

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
WESTERN ZONE BENCH PUNE AT PUNE.

ORIGINAL APPLICATION NO. 198 OF 2023 (WZ)

NARAYAN SHIVAJI GUND

APPLICANT

V/s

MAHARASHTRA POLLUTION
CONTROL BOARD AND ORS.

RESPONDENTS

INDEX

SR NO	ANNE XURE	PARTICULARS	PAGE NOS.	
			From	To
1.		Index	2491	2492
2.		Reply	2493	2501
3.		Affidavit in Support	-	2502
4.	R-1	Copy of Bio data of above three Senior Professor	2503	2510
5.	R-2	Copy of the results of samples	2511	2516
6.	R-3	Copy of the records of online monitoring system	2517	2024
7.	R-4	Copy of the MPCB online monitoring data	2525	2531
8.	R-5	Copy of the laboratory analysis report (JVS sample reports)	2532	2553
9.	R-6	Copy of Photographs of evaporation system and Dryer	2554	2558

10.	R-7 Colly	Copies of the judgment of the Supreme Court of India	2559	2659
		LAST PAGE NO.		2659

PUNE

DATE : 08/09/2025



ADVOCATE FOR THE RESPONDENTS NO.2

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
WESTERN ZONE BENCH PUNE AT PUNE.

ORIGINAL APPLICATION NO. 198 OF 2023 (WZ)

NARAYAN SHIVAJI GUND

APPLICANT

V/s

MAHARASHTRA POLLUTION
CONTROL BOARD AND ORS.

RESPONDENTS

REPLY TO REPORTS FILED BY I.C.T. DIPAK
V. PINJARI ON 01/08/2025

MAY IT PLEASE THE HON'BLE TRIBUNAL –

Reply on behalf of Respondent No.2 is as under:

1. At the outset, it is submitted that the contents of the said Report are not admitted by the present Respondent No.2 and that the Respondent No.2 reserves its right to file a detailed reply to the final report.
2. The Respondent No.2 submits that the Institute of Chemical Technology (ICT) file a report on dated 1.08.2025; At paragraph 1 of the said report of ICT it has mentioned that **Figure 1 (Google Map)** a visual representation of the Respond No.2 position with Jakraya City and Bhima River is not accepted to the Respondent No.2. The Respondent No.2 further submits that the factory of the Respondent No.2 is 4.5 Kms away from the Bhima river. (**refer to Page No. 861**)
3. The Respondent No.2 submits that it has mentioned at Figure 2 of the said report that the Brookes flows adjacent to the Factory, which is not admitted by the Respondent No.2. The Respondent No.2 further submits that the brook flows 1.00 Kms away from the Factory of the Respondent No.2 (**refer to Page No. 861**)

4. The Respondent No.2 submits that, it has mentioned in the said report that the residents of Mohol village have repeatedly voiced serious concerns about environmental pollution attributable to the Respondent No.2; to which the Respondent No.2 contention is that only the Applicant has filed the present complaint. The Respondent No.2 further submits that the neighbour farmers of the Applicant gave undertaking regarding non pollution on their farm lands.
5. The Respondent No.2 further submits that, the factory of the Respondent No.2 is 35 Kms away from the Mohol Village. The Mohol Village is situated on Solapur Pune Expressway.
6. The Respondent No.2 submits that, this Hon'ble Tribunal had issued directions to the ICT to evaluate the environmental damage if caused to nearby crops, trees and water and soil in the surrounding area of the Respondent No.2, but the Principle Investigator has not collected the water samples, soil samples from the lands of farmers outside the premises of JSL. But he has collected all the samples from the premises of the Respondent No.2 within its boundary compound wall.
7. The Respondent No.2 submits that, the Hon'ble Tribunal directed the ICT to investigate detailed pollution load assessment to quantify the pollution being caused by the Respondent No.2 and their potential effects on surrounding environment. The Hon'ble Tribunal has never directed for effectiveness of wet scrubber, bag filter and boiler stack emission control system to determine their compliance of environmental standards. **(refer to Paragraph 2 of Page No. 862)**
8. The Respondent No.2 submits that, the Dr. Dipak V Pinjari is polymer technologists and he is not a Chemical Engineer. He is not having any degree in Chemical Engineering or Environmental Science. He is not an expert in solid waste management, wastewater treatment and mass and energy balance and it is not true to say that he has conducted extensive

Environment audits across multiple industries. The respondent No.2 further submits that Dr. B N Thorat, Dr. Prakash D Vaidya, and Dr. V K Rathod are Chemical Engineers. They are Senior Professor in the ICT.

- Dr. Professor B. N. Thorat is Member CAC Advisory Committee MPCB, and Member of State Environment Appraisal Committee (SEAC-I).
- Dr. Prakash D Vaidya- Controller of Examinations and RCF Professor of Chemical Engineering.
- Dr. V K Rathod - Professor Chemical Engineering Department life member of (IICHE) CSI Senior Recherche Fellow ICT 2001, 2003 worked as Technical Consultant for Various Private Companies.

Bio data of above three Senior Professor are annexed and marked as **ANNEXURE-R-1**.

9. It is further submits by the Respondent No.2, further investigation be done by these Three professors along with Dr. Dipak Pinjari.
10. The Respondent No.2 submits that, it has mentioned in the said report that during the visit dated 12/08/2024 the Respondent No.2 was not cooperative and did not facilitate the investigation. The Respondent No.2 submits that the said statement is not accepted to the Respondent No.2; the Respondent No.2 states that Dr. Dipak V Pinjari had told that, the order dated 06/ 08/2024 was not with him. He would show the order afterwards and the Dr. Dipak V Pinjari gone without making any investigation, at that time he had come along with Mr. More (SRO MPCB) and not came along with his team. The Respondent No.2 cooperated with the Team and allowed them to enter the premises of the Respondent No.2 on Further Visit.
11. The Respondent No.2 further submits that, further site visit was conducted from 12/09/2024 to 13/09/2024 by Dr Dipak V Pinjari and

his team and collected the water and solid samples from various locations both within and around the factory premises. One part of same sample was handed over by Dr Dipak V Pinjari and his team to JSL and JSL had sent this samples to NABL accredited Lab for examination at **EHS MATRIX PVT LTD Pune**. The results of these samples are within standard limits. Copy of the results of samples are annexed and marked as **ANNEXURE-R-2**.

12. The Respondent No.2 further submits that, it is mentioned in the said report that it is mentioned that required documents were not submitted by the Respondent No.2. The said statement is not accepted to the Respondent No.2; the Respondent No.2 submitted required data on dated 13/09/2024. The said data was also submitted to the Respondent No.1 dated 12/02/2025.
13. The Respondent No.2 submits that, the Dr Dipak V Pinjari and their team visited the factory of the Respondent No.2 for the third time on 07/03/2025. The team collected the water and soil samples **within the premises of the Respondent No.2**. The ICT team collected water samples and solid samples from various locations within the premises of the Respondent No.2 and not around the premises of the Respondent No.2.
14. The Respondent No.2 submits that, it has shown in the table 1 of the said report that the samples were taken from the agriculture fields adjacent to the factory to analyse potential contamination from air and water pollutants. The said table is not showing the correct fact. Only water sample No.7 is taken from outside of factory premises. The samples taken are not showing geographical details co-relating pollution levels with potential sources. (**refer to 5.1 Sample collection at Page No. 864 to 866**).

15. The Respondent No.2 further submits that, the sample collected from spent wash tank (W3) and spent wash tank (W6) are not discharge points. Those tanks are made for the treatment process requirement and it is not used for land application. It is mentioned that the Water sample from the east side dug-well (W7) shows sign of contamination which might be linked to leachet from the CBG land filling side (W2); to which the Respondent No.2 contention is that Water sample shown of dug. well (W7) are within prescribed limit. It is also shown in the table that the water quality from west side discharge (W1), ETP inlet (W4) & ETP outlet (W5) suggest on going contamination and possible limitations in the current performance of the effluent treatment plant (ETP); to which the Respondent No.2 contention is that sample parameter of ETP outlet (W5) (COD- 15362, BOD-4336) is higher than ETP inlet parameter (W4) (COD-3919, BOD-1052). This record of sample parameters are wrong, but correct record of same sample parameters are of ETP outlet parameters (W5) (COD- 155.35, BOD- 18.67) is as per JSL office record according to online monitoring system dated 07/03/2025. Copy of the records of online monitoring system are annexed and marked as **ANNEXURE-R-3**.
16. The Respondent No.2 further submits that the Respondent No.2's ETP outlet parameters are connected to the online monitoring system of MPCB, all parameters of ETP outlet are within permissible limit as per the MPCB data shown in online system. It is not true to say that CBG land filling side sample (W2), exhibits high TDS. It is not true to say that Sulphate and Chloride concentration suggesting poor leaked contamination and resulting in local ground water pollution. As per the report, sample tagged with W3 and W6 are taken from storage tanks for spent wash made as per process requirement and as per MPCB storage guidelines. It is not a discharge points.

