD-162** mg/l (against the

norms of 250 mg/l), **TSS-31** mg/l (against the norms of 50 mg/l).

18. The '**spent liquor**' generated during the digesters cooking has high organic load i.e. pH-5.71, **BOD-7094** mg/l, **COD-13483** mg/l; **TSS-360** mg/l and **TDS-11828** mg/l. The quantity of '**spent liquor**' is significant and needs to be collected and treated in the ETP for the safe disposal. The Unit does not have any provision (channel/route etc. of ETP) to treat the '**spent liquor**' and the same is lying below the digesters.
19. The Unit has inadequate sludge management system and needs to install adequate **mechanized sludge handling system and its disposal** as sludge was found lying in equalization tank, ETP channel, and large quantity in open land area.

CONCLUSION ON DIGESTER COOKING OF IMPORTED WASTE PAPER

6. The raw material used by Unit for cooking of digester was *KCB grade waste paper*, and can be called as '*wet strength waste paper*'.
7. Three digesters were operational out of the 04 digesters. No chemical was added during cooking of the waste paper in digester.
8. This grade of raw material i.e. '*imported KCB waste paper*' can be easily pulped in a hydra pulper and does not require a digester cooking at all.
9. The digester cooking should be avoided as it involves additional costs of labour, electrical energy, and steam on one hand and produces pulp of lower strength and darker appearance on the other hand.
10. The digester cooking of waste paper also gives higher pollution load in comparison to the pulping in hydra pulper without cooking and the same was corroborated by the lab analysis result of the '*spent liquor*' (collected from the mill) i.e. pH-5.71, **BOD-7094** mg/l, **COD-13483** mg/l; **TSS-360** mg/l and **TDS-11828** mg/l. Substantial amount of '*spent liquor*' which is black in colour, is generated which requires proper treatment.

The Unit was found complying with the effluent discharge norms, however the Units requires to take aforesaid pollution control measures.

It may be concluded that, this KCB grade waste paper can be pulped easily in a hydra pulper, without using digester for cooking. Therefore, there is no requirement of digesters for cooking of '*KCB grade waste paper*', which the Unit is doing, and the same grade of '*imported KCB waste paper*' can be efficiently

pulped in hydra pulper. The Unit has newly constructed hi-consistency hydra pulper setup near digester and the same can be utilized for pulping of 'imported KCB waste paper'. The digester cooking also generating 'spent liquor' in high pollution load (pH-5.71, BOD-7094 mg/l, COD-13483 mg/l; TSS-360 mg/l and TDS-11828 mg/l) and the same needs appropriate effluent treatment for management of pollution.

9.0 INSPECTION DATE: April 06, 2016”

13. The Appellant had filed its objections/comments to the reports, particularly the inspection report dated 21st May, 2016. In the objections, it has been stated that during the course of the inspection, records were shown in relation to various columns of the report. It was stated that it is well-established and conclusively corroborated by the findings of the inspection report that the wastepaper used in digesters, as also found during the inspection, is KCB grade imported wastepaper and contains wet strength. There is complete absence of chemicals being used in the pulping process. In relation to some of the observations, particularly, observations made by IIT Roorkee that the digester cooking should be avoided as it involves an extra cost of labour, electrical energy and steam, is without any basis and is arbitrary. The team has failed to specify as to how the appearance of colour is relevant when the discharge from the digester has not been found to contain any heavy metals. On the one hand, the Appellant stated that the literature in support of wet strength paper grades having been found difficult to re-pulp in hydra pulper, is very vague and on the other hand, there is no literature available where cooking of waste paper in a digester before use of hydra pulper has been recommended. The Appellant is using a method that is both,

innovative and environment friendly. Other observations, particularly, in relation to using of hydra pulper for pulping of KCB waste paper without using digesters for cooking is stated to be without any basis and the apprehension of misuse is baseless and could not be made a ground for directing dismantling of the digesters. According to the Appellant, it is more so because it is adhering to all the prescribed norms as online monitoring system had adequate ETP and is not discharging its effluent in the river/stream etc. From the above inspection reports and the objections filed by the Appellant, it emerges that there are mainly three issues which require to be considered by the Tribunal. Firstly, there is no dispute to the fact that the industry does not have authorization from the Central Ground Water Authority for abstraction of sufficient ground water. Thus, the unit is consuming a significant quantity of ground water on an average to the extent of 2821.m³/day. The industry has stated that it has been trying to reduce and in fact, had reduced its water consumption per tonne on manufacturing of the paper. However, it is undisputed by the Appellant industry that it has not obtained the authorization from the Central Ground Water Authority for all this period. Its consumption of ground water was quite higher in the previous years. Now, even if it is reduced, still for abstraction of ground water, admittedly, the industry required authorization from the Central Ground Water Authority. It is clear from the record that this deficiency was pointed out in the inspections and even in the inspection conducted on 25th June, 2015. The Appellant industry under obligation ought to have obtained the authorization by now.