17. The Respondent No.2 submits that as per the Table No.1 in the said report states that S1 sample is collected from CBG side discharge as per table number 1; to which the Respondent No.2 contention is that there is no any side discharge to the CBG plant. The only methane gas is the discharge of CBG plant. There is no any liquid matter or solid matter is discharged from CBG plant. The Respondent No.2 further submits that the S2 (South side soil sample) contents are wrong and results of mixed origin possibly results mentioned are also wrong.
18. The Respondent No.2 further submits that the The S3 (spent wash tank-2) the S3 sample is collected from directly spent wash tank. Spent wash is generated from distillery fermentation process and stored in the spent wash tank, and further it is supplied to digester. In this process raw gas is generated and it is supplied to CBG plant and liquids spent wash supplied to evaporator process and thereafter it is supplied to dryer i.e. zero liquid discharge. The trace metals like copper, manganese and zinc across all samples were not spread or discharge out of sugar factory. Therefore no toxicity will create in the soil and effects on microwave activities and eventually bio accumulate in crops, posing a risk to human and animal health.
19. The Respondent No.2 submits that the there is no fly ash pollution as shown in photographs figure number 7, because the ICT team had not collected any fly ash sample of our boiler stack mission. They showed only photographs of leaves of trees and plants. (**Refer to Paragraph 6.3.1 Fly Ash Pollution at Page No. 874**) As per the MPCB online monitoring system of stack emission parameters are shown under prescribed limits, which is shown in MPCB online monitoring data. Copy of the MPCB online monitoring data annexed and marked as **ANNEXURE-R-4**.

20. The Respondent No.2 submits that, the said report has mentioned that the Respondent No.2 is discharging wastewater into fields and drains; **(Refer to Paragraph 6.3.2 Wastewater discharge into fields and natural drain at Page No. 875)**. To which the Respondent No.2 contention is that the Respondent No.2 is using treated water at the premises of the Respondent No.2 for gardening and irrigation. The parameters of treated effluent are under prescribed limits as per the MPCB laboratory analysis report (JVS sample reports), which are collected by SRO, MPCB Solapur frequently. Copy of the laboratory analysis report (JVS sample reports) are annexed and marked as **ANNEXURE-R-5**.
21. The Respondent No.2 submits that, the said report has mentioned that the Respondent No.2 used eight trucks for transportation of spent wash; to which the Respondent No.2 contention is that the said eight trucks were used for transportation of molasses and ethanol and not used for Transportation of Spent Wash **(Refer to Paragraph 6.3.3 Concealed truck transporting spent wash at Page No. 876)**.
22. The Respondent No. 2 further submits that the Spent wash is treated in to digester for generation of Raw Gas, the Raw gas is supplied to CBG Plant for further process and pure gas is supplied to gasket mounted vehicles for supplying to receiving CBG gas points at IOCL, HPCL and BPCL station installed by IMC Limited. The above treated spent wash was further supplied to evaporation plant for evaporation of the Water from the spent wash and further 30 Bricks spent wash was supplied to Drier for further process in that process the remaining water is evaporated and only Dray powder is generated and it is used as a PDM Potash organic manure for Crops as Nutrient. Therefore it is not true to say that eight Trucks are used for Transportation of spent wash.

Copy of Photographs of evaporation system and Dryer are annexed and marked as **ANNEXURE-R-6**.

23. The Respondent No.2 submits that, the said report has mentioned that the Respondent No.2 discharged wastewater onto open land; to which the Respondent No.2 contention is that the said photographs does not depicts that it is wastewater. (**Refer to Paragraph 6.3.4 Contaminated Open Dug at Page No. 876 to 877**).

24. The Hon'ble Supreme Court of India in its judgement in the matter of D.P.C.C Vs Lodhi Property Co. Ltd. ETC. has stated that

“30. The Board's powers under Section 33A of the Water Act and Section 31A of the Air Act have to be read in light of the legal position on the application of Polluter Pays principle as formulated and explained. This means that State Board cannot impose environmental damages in case of every contravention or offence under the Water Act and Air Act. It is only when the State Board has made a determination that some form of environmental damage or harm has been caused by the erring entity, or the same is so imminent, that the State Board must initiate action under Section 33A of the Water Act and Section 31A of the Air Act.”

“35. To ensure that Board impose restitutionary and the compensatory environmental damages in a fair transparent, non- arbitrary manner with procedural certainty, necessary subordinate legislation in the form of rules and regulations must be notified....”

Copy of the judgment of the Supreme Court of India is annexed and marked as **ANNEXURE-R-7**. (collectively).

25. In view of the facts and circumstances as stated herein above, it is submitted that, the present report may not be considered by the Hon'ble

2501

Tribunal and the Original Application may kindly be dismissed with costs.

PUNE

DATE: 8/09/2025

A handwritten signature in blue ink, appearing to read 'S. S. Sawani', with a stylized flourish underneath.

ADVOCATE FOR RESPONDENT NO. 2

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
WESTERN ZONE BENCH PUNE AT PUNE.

ORIGINAL APPLICATION NO. 198 OF 2023 (WZ)

NARAYAN SHIVAJI GUND

APPLICANT


V/s

MAHARASHTRA POLLUTION
CONTROL BOARD AND ORS.

RESPONDENTS

A F F I D A V I T

MAY IT PLEASE THE HON'BLE TRIBUNAL:



I, SACHIN BIRAPPA JADHAV, Age: 45, Occu.: Service, having office at Chelekar Galli, Mangalwedha, Taluka Mangalwedha, District Solapur 413 305, do hereby state on solemn affirmation as under: -

I am the Managing Director of the Respondent No.2 Jakraya Sugar Limited and responsible for day to day administration of my business. As such, I have gone through the reply thereto being filed today. I find that the contents therein are true and correct to the best of my knowledge and belief and which may be treated as part and parcel of the present affidavit.

WHATEVER STATED ABOVE is true and correct to the best of my knowledge and belief. In witness whereof I have signed hereunder at

Mangalwedha on 08 day of September 2025.

Solemnly affirmed before me
Shri Sachin Birappa Jadhav.

Who is identified by Shri Adv. S.L. Mane

Whom I personally know


Date :- 08 / 09 / 2025

BEFORE ME

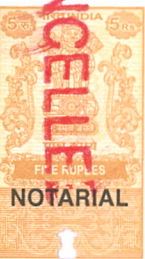
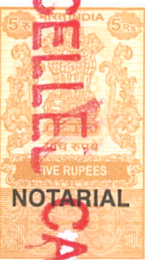


DEPONENT

Noted and Registered at	
Serial No.	2788/2025
Page No.	01
Date	08/09/2025



DHANANJAY C. JADHAV
NOTARY
GOVT. OF INDIA
REG.NO.15916





2503

PROF. BHASKAR NARAYAN THORAT

Senior Professor of Chemical Engineering

B. Chem. Eng., M. Chem. Eng., Ph.D. (Tech)

ANNEXURE-R-1

ADDRESS:

INSTITUTE OF CHEMICAL
TECHNOLOGY

Nathalal Parekh Marg, Matunga,
Mumbai - 400019, India,

E-mail address:

bn.thorat@ictmumbai.edu.in

Personal E-mail:

thoratbn@gmail.com

Contact number:

+91 9322660072

+91 7021016001

Office contact number:

022-3361 2022/2023

Date of Birth: 23rd May, 1965

Domicile State: Maharashtra,
India

PROFESSIONAL EXPERIENCE:

2021 onwards Senior Professor of Chemical Engineering

- Institute of Chemical Technology/ UDCT, Mumbai

2018-2021

Director and Professor of Chemical Engineering

- ICT Mumbai-IOC Odisha Campus, Bhubaneswar

2015-2018

Head of the Department

- Dept. of Chemical Engineering, ICT/UDCT, Mumbai

2006-2018

Professor of Chemical Engineering

- Institute of Chemical Technology/ UDCT, Mumbai

1999- 2005

Reader in Chemical Engineering

- Institute of Chemical Technology/ UDCT, Mumbai

1995- 1999

Senior Lecturer in Chemical Engineering

- Institute of Chemical Technology/ UDCT, Mumbai

1989- 1994

Scientist 'B'

- National Chemical Laboratory, Pune

AWARDS AND HONOURS:

- **Member. CAC Advisory Committee, Maharashtra Pollution Control Board, July 2017 onward**
- **Member. State Environment Appraisal Committee (SEAC-I), Govt. of Maharashtra, February 2014-October 2016**
- **Member, Consent Committee, Maharashtra Pollution Control Board, 2006-2013**
- **Fellow, Royal Society of Chemistry, FRSC**
- **Fellow, Indian Chemical Society, FICS**
- **Fellow, Maharashtra Academy of Sciences, FMASc**
- **Shri G. M. Marve Prize for Most Research Oriented Group during 2021-2022.**
- **The VASVIK Award for the year 2012 in the field of Chemical Sciences and Technology, 2015.**
- **Zayed Sustainability Award, UAE of USD 6000,000 in "food" Category, 2022.**
- **Bill and Melinda Gates Foundation Award of USD 100,000 (One Lakh US Dollar) for Innovative Cassava Dryer, 2013.**
- **Bill and Melinda Gates Foundation Award of USD 100,000 (One Lakh US Dollar) for Innovative Solar Grain Dryer, 2013.**
- **Dell Social Innovation Award of USD 60,000 (Sixty thousand US Dollar) for developing "Solar Conduction Dryer", 2013.**
- **Member, Expert Group of Doctors and Scientists to Advise Government on Prevention, Containment and Clinical Management of Covid-19 in Odisha State, 2020.**
- **Lifetime Achievement Award for Outstanding Contribution to Drying and Dehydration, 2019 by Taylor and Francis, USA.**

- **CSIR-IICT-Avon Padmashri Dr. G. S. Sidhu CHEMCON Distinguished Speaker Award, 2017.**
- **Gunther Oertel Start-up Innovation Award for Microbutor Innovation, Covestro, (Former Bayer Material Science, Germany), 2017.**
- **Millennium Alliance Award** by UKAID (DFID) and FICCI: Solar Conduction Dryer Scale-up in Nepal, **2016**
- **Millennium Alliance Award** by UKAID (DFID) and FICCI: CassavaTech scale up in Kenya, **2016**
- **NOCIL AWARD** for excellence in design of new equipment and process, **2015.**
- **Vocational Excellence Award**, for his valuable contribution to Science and Society for making Solar Conduction Dryer for the Agricultural Sector, **Rotary Club of Mumbai Cuffe Parade, 2013.**
- **Award for Excellence in Drying** and Promotion of the Nordic Drying Conferences in Asia at 5th Nordic Drying Conference, Helsinki, Finland, **2011.**
- **Award for Excellence in Drying:** Transferring Fundamental Results into Practice, by (AFSIA, French Award), given in Magdeburg, Germany, **2010**
- **Special Certificate of Merit by Drying Technology**-An International Journal for “In recognition of his exceptional professional service to promote Drying R & D to Industry in Indian sub-continent as well as globally and his outstanding academic achievements in Drying Research and Mentorship of Postgraduate students. **2008.**
- **Certificate of Excellence by Taylor and Francis, USA**, for promotion of Drying Technology in Indian subcontinent and on Global scale, **2008.**
- **Winner of Agilent Engineering and Technology award** (with two students) **2007.**
- **Mondialogo (UNESCO) Engineering Award**, 2007 (with two students), Prize Money 12 lakh, **2007.**
- **Awarded Certificate of Merit by Marcel Dekker**, for Outstanding Services to the Promotion of Drying R&D in Indian Subcontinent USA, **2004.**
- **Winner of Business Simulation Challenge Competition**, Middlesex University, London, U.K. (Prize Money worth 40,000 USD shared with 4 students) **2003.**
- **Chairman, 1st to 11th International Workshop on Crystallization Filtration and Drying, 2006-2017**
- **Committee member, Planning Commission “Working Group on XIIth five-year plan for higher education”, Government of India. 2012**
- **Founder President, “World Forum for Crystallization, Filtration and Drying”, 2006. (<http://www.wcfd.org>)**
- **Visiting Professor, Lappeenranta and Helsinki Univ. of Tech., Finland 2009.**
- **Chairman, 16th International Drying Symposium IDS2008, Hyderabad, India.**
- **Visiting Professor, University of California, Santa Barbara, 2007.**
- **Visiting Professor of Chemical Engg, University of Lyon, France 2005-2006.**
- **Editorial Advisory Board, Drying Technology, Taylor & Francis, USA, since 2006.**
- **Chairman, Intl’ Workshop and Symposium on Industrial Drying, IWSID, 2004**
- **International Advisory/Scientific Member on following societies:**
 - **Nordic Baltic Drying conference, 2003, 2005, 2009, 2011, 2015, 2017, 2019.**
 - **International Drying Symposium (IDS), 2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2020**
 - **Asia-Pacific Drying Conference, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019**
 - **Russian Thermal Processing Society, EFCE, 2005**
 - **French Drying Society (AFSIA), 2005, 2007.**
 - **Polish Drying Society, Lodz, Poland, 2009.**

PROFESSIONAL EXPERIENCE:

<u>TOTAL EXPERIENCE:</u>	33 YEARS
<u>TOTAL PUBLICATIONS:</u>	165
<u>GOOGLE SCHOLAR LINK:</u>	HTTPS://SCHOLAR.GOOGLE.COM/CITATIONS?USER=WQO-R5MAAAAJ&HL=EN
<u>RESEARCH GATE LINK:</u>	HTTPS://WWW.RESEARCHGATE.NET/PROFILE/BHASKAR-THORAT
<u>BOOKS & MONOGRAMS:</u>	26
<u>PATENTS & TRADEMARKS:</u>	05
<u>INTERNATIONAL CONFERENCES:</u>	23 ORGANIZED, ATTENDED 100 +
<u>PH.D. STUDENTS:</u>	32
<u>M. TECH STUDENTS:</u>	69
<u>CONSULTANCY:</u>	MORE THAN 250 ASSIGNMENTS

START-UP COMPANIES BY BNT RESEARCH SCHOLARS:

Dr. Vaibhav Tidke CEO, S4S Technologies Services Pvt. Ltd.

Website: <https://s4stechnologies.com/>



Dr. Tushar Gaware S4S Technologies Services Pvt. Ltd.

Website: https://s4stechnologies.com



Mr. Ganesh Bhare S4S Technologies Services Pvt. Ltd.

Website: https://s4stechnologies.com



Mr. Swapnil Kokate S4S Technologies Services Pvt. Ltd.

Website: https://s4stechnologies.com



Dr. Sheetal Somani S4S Technologies Services Pvt. Ltd.

Website: https://s4stechnologies.com



Dr. Dilip Jadhao Director,
Annica life sciences Pvt. Ltd.



Dr. Nupur Nagwekar
Hydroponics



Mr. Sumit Tated CEO, Brotos Sprouts.
www.sofoods.co.in



Miss. Nidhi Pant (Desi Videshi), key member of S4S group



Dr. Shailendra Singh Rajput
Enrich Tech – A waste management company

BIODATA

1. **Name:** Prof. Dr. Prakash D. Vaidya

2. **Present Post and Name of Employer:**

Controller of Examinations &

Rashtriya Chemicals and Fertilizers Professor of Chemical Engineering

Institute of Chemical Technology, Nathalal Parekh Marg, Matunga (E), Mumbai-400019

Email: pd.vaidya@ictmumbai.edu.in

3. **Date of Birth:** 13th July 1977

4. **Educational Qualifications:**

Sr. No	Degree	Subject	Class CGP marks	Year	University	Additional Particulars
1	B. E.	Chem. Engg.	1 st 63.6 %	1998	Mumbai	Design project on coal chemicals
2	M. Chem. Engg.	Chem. Engg.	Distinction (2 intl. publications)	2000	Mumbai	IChE's Artemis Biotech Best Master's Thesis Award
3	Ph. D. (Tech.)	Chem. Engg.	(6 intl. publications)	2005	Mumbai	ICT's Dr. K. H. Gharda Best PhD Thesis Award
4	Post-Doc	Chem. Engg.	(3 intl. publications)	2005-06	Porto, Portugal	FCT Postdoctoral Research Fellow
5	Post-Doc	Chem. Engg.	(4 intl. publications)	2006-07	Dortmund, Germany	Alexander von Humboldt Fellow