But it appears from the record that the industry made no sincere efforts to obtain the authorization and moved the application without any purpose recently. According to the industry, it has applied for obtaining the said authorization but the application is still pending with the authority. This is the condition imposed in the consent order and is also the requirement of the various inspection reports and in fact, the Appellant industry does not dispute its obligations to take such authorization. Thus, the industry is liable to be directed that it must obtain the authorization from the Central Ground Water Authority within two months from the date of pronouncement of this judgment, failing which it would be liable to pay environmental compensation for illegal abstraction of ground water and would also be liable for such other coercive orders as may be passed by the Board or the Tribunal, in accordance with law. As regards the other and the main contention with regard to the dismantling of the digesters, it is undisputed in this regard that the industry had installed 14 digesters, out of which 10 have already been dismantled and 4 are still operating in the premises of the Appellant industry. According to the directions issued in the two inspection reports dated 25th June, 2015 and 6th April, 2016, dismantling of the four digesters that are operating in the premises in question was specifically recommended. In the inspection reports, there are reasons stated for making such recommendations. Referring to the studies on the subject, the Joint Inspection team has stated that cooking of waste paper and digesters before use of hydra pulper is not recommended, though it was noticed that chemical was not added during the cooking of the waste paper in the digester. It

was concluded that KCB grade waste paper can be pulped easily in hydra pulper without using digester for cooking. The unit has newly constructed, with high consistency, hydra pulper setup near digester and the same can be utilized for the pulping imported KCB grade waste paper. The digester cooking process generates spent liquor of high pollution load like BOD -7094mg/l, COD-13483 mg/l, TSS-360mg/l and TDS-11828 mg/l and the same needs appropriate effluent treatment.

14. Furthermore, one of the main reasons stated in the reports for making such recommendation is the reasonable possibility of the unit misusing the said facility of use of digesters and generate pollution including the black liquor with chemicals. This aspect we have referred to in some detail above. It is also on record that the industry had used the device of bypassing the effluent and it was directed to dismantle the said device which it has noticed above. The past conduct of the industry is not in conformity with law; however, in the recent past it has tried to bring its parameters within the prescribed limits and has improved the functioning of its ETP. However, the working of the digesters and generation of pollution therefrom remains a serious matter. Of course, in the inspection report it has come that in the pulping process of the raw material the industry is not using any chemicals and at the same time, on scientific basis the repeated inspection reports of the Board as well as the Joint Inspection Team recommended dismantling of the digesters and use of hydra pulper exclusively. This is also in consonance with the Charter issued by the

CPCB for paper industries, more particularly, in the States of Uttar Pradesh and Uttarakhand. The argument raised on behalf of the industry, that the suggestion/ recommendation is vague and arbitrary and does not stand to reason as to industry is complying and non-polluting, for the kind of raw material that the industry is using for the manufacturing of the paper, it is required that the material be processed through the said digesters before it is sent to hydra pulper. The argument of the Appellant appears to be vague against the recommendations made for recorded reasons in the two Joint Inspection Reports where, even an independent agency like IIT Roorkee was involved.

15. The recommendation made and the direction passed can safely be supported even on legal basis. Firstly, the *Precautionary Principle* would come to the aid of implementation of the recommendation. It was noticed that near the digester the sludge and black liquor was found lying and that is the reason the permission in regard to sludge management and black liquor was passed. It is the duty of a person who carries on an activity, which can/or causes pollution, to take precaution with regard to the activity that the industry is carrying on. Furthermore, the inspection report intends to suppress the mischief of likely misuse of the digesters as it is not practically possible to inspect the industry every day. *Rule of Mischief* would require that possibility of such misuse in the process adopted while operating the digesters should completely be ruled out. The conduct of the industries would again be a relevant consideration and as already noticed, the industry

had even constructed the device of bypassing its effluent from the treatment plants. The submissions, on the cumulative effect of the inspection report and seen in light of the above legal principles, we are unable to see any error in imposition of the condition relating to dismantling of the four digesters. In our considered view, the Applicant cannot claim parity with the Judgment of the Tribunal in *Khatema Fibres Limited* (supra). In the present case, the Joint Inspection Team has provided scientific reasoning for requiring the dismantling of the digester unlike in the case of *Khatema Fibres Limited* (supra). Unless the Tribunal holds that the reasoning given by the Joint Inspection Team twice over is unsustainable, which we are not prepared to hold, the Tribunal cannot return a finding that the digesters should not be dismantled like it directed in the case of *Khatema Fibres Limited* (supra).