5. **Professional Experience:**

Sr. No	Period	Place of Employment	Designation	Scale of pay
1	Aug 07 – Feb 15	ICT Mumbai	V. V. Mariwala Lecturer in Chemical Engineering	Rs. 8000-275-13500
2	Feb 15 – Feb 18	ICT Mumbai	Rashtriya Chemicals and Fertilizers Chair Associate Professor of Chemical Engineering	Rs. 37400-67000 + AGP 9000
3	Feb 18 till date	ICT Mumbai	Rashtriya Chemicals and Fertilizers Chair Professor of Chemical Engineering	Rs. 37400-67000 + AGP 10,000

6. **Publications and Academic Record:**

Peer-reviewed international journal papers: 137, Book chapters: 2

H-index: (Google Scholar 36, Scopus: 31), Citations: (Google Scholar 5950, Scopus: 4650)

PhDs guided: 35, MTech guided: 62

7. Patents Granted:

- 1) Bumb, P.; Vaidya, P. D. Carbon capture solvents and methods for using such solvents, EP2830737, 2019.
- 2) Vaidya, P. D.; Bhagwat, S. S.; Budhwani, N.; Sinha, R.; Chugh, P.; Someswarudu, M. V. R. Absorbent composition and method for removing acidic components from industrial gases, Indian Patent 316595, 2019.
- 3) Patil, M. P.; Vaidya, P. D. Novel absorbent composition and method for removing acid compounds from industrial gases, Indian Patent 369135, 2021.
- 4) Badhe, R. M.; Vaidya, P. D.; Garapati, S. R. K.; Damacherla, M. R.; Sharma, A.; Singh, G. K.; Ramakumar, S. S. V. A process and catalysts for the production of hydrogen by reforming in the liquid phase. Indian Patent 542981, 2024.

8. Awards/Honours/Recognitions/Fellowships

- OADB's Award of Recognition presented by Hon'ble Minister PNG (2024)
- IChE's Dr. A. V. Rama Rao Foundation's Best Ph.D. Thesis and Research Award (2024)
- IChE's Herdillia Award for Excellence in Basic Research in Chem. Eng. (2023)
- Manmohan Sharma Science and Technology Prize from Marathi Vidnyan Parishad (2022)
- SHV Energy Sustainable Fuels Open Innovation Challenge – India Edition (2022)
- Dr. Naresh J. Suchak Innovation Award from ICT Mumbai (2021)
- Life Fellow, Indian Chemical Society (2021)
- Fellow, Maharashtra Academy of Sciences (2019)
- IUSSTF Bioenergy Award for Cutting-Edge Research from DBT (2017)
- India Fellowship Awardee, Liverpool University (2015)
- Best Teacher Award from ICT Mumbai (2014)

9. Invited Talks and Lectures

- Eminent Speaker at Workshop by Indian Chemical Council (ICC) under the auspices of the Technology and Energy Expert Committee of the Council; Title of talk: Hydrogen via Aqueous-Phase Reforming; Date: 25th March 2022.
- Distinguished Speaker at Indo-Canadian Research Conclave on Sustainable Approaches to Carbon Capture Sequestration and Utilization (supported by Shastri Indo-Canadian Institute SICI, and organized by Chemical Engineering Department, Pandit Deendayal Energy University Gandhinagar); Title of talk: Promotion of Carbon Footprint Reduction in the Energy Systems during Energy Transition; Date: 13th March 2021.
- Invited Speaker at IIT Bombay (seminar organized by Chemical Engineering Department); Title of talk: Superior hydrogen production from biomass surrogates by reforming processes; Date: 11th March 2020.
- Oral presentations at International Hydrogen and Fuel Cell Conference (organized by Hydrogen Association of India) in 2016, 2017, 2018 and 2019 on hydrogen production from biofeeds by improved reforming processes.
- Oral presentation at PETROTECH-2016 on green diesel production from non-edible vegetable oil.

- Fellow Biotech Research Society of India (2023)
- Fellow IChE (2023)
- Fellow Maharashtra Academia of Science (2015)
- Fellow Indian Chemical Society, (2021)
- Dr K Anji Reddy Innovator of the Year in Chemical Engineering & Technology in India by Publishing in the Reputed International Journal in Chemical Engineering & Bio-Technology/Patents of Merit, 2022
- Man Mohan Sharma Award for Science and Technology by Marathi Vidyan Parishad, 2019.
- Hindustan Lever Biennial Award for the Most Outstanding Chemical Engineer of the Year Under The Age Of 45 Years of Indian Institute of Chemical Engineers
- “Outstanding Professor of ICT” sponsored by Indian Speciality manufacture association (ISCMA) for his research contribution.
- Best Professor contributing in Research award by C. B. Murarka charitable trust in 2019-20.
- Young Associate, Maharashtra Academy of Sciences
- IChE NRC Award for best paper Publication in Indian Chemical Engineer in 2015, presented at Chemcon 2015 (2015)
- Member, editorial board of Catalysis Green Chemistry and Engineering, Begell House, USA.
- Guest editor for special issue of Journal of Chemical Sciences (Springer) and Chemical Records (Wiley).
- Nominated to visit University of Mauritius in 2012 under 5th UGC-TEC consortium
- Nominated by Embassy of Israel, Delhi, to visit Israel under “Discover Israel Program” in 2018.
- Secretary, Catalysis Society of India, Mumbai Chapter, Since 2017
- Session Chair at 9th International Conference on Environmental Catalysis, Newcastle, Australia, 2016
- Session Chair at International Conference on Sustainable Chemistry & Engineering SUSCHEM, 2015
- Session Chair at 8th Asia Pacific Congress on Catalysis (APCAT 8), held Bangkok, 2019.
- Convener, ACS school festival in association with ACS India International Student Chapter 2018
- Treasurer, SCHEMCON, 2018
- Convener, Workshop cum training programme on Analytical instrumentation in association with TEQIP and Catalysis Society of India 2017
- Convener, Workshop on Process intensification sponsored by TEQIP 2016
- Convener, Workshop cum training programme on Analytical instrumentation 2016
- IChE NRC Award for best paper publication in Indian Chemical Engineer in 2015, presented at Chemcon 2015
- Treasurer, Chemcon 2013
- Member, Technical Committee Chemcon 2013
- Convener, workshop CO₂ utilization and Green Chemistry, sponsored by DST 2013
- Convener, Workshop on New vistas water treatment technologies sponsored by DST 2013
- Member, organizing committee for “Chemcareers 2012” organized by ICT-Royal Society of Chemistry (RSC)” 2012.
- Convener, Workshop and Training programme on Chemical Engineering Laboratory, 2011 and 2010

- Member, 2nd International Indo German Symposium on Green Chemistry and Catalysis for Sustainable Development, 2012.
- Member, Technical Committee, Asia Pacific Congress on Catalysis (APCAT 7)
- Member, Technical Committee, International Conference on Sustainable Chemistry & Engineering (SUSCHEME)
- Member Board of studies Nagpur University
- NBA Expert for accreditation of various engineering courses
- Member, Academic Council, Dr. BATU, Lonere, Maharashtra
- Member, Board of Studies of Chemical Engineering Undergraduate Program of MGM University, Aurangabad
- Co-convener SESTEC 2022
- Convener SusChemE 2023

List of awards received by Nanopearl Technology:

Sr. No.	Award	Awarded by	Type of Award
1.	Winner of Best Innovative Product of the Year-18	Global E-Sumit Empresario-Global B-Model Competition IITKGP	International
2.	Represented India in International Business model competition-18	International Business Model Competition, Provo, USA	International
3.	Winner of India Innovation Growth Program 2018	DST-Lockheed Martin-TATA Trusts India Innovation Growth Program (IIGP 2.0) - University Challenge Competition -2018	National
4.	Winner of Atal Incubation Mission-2018	NITI Ayog, GoI	National
5.	Winner of Big pitch-2	Start-up Summit-18, Entrepreneurship Development Institute of India	National
6.	Finalist Team in India-Israel Innovation Challenge-18	Make in India	International
7.	Top third team in Eureka-18 Business Model Competition	IIT Bombay	International
8.	Winner of BEST Able India 2018	Department of Biotechnology, Government of India	National
9.	Finalist in Smart 50	Government of India	National





ANNEXURE-R-2

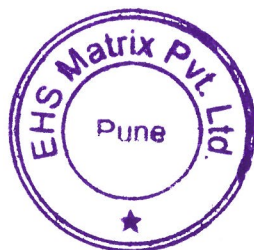
TEST REPORT

Report No:	EHSM/2024/Sep/602	Issue Date	23/09/2024
Name and Address of Customer	Jakraya Sugar Ltd., Gat No. 71-74, A/P - Watwate, Tal. Mohol, Dist. Solapur, PIN – 413305.		
Sample Name	Water	Sample Description	Borewell Water
Date of Sampling	13/09/2024	Sampling Time	10.15 AM
Sampling Location	Bandgar Well Water	Sampling Procedure	APHA 1060
Sampling Collected by	Client	Sample Quantity	02 L
Start Date of Analysis	16/09/2024	End Date of Analysis	23/09/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Requirement (Acceptable Limit)	Methods
1	pH at 25°C	7.66	--	6.5-8.5	APHA 4500 H+ B, 23 rd Ed.2017
2	EC at 25°C	440	µS/cm	NS	APHA 2510 B, 23 rd Ed.2017
3	Total Dissolved Solids TDS	282.0	mg/L	Max 500	APHA 2540 C, 23 rd Ed.2017
4	Total Alkalinity (as CaCO ₃)	112.0	mg/L	Max 200	IS 3025 (Part 23):2019
5	Total Hardness (as CaCO ₃)	121.0	mg/L	Max 200	IS 3025(Part 21):2019
6	Chloride (as Cl)	41.0	mg/L	Max 250	APHA 4500 Cl ⁻ B, 23 rd Ed.2017
7	Sulphate (as SO ₄)	32.0	mg/L	Max 200	IS 3025 (Part 24/Sec 1):2022
8	Calcium (as Ca)	15.0	mg/L	Max 75	IS 3025 (Part 40):2019
9	Magnesium (as Mg)	11.0	mg/L	Max 30	IS 3025(Part 46):2019
10	Reactive Silica	6.1	mg/L	NS	APHA 4500 SiO ₂ -D, 23 rd Ed. 2017
11	Total Coliform	Absent	CFU/100ml	Absent	IS 1622:2019
12	E.coli.	Absent	CFU/100ml	Absent	IS 1622:2019

Remark - The above water sample Complies with required limit as per IS 10500:2012.




Authorized Signatory
Mr. Rahul Patil
(Director)



EHS MATRIX

PRIVATE LIMITED

2512

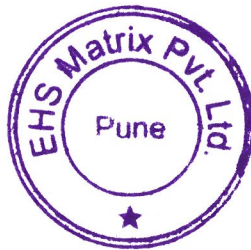
- Sr. No.30/7, Office No. 202, 203, Chintamani Industrial Estate,
Near Dran Company, Dhayari, Pune - 411041, Maharashtra, India.
- +91 91585 60571 / +91 95796 84751 / +91 90961 85285
- www.ehsmatrix.co.in ehsmatrixpune@gmail.com

TEST REPORT

Report No:	EHSM/2024/Sep/610	Issue Date	23/09/2024
Name and Address of Customer	Jakraya Sugar Ltd., Gat No. 71-74, A/P - Watwate, Tal. Mohol, Dist. Solapur, PIN - 413305.		
Sample Name	Soil	Sample Description	Soil
Date of Sampling	13/09/2024	Sampling Time	13.50 PM
Sampling Location	Madake Field Soil	Sampling Procedure	APHA 1060
Sampling Done By	Client	Sample Quantity	2 Kg
Start Date of Analysis	16/09/2024	End Date of Analysis	23/09/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Methods
1	Soil Texture			
	a) Sand	19	%	Manual of Soil Testing
	b) Silt	20	%	
	c) Clay	61	%	
2	pH at 25°C	7.21	--	IS 2720(Part 26):1987
3	EC at 25°C	348	µS/cm	IS 14767 : 2000
4	Organic Matter	6.8	%	IS 2720 (Part 22):1972
5	Moisture Content	12.4	%	Manual of Soil Testing
6	Cation Exchange Capacity	13.9	meq/cm ³	IS 2720 (Part 22):1972
7	Total Soluble Sulphate	15.2	mg/Kg	IS 2720 Part 27
8	Available Phosphorus	7.0	mg/Kg	Manual of Soil Testing
9	Available Nitrogen	108.0	mg/Kg	
10	Water Holding Capacity	38.6	%	
11	Calcium	51.7	mg/Kg	
12	Magnesium (as Mg)	20.3	mg/Kg	
13	Lead	<0.01	mg/Kg	
14	Copper (as Cu)	<0.05	mg/Kg	
15	Zinc (as Zn)	5.1	mg/Kg	
16	Cadmium	<0.01	mg/Kg	
17	Iron (as Fe)	3.0	mg/Kg	
18	Manganese	1.4	mg/Kg	
19	Soil Type	Clay Loam		



RP
Authorized Signatory
Mr. Rahul Patil
(Director)

Page 01 of 01

Laboratory Recognized by Ministry of Environment, Forest (MoEF) & Climate Change (CC) Govt. of India.

Register Office Address :
C-7, Omkar Kudale Patil Estate, Manik
Baugh, Sinhgad Road, Pune - 411051.
+91 20 2435 6133
+91 90961 85285 / +91 91585 60571

Branch Office Address :
1151, E-ward, Saroj Sankul, Flat No. B-204,
Near Swayamsiddha Trust Building,
Sykes Extension, Kolhapur - 415116
+91 98343 07334 / +91 90961 85285

CERTIFICATIONS
ISO 9001 : 2015
ISO 14001 : 2015
ISO 45001 : 2018



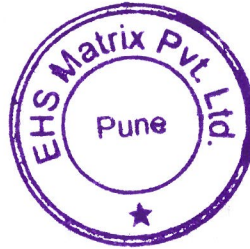
TEST REPORT


Report No:	EHSM/2024/Sep/604	Issue Date	23/09/2024
Name and Address of Customer	Jakraya Sugar Ltd., Gat No. 71-74, A/P - Watwate, Tal. Mohol, Dist. Solapur, PIN – 413305.		
Sample Name	Water	Sample Description	Borewell Water
Date of Sampling	13/09/2024	Sampling Time	10.15 AM
Sampling Location	Asbe Taty Well Water	Sampling Procedure	APHA 1060
Sampling Collected by	Client	Sample Quantity	02 L
Start Date of Analysis	16/09/2024	End Date of Analysis	23/09/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Requirement (Acceptable Limit)	Methods
1	pH at 25°C	7.49	--	6.5-8.5	APHA 4500 H+ B, 23 rd Ed.2017
2	EC at 25°C	610	µS/cm	NS	APHA 2510 B, 23 rd Ed.2017
3	Total Dissolved Solids TDS	395.0	mg/L	Max 500	APHA 2540 C, 23 rd Ed.2017
4	Total Alkalinity (as CaCO ₃)	135.1	mg/L	Max 200	IS 3025 (Part 23):2019
5	Total Hardness (as CaCO ₃)	172.0	mg/L	Max 200	IS 3025(Part 21):2019
6	Chloride (as Cl)	78.0	mg/L	Max 250	APHA 4500 Cl ⁻ B, 23 rd Ed.2017
7	Sulphate (as SO ₄)	36.0	mg/L	Max 200	IS 3025 (Part 24/Sec 1):2022
8	Calcium (as Ca)	60.0	mg/L	Max 75	IS 3025 (Part 40):2019
9	Magnesium (as Mg)	17.2	mg/L	Max 30	IS 3025(Part 46):2019
10	Reactive Silica	8.4	mg/L	NS	APHA 4500 SiO ₂ -D, 23 rd Ed. 2017
11	Total Coliform	Absent	CFU/100ml	Absent	IS 1622:2019
12	E.coli.	Absent	CFU/100ml	Absent	IS 1622:2019

Remark - The above water sample Complies with required limit as per IS 10500:2012.