16. The Joint Inspection Team on the one hand, has disapproved the use of the digesters while on the other, it has provided complete alternatives for using of hydra pulper without using digesters for cooking. In the report, the Joint Inspection Team has also spelled out the negative effects of use of digesters which would generate spent liquor. It has also noticed that CPPRI lab report showed high consistency hydra pulper (with 90% fiber yield) is suitable for pulping of KCB grade paper as like digesters cooking with 77% & 78% lead of KCB waste paper. It is possible, and even reported that the Appellant uses rotary digesters to break the wet strength merely by using water and steam and no chemicals are used for this process but this factor

has to be viewed with element of doubt. It has been noticed that digesters in a paper mill are based only on recycled fiber and can only provide ample opportunity for misuse in chemical pulping of the waste paper. In one of the inspections, a doubt was created that the Appellant might be using chemicals in its process. However, the subsequent inspections did not notice presence of chemicals in the process of digesters. The Ld. Counsel appearing for the Appellant placed heavy reliance upon the judgments of the Tribunal in the case of *Khatema Fibres Limited v. Uttarakhand Environment Protection and Pollution Control Board & Ors.*, R.A. No. 02/2016 in Appeal No. 58/2015, decided on 4th May, 2016. The argument is that the Tribunal had allowed similar prayer like in the present case and it was held that the conditions imposed by the Board that the digesters should be demolished shall not hold as the unit was found to be compliant and its parameters were within the permissible limits and the ETP was functioning. Like in that case, in the present case also, the Joint Inspection Team has found that there is no evidence of agro based raw material, no chemical was used, the parameters are within the prescribed limits and ETP is operational. At the very outset, we must notice that the judgment of the Tribunal in *Khatema Fibres Limited* (supra) was on its own facts. Furthermore, the judgment had granted temporary permission for a period of six months and a number of other conditions that are imposed, keeping in view the facts and circumstances of that case. A clear distinguishing feature in the present case is that the inspection team has found that the Appellant industry had constructed a bypass to the ETP. Further and more

importantly, in the present case the Joint Inspection Team in the latest inspection of 6th April, 2016 has not only made observations with regard to the functioning and processes of the industry and noticed the exclusive parameters but has passed directions in great detail under the head 'MAJOR OBSERVATIONS AND CONCLUSIONS', which require the industry to take various remedial measures with regard to ETP, dismantling of digesters and control over water consumption. Unlike in the case of *Khatema Fibres Limited* (supra), the Joint Inspection Report has directed that preventive and controlling measures be taken by the industry and specific recommendation for dismantling of the digesters. In that case, the Joint Inspection Team had not found that it was necessary, and in the interest of prevention and controlling of pollution, that the digesters should be dismantled. In these circumstances, we are unable to hold that the condition imposed by the Board for removal of four digesters is without reason and substance and unjustifiable in the facts and circumstances of the present case. Another aspect that needs mentioning at this stage is that the industry has the 'Consent to Operate' and is actually carrying on its manufacturing activity.

17. The industry must comply with all the terms, conditions and recommendations made by the Joint Inspection Team in its report dated 6th April, 2016. This compliance has to be time bound and would be of relevant consideration for the Board when it grants Consent to Operate to the industry after December 2016. These conditions and recommendations, particularly, the measures that the

industry is required to take for prevention and controlling of pollution are mandatory and ought to be complied with by the industry. Therefore, we dispose of present appeal with following orders/directions:

- a. While declining to set aside the directions issued by the Board vide its orders dated 4th March, 2015 and 1st April, 2016, we direct that the said orders would be kept in abeyance for the period of six months from the date of pronouncement of this judgment.
- b. The industry will obtain the authorization from the Central Ground Water Authority within the period of two months from the date of pronouncement of this judgment.
- c. The Appellant industry would comply with all the conclusions/observations and pollution controlling measures as stated in the Joint Inspection Report dated 6th April, 2016 including dismantling of digesters and submit a report of compliance to the CPCB and UPPCB.
- d. The industry has been granted consent till December, 2016 but would be permitted to operate for a period of six months from the date of pronouncement of this judgment during which, and upon submission of compliance report or even prior thereto, the industry would be subject to surprise inspection by the Joint Inspection Team that had conducted the earlier inspections and shall submit a report to the

Tribunal and to the UPPCB which then, would process the application for grant of 'Consent to Operate' in accordance with law. If the consent is granted, the industry would be permitted to operate beyond a period of six months, subject to the orders of the Tribunal.

18. Hence, the Appeal No. 19 of 2015 is disposed of without any order as to costs.

19. M. A. No. 355 of 2015 does not survive for consideration in view of the fact that the main Appeal No. 19 of 2015 stands disposed of. Consequently, M.A. No. 355 of 2015 is dismissed as having become infructuous. No order as to costs.

Swatanter Kumar
Chairperson

Raghuvendra S. Rathore
Judicial Member

Bikram Singh Sajwan
Expert Member

Ranjan Chatterjee
Expert Member

New Delhi
20th September, 2016