Authorized Signatory
Mr. Rahul Patil
(Director)



EHS MATRIX

PRIVATE LIMITED

2514

- Sr. No.30/7, Office No. 202, 203, Chintamani Industrial Estate,
Near Dran Company, Dhayari, Pune - 411041, Maharashtra, India.
- +91 91585 60571 / +91 95796 84751 / +91 90961 85285
- www.ehsmatrix.co.in ehsmatrixpune@gmail.com

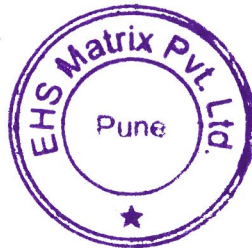
TEST REPORT

Report No:	EHSM/2024/Sep/603	Issue Date	23/09/2024
Name and Address of Customer	Jakraya Sugar Ltd., Gat No. 71-74, A/P - Watwate, Tal. Mohol, Dist. Solapur, PIN – 413305.		
Sample Name	Water	Sample Description	Borewell Water
Date of Sampling	13/09/2024	Sampling Time	10.15 AM
Sampling Location	Deva Naiknaware Well Water	Sampling Procedure	APHA 1060
Sampling Collected by	Client	Sample Quantity	02 L
Start Date of Analysis	16/09/2024	End Date of Analysis	23/09/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Requirement (Acceptable Limit)	Methods
1	pH at 25°C	7.24	--	6.5-8.5	APHA 4500 H+ B, 23 rd Ed.2017
2	EC at 25°C	271	µS/cm	NS	APHA 2510 B, 23 rd Ed.2017
3	Total Dissolved Solids TDS	174.0	mg/L	Max 500	APHA 2540 C, 23 rd Ed.2017
4	Total Alkalinity (as CaCO ₃)	112.0	mg/L	Max 200	IS 3025 (Part 23):2019
5	Total Hardness (as CaCO ₃)	127.0	mg/L	Max 200	IS 3025(Part 21):2019
6	Chloride (as Cl)	38.1	mg/L	Max 250	APHA 4500 Cl ⁻ B, 23 rd Ed.2017
7	Sulphate (as SO ₄)	30.6	mg/L	Max 200	IS 3025 (Part 24/Sec 1):2022
8	Calcium (as Ca)	37.6	mg/L	Max 75	IS 3025 (Part 40):2019
9	Magnesium (as Mg)	9.6	mg/L	Max 30	IS 3025(Part 46):2019
10	Reactive Silica	4.9	mg/L	NS	APHA 4500 SiO ₂ -D, 23 rd Ed. 2017
11	Total Coliform	Absent	CFU/100ml	Absent	IS 1622:2019
12	E.coli.	Absent	CFU/100ml	Absent	IS 1622:2019

Remark - The above water sample Complies with required limit as per IS 10500:2012.




Authorized Signatory
Mr. Rahul Patil
(Director)

Page 01 of 01

Laboratory Recognized by Ministry of Environment, Forest (MoEF) & Climate Change (CC) Govt. of India.

Register Office Address :
C-7, Omkar Kudale Patil Estate, Manik
Baugh, Sinhgad Road, Pune - 411051.
+91 20 2435 6133
+91 90961 85285 / +91 91585 60571

Branch Office Address :
1151, E-ward, Saroj Sankul, Flat No. B-204,
Near Swayamsiddha Trust Building,
Sykes Extension, Kolhapur - 415116
+91 98343 07334 / +91 90961 85285

CERTIFICATIONS
ISO 9001 : 2015
ISO 14001 : 2015
ISO 45001 : 2018



EHS MATRIX

PRIVATE LIMITED

2515

- Sr. No.30/7, Office No. 202, 203, Chintamani Industrial Estate,
Near Dran Company, Dhayari, Pune - 411041, Maharashtra, India.
- +91 91585 60571 / +91 95796 84751 / +91 90961 85285
- www.ehsmatrix.co.in ehsmatrixpune@gmail.com

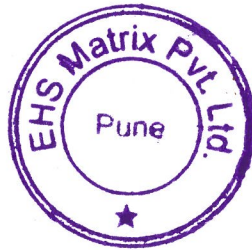
TEST REPORT

Report No:	EHSM/2024/Sep/600	Issue Date	23/09/2024
Name and Address of Customer	Jakraya Sugar Ltd., Gat No. 71-74, A/P - Watwate, Tal. Mohol, Dist. Solapur, PIN – 413305.		
Sample Name	Water	Sample Description	Borewell Water
Date of Sampling	13/09/2024	Sampling Time	10.15 AM
Sampling Location	Gaikwad Well Water	Sampling Procedure	APHA 1060
Sampling Collected by	Client	Sample Quantity	02 L
Start Date of Analysis	16/09/2024	End Date of Analysis	23/09/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Requirement (Acceptable Limit)	Methods
1	pH at 25°C	7.24	--	6.5-8.5	APHA 4500 H+ B, 23 rd Ed.2017
2	EC at 25°C	668	µS/cm	NS	APHA 2510 B, 23 rd Ed.2017
3	Total Dissolved Solids TDS	431.0	mg/L	Max 500	APHA 2540 C, 23 rd Ed.2017
4	Total Alkalinity (as CaCO ₃)	143.0	mg/L	Max 200	IS 3025 (Part 23):2019
5	Total Hardness (as CaCO ₃)	136.0	mg/L	Max 200	IS 3025(Part 21):2019
6	Chloride (as Cl)	65.0	mg/L	Max 250	APHA 4500 Cl ⁻ B, 23 rd Ed.2017
7	Sulphate (as SO ₄)	52.0	mg/L	Max 200	IS 3025 (Part 24/Sec 1):2022
8	Calcium (as Ca)	10.5	mg/L	Max 75	IS 3025 (Part 40):2019
9	Magnesium (as Mg)	15.0	mg/L	Max 30	IS 3025(Part 46):2019
10	Reactive Silica	5.1	mg/L	NS	APHA 4500 SiO ₂ -D, 23 rd Ed. 2017
11	Total Coliform	Absent	CFU/100ml	Absent	IS 1622:2019
12	E.coli.	Absent	CFU/100ml	Absent	IS 1622:2019

Remark - The above water sample Complies with required limit as per IS 10500:2012.




Authorized Signatory
Mr. Rahul Patil
(Director)

Page 01 of 01

Laboratory Recognized by Ministry of Environment, Forest (MoEF) & Climate Change (CC) Govt. of India.

Register Office Address :
C-7, Omkar Kudale Patil Estate, Manik
Baugh, Sinhgad Road, Pune - 411051.
+91 20 2435 6133
+91 90961 85285 / +91 91585 60571

Branch Office Address :
1151, E-ward, Saroj Sankul, Flat No. B-204,
Near Swayamsiddha Trust Building,
Sykes Extension, Kolhapur - 415116
+91 98343 07334 / +91 90961 85285

CERTIFICATIONS
ISO 9001 : 2015
ISO 14001 : 2015
ISO 45001 : 2018



EHS MATRIX

PRIVATE LIMITED

2516

- Sr. No.30/7, Office No. 202, 203, Chintamani Industrial Estate,
Near Dran Company, Dhayari, Pune - 411041, Maharashtra, India.
- +91 91585 60571 / +91 95796 84751 / +91 90961 85285
- www.ehsmatrix.co.in ehsmatrixpune@gmail.com

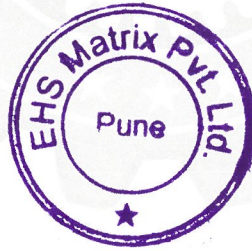
TEST REPORT

Report No:	EHSM/2024/Sep/595	Issue Date	23/09/2024
Name and Address of Customer	Jakraya Sugar Ltd., Gat No. 71-74, A/P - Watwate, Tal. Mohol, Dist. Solapur, PIN - 413305.		
Sample Name	treated Effluent	Sample Description	ETP Outlet
Date of Sampling	13/09/2024	Sampling Time	11.30 AM
Sampling Location	ETP Outlet Water	Sampling Procedure	APHA 1060
Sampling done by	Client	Sample Quantity	02 L
Start Date of Analysis	16/09/2024	End Date of Analysis	23/09/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Limits	Methods
1	Total Suspended Solids TSS	19.3	mg/L	<100.0	APHA 2540 D, 23 rd Ed.2017
2	Total Dissolved Solids TDS	1965.0	mg/L	<2100.0	APHA 2540 C, 23 rd Ed.2017
3	pH at 25°C	7.89	--	5.5-9.0	APHA 4500 H ⁺ B, 23 rd Ed.2017
4	Biochemical Oxygen Demand at 27°C for 3 days	69.0	mg/L	<100.0	IS 3025 (Part 44):2019
5	Oil & Grease	<5.0	mg/L	<10.0	APHA 5520 B, 23 rd Ed.2017
6	Chemical Oxygen Demand	212.0	mg/L	<250.0	IS 3025 (Part 58):2017
7	Sulphate (as SO ₄)	<5.0	mg/L	<1000.0	IS 3025 (Part 24):2022
8	Chloride (as Cl ⁻)	513.7	mg/L	<600.0	APHA 4500 Cl ⁻ B, 23 rd Ed.2017

Remark - All parameters are well within the limits.



Rp
Authorized Signatory
Mr. Rahul Patil
(Director)



Page 01 of 01


Laboratory Recognized by Ministry of Environment, Forest (MoEF) & Climate Change (CC) Govt. of India.

- Register Office Address :
C-7, Omkar Kudale Patil Estate, Manik
Baugh, Sinhgad Road, Pune - 411051.
- +91 20 2435 6133
+91 90961 85285 / +91 91585 60571

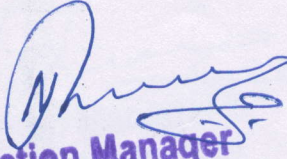
- Branch Office Address :
1151, E-ward, Saroj Sankul, Flat No. B-204,
Near Swayamsiddha Trust Building,
Sykes Extension, Kolhapur - 415116
- +91 98343 07334 / +91 90961 85285

CERTIFICATIONS
ISO 9001 : 2015
ISO 14001 : 2015
ISO 45001 : 2018

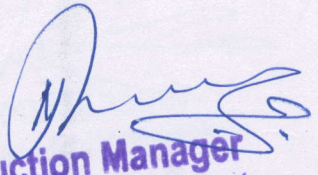
Jakraya Sugar Office data					
Jakraya Sugar LTD Solapur ETP-OUTLET PARAMETER FEB-2025					
Date	6.5-8.0 (pH)	30 (Mg/l) BOD	250 (Mg/l) COD	100 (Mg/l)TSS	215 (M3/day) FLOW
1/2/2025	7.77	10.87	112.53	12.31	0
2/2/2025	7.42	9.26	99.5	13.28	0
3/2/2025	6.74	13.83	135.33	16.01	0
4/2/2025	6.92	13.09	129.85	15.25	0
5/2/2025	7.02	11.3	115.84	12.36	0
6/2/2025	7.13	10.54	110.82	9.36	0
7/2/2025	7.17	10.2	107.8	7.5	0
8/2/2025	7.24	11.2	115.3	10.26	0
9/2/2025	7.33	11.31	117.57	11.74	0
10/2/2025	7.37	12.54	125.99	16.76	0
11/2/2025	7.45	13.2	130.81	20.19	0
12/2/2025	7.52	12.1	122.03	11.9	0
13/2/2025	7.6	12.22	122.65	9.83	0
14/2/2025	7.72	14.22	138.08	13.3	0
15/2/2025	7.55	13.01	129.22	20.79	0
16/2/2025	7.3	8.14	91.72	16.49	0
17/2/2025	7.37	7.36	85.45	11.75	0
18/2/2025	7.41	12.65	126.14	34.64	0
19/2/2025	7.65	14.64	78.24	32.85	0
20/2/2025	7.71	15.52	146.74	36.55	0
21/2/2025	7.54	15.68	124	65.68	0
22/2/2025	7.55	15.33	154.63	26.86	0
23/2/2025	7.34	9.35	152.45	65.75	0
24/2/2025	6.68	11.39	158.31	61.52	0
25/2/2025	7.06	14.61	154.24	64.58	0
26/2/2025	7.09	19.22	135.54	54.57	0
27/2/2025	7.13	14.34	196.16	87.41	0
28/2/2025	7.15	18.68	195.17	94.56	0


Production Manager
Jakraya Sugar Ltd., Watwate.

Jakraya Sugar Office data					
Jakraya Sugar LTD Solapur ETP-OUTLET PARAMETER MAR-25					
Date	6.5-8.0 (pH)	30 (Mg/l) BOD	250 (Mg/l) COD	100 (Mg/l)TSS	215 (M3/day) FLOW
1/3/2025	7.85	14.35	184.54	91.21	0
2/3/2025	7.22	16.54	202.51	88.67	0
3/3/2025	7.94	16.84	206.51	86.65	0
4/3/2025	7.44	17.54	164.32	82.12	0
5/3/2025	6.93	18.11	169.26	83.22	0
6/3/2025	7.08	18.21	165.33	79.94	0
7/3/2025	7.88	18.67	155.35	78.65	0
8/3/2025	7.4	19.74	147.32	75.94	0
9/3/2025	7.43	19.93	132.53	76.41	0
10/3/2025	7.51	20.59	186.12	71.36	0
11/3/2025	7.58	22.63	199.65	65.86	0
12/3/2025	7.48	26.54	186.54	56.31	0
13/3/2025	7.50	23.84	209.97	56.83	0
14/3/2025	7.41	23.98	210.49	35.53	0
15/3/2025	7.58	28.84	213.68	28.14	0
16/3/2025	6.86	28.64	216.62	21.31	0
17/3/2025	6.97	17.75	136.35	18.11	0
18/3/2025	7.3	10.75	80.56	15.34	0
19/3/2025	7.16	15.1	98.86	25.78	0
20/3/2025	7.27	17.3	101.87	31.13	0
21/3/2025	7.39	12.91	94.47	24.32	0
22/3/2025	7.5	12.29	85.53	25.82	0
23/3/2025	7.6	10.28	78.17	27.68	0
24/3/2025	7.69	12.95	90.61	42.64	0
25/3/2025	7.8	12.45	66.71	23.2	0
26/3/2025	7.86	16.18	80.04	32.87	0
27/3/2025	7.54	21.28	94.54	50.46	0
28/3/2025	7.35	12.68	70.54	24.38	0
29/3/2025	7.54	14.59	71.35	26.88	0
30/3/2025	7.6	17.63	81.33	33.41	0
31/3/2025	7.35	20.42	82.08	38.64	0


 Production Manager
 Jakraya Sugar Ltd., Watwate.

Jakraya Sugar Office data					
Jakraya Sugar LTD Solapur ETP-OUTLET PARAMETER Apr-2025					
Permissible Range	6.5-8.0 (pH)	30 (Mg/l) BOD	250 (Mg/l) COD	100 (Mg/l)TSS	215 (M3/day) FLOW
1/4/2025	7.44	21.6	88.38	42.28	0
2/4/2025	7.51	21.28	92.35	43.82	0
3/4/2025	7.6	16.58	75.27	32.19	0
4/4/2025	7.41	7.55	53.55	15.01	0
5/4/2025	7.25	10.65	60.74	20.75	0
6/4/2025	7.4	16.17	72.19	30.53	0
7/4/2025	7.54	17.2	74.22	31.74	0
8/4/2025	7.68	19.63	77.24	35.76	0
9/4/2025	7.82	26.62	123.8	75.19	0
10/4/2025	7.92	21.32	81.63	38.68	0
11/4/2025	7.63	23.34	86.4	42.36	0
12/4/2025	7.5	21.9	83.63	39.48	0
13/4/2025	7.32	21.78	82.24	39.12	0
14/4/2025	7.17	21	84.45	39.12	0
15/4/2025	7.3	18.03	73.57	32.49	0
16/4/2025	7.47	22.87	85.8	41.86	0
17/4/2025	7.62	25.08	90.52	45.81	0
18/4/2025	7.81	25.82	91.65	46.76	0
19/4/2025	7.71	26.53	92.29	47.79	0
20/4/2025	7.48	26.81	92.57	48.12	0
21/4/2025	7.6	26.58	92.27	47.81	0
22/4/2025	7.61	26.6	96.73	51.73	0
23/4/2025	7.61	26.47	92.16	47.53	0
24/4/2025	7.72	26.51	92.1	47.73	0
25/4/2025	7.56	26.59	92.49	47.86	0
26/4/2025	7.54	26.6	92.51	47.95	0
27/4/2025	7.25	26.63	92.44	47.86	0
28/4/2025	7.36	26.05	96.35	47.82	0
29/4/2025	7.54	26.07	92.45	47.7	0
30/4/2025	7.13	26.4	92.01	47.45	0


Production Manager
 Jakraya Sugar Ltd., Watwata.

	JAKRAYA SUGAR LTD SOLAPUR ETP_1_OUTLET pH	JAKRAYA SUGAR LTD SOLAPUR ETP_1_OUTLET BOD	JAKRAYA SUGAR LTD SOLAPUR ETP_1_OUTLET COD	JAKRAYA SUGAR LTD SOLAPUR ETP_1_OUTLET TSS	JAKRAYA SUGAR LTD SOLAPUR ETP_1_OUTLET FLOW (m3/hr)
Permissible Range	6.5-8.0 (pH)	30 (Mg/l)	250 (Mg/l)	100 (Mg/l)	215 (M3/day)
10/1/2024 0:00	8.14	15.07	149.07	87.58	NA
10/2/2024 0:00	7.83	13.21	133.33	72.22	NA
10/3/2024 0:00	7.82	21.73	201.06	119.97	NA
10/4/2024 0:00	7.99	19.81	184.23	92.84	NA
10/5/2024 0:00	8.08	28.36	254.97	132.42	NA
10/6/2024 0:00	7.83	18.97	179.52	87.08	NA
10/7/2024 0:00	7.98	16.19	156.36	82.53	NA
10/8/2024 0:00	8.15	22.37	205.66	109.78	NA
10/9/2024 0:00	8.06	27.59	247.92	142.24	NA
10/10/2024 0:00	7.93	20.44	191.55	107.47	NA
10/11/2024 0:00	7.59	2.2	48.35	9.99	NA
10/12/2024 0:00	7.74	2.3	48.83	9.74	NA
10/13/2024 0:00	7.97	2.18	48.11	9.51	NA
10/14/2024 0:00	8.13	2.23	47.92	9.56	NA
10/15/2024 0:00	7.08	2.22	48.75	10.38	NA
10/16/2024 0:00	6.56	2.12	48.49	10.75	NA
10/17/2024 0:00	6.58	2.81	52.5	10.6	NA
10/18/2024 0:00	6.56	4.34	63.72	14.33	NA
10/19/2024 0:00	6.74	6.46	80.04	22.64	NA
10/20/2024 0:00	6.86	7.81	90.98	28.12	NA
10/21/2024 0:00	7.11	8.41	93.17	27.55	0
10/22/2024 0:00	7.4	9.44	102.79	31.47	NA
10/23/2024 0:00	7.36	11.44	118.67	39.57	NA
10/24/2024 0:00	7.27	25.32	229.54	132.1	NA
10/25/2024 0:00	7.33	28.91	260.26	169.97	NA
10/26/2024 0:00	7.26	27.98	251.83	164.02	NA
10/27/2024 0:00	7.17	27.2	245.92	159.33	NA
10/28/2024 0:00	7.3	27.02	244.88	158.26	NA
10/29/2024 0:00	7.47	27.08	244.48	158.32	NA
10/30/2024 0:00	7.45	27.11	244.23	158.05	NA
10/31/2024 0:00	7.45	27.09	243.91	158.04	NA
11/1/2024 0:00	7.32	26.93	243.54	157.75	NA
11/2/2024 0:00	7.44	26.12	235.78	152.23	NA
11/3/2024 0:00	7.54	16.49	157.16	93.5	NA
11/4/2024 0:00	7.68	16.13	155.74	92.04	NA
11/5/2024 0:00	7.73	16.27	156.11	92.67	0
11/6/2024 0:00	7.79	11.74	120.72	63.91	0
11/7/2024 0:00	7.76	7.23	85.44	26.29	NA
11/8/2024 0:00	7.92	8.75	96.55	32.31	NA
11/9/2024 0:00	7.94	11.18	116.39	46.59	0
11/10/2024 0:00	7.73	10.05	106.86	44.18	NA
11/11/2024 0:00	7.58	8.17	93.69	41.78	NA
11/12/2024 0:00	6.87	5.59	73.67	29.08	NA
11/13/2024 0:00	7.27	5.6	72.94	28.57	NA
11/14/2024 0:00	7.54	8.99	98.7	48.4	NA
11/15/2024 0:00	7.64	10.08	107.22	55.61	0
11/16/2024 0:00	7.69	12.24	124.91	67.87	NA
11/17/2024 0:00	7.74	9.03	100.15	47.93	NA
11/18/2024 0:00	7.8	10.18	108.7	53.67	0
11/19/2024 0:00	7.68	10.3	108.26	52.27	NA
11/20/2024 0:00	7.8	4.57	64.32	19.6	0
11/21/2024 0:00	8.02	6.11	75.56	26.71	0

11/22/2024 0:00	8.01	5.46	70.39	24.16	NA
11/23/2024 0:00	7.52	4.24	62.49	18.93	NA
11/24/2024 0:00	7.41	4.5	63.55	20.05	NA
11/25/2024 0:00	7.4	4.95	68.41	21.9	NA
11/26/2024 0:00	7.47	6.82	80.6	28.69	NA
11/27/2024 0:00	7.5	8	90.64	34.33	NA
11/28/2024 0:00	7.54	9.93	105.59	47.75	NA
11/29/2024 0:00	7.52	11.87	120	47.34	0
11/30/2024 0:00	7.64	13.08	129.32	31	0
12/1/2024 0:00	8.41	12.51	125	32.84	0
12/2/2024 0:00	8.41	10.32	107.36	32.79	NA
12/3/2024 0:00	7.96	13.85	135.22	53.85	0
12/4/2024 0:00	7.87	10.21	107.64	37.3	0
12/5/2024 0:00	7.6	9.73	103.9	34.24	NA
12/6/2024 0:00	7.85	9.1	99.65	33.97	0
12/7/2024 0:00	7.89	7.55	88.11	27.83	NA
12/8/2024 0:00	7.74	10.66	112.39	43.2	0
12/9/2024 0:00	7.73	13.05	128.97	53.82	NA
12/10/2024 0:00	7.89	11.35	116.91	43.26	NA
12/11/2024 0:00	7.83	10.41	109.25	28.43	0
12/12/2024 0:00	8.05	11.2	115.82	24.34	NA
12/13/2024 0:00	8.02	18.63	173.43	49.91	0
12/14/2024 0:00	7.6	17.04	162.2	47.37	NA
12/15/2024 0:00	7.6	8.17	90.99	19.26	0
12/16/2024 0:00	7.9	11.93	119.82	22.39	0
12/17/2024 0:00	7.98	14.5	140.29	27.37	0
12/18/2024 0:00	7.76	19.01	175.69	47.95	NA
12/19/2024 0:00	7.79	21.09	194.13	62.54	NA
12/20/2024 0:00	7.7	15.49	148.37	40.33	0
12/21/2024 0:00	7.64	18.92	176.16	58.22	NA
12/22/2024 0:00	7.59	20.93	192.34	63.67	NA
12/23/2024 0:00	7.29	23.36	213.38	70.13	NA
12/24/2024 0:00	7.37	24.55	222.75	79.95	NA
12/25/2024 0:00	7.47	23.05	210.82	57.96	NA
12/26/2024 0:00	7.93	13.57	135.43	29.8	NA
12/27/2024 0:00	7.77	9.26	100.6	27.57	NA
12/28/2024 0:00	7.92	16.15	154.56	47.84	NA
12/29/2024 0:00	7.86	21.1	194.24	65.11	NA
12/30/2024 0:00	7.83	20.23	186.71	67.71	NA
12/31/2024 0:00	7.7	20.62	190.6	67.66	0
1/1/2025 0:00	7.59	21.37	196.2	73.23	NA
1/2/2025 0:00	7.71	22.26	203.32	79.11	NA
1/3/2025 0:00	7.64	21.54	197.85	67.22	0
1/4/2025 0:00	7.83	19.14	176.92	24.71	NA
1/5/2025 0:00	7.91	14.88	143.03	27.71	NA
1/6/2025 0:00	7.89	16.57	157.85	26.36	0
1/7/2025 0:00	7.76	15.17	146.9	26.52	0
1/8/2025 0:00	7.88	14.83	143.32	37.66	NA
1/9/2025 0:00	7.75	20.06	185.22	81.83	NA
1/10/2025 0:00	7.59	29.43	261.94	141.85	0
1/11/2025 0:00	7.64	13.81	135.66	63.32	NA
1/12/2025 0:00	7.7	4.32	60.76	17.7	0
1/13/2025 0:00	7.47	12.13	122.08	49.91	NA
1/14/2025 0:00	7.6	15.18	146.42	67.7	0
1/15/2025 0:00	7.71	22.18	202.95	103.91	NA
1/16/2025 0:00	7.51	21.24	195.58	95.84	0
1/17/2025 0:00	7.5	10.66	110.87	23.79	0
1/18/2025 0:00	7.15	8.35	94.16	18.24	NA

1/19/2025 0:00	7.15	6.66	79.83	10.83	NA
1/20/2025 0:00	7.02	5.58	72.29	2.98	0
1/21/2025 0:00	6.89	10.5	108.93	9.61	0
1/22/2025 0:00	7.19	17.32	160.98	27.87	NA
1/23/2025 0:00	7.25	17.76	167.34	34.03	NA
1/24/2025 0:00	7.36	6.55	79.9	4.77	NA
1/25/2025 0:00	7.45	4.42	64.2	3.49	NA
1/26/2025 0:00	7.49	9.91	106	17.87	NA
1/27/2025 0:00	7.54	15.78	150.76	41.68	NA
1/28/2025 0:00	7.59	14.98	144.92	51.73	NA
1/29/2025 0:00	7.63	10.65	111.98	29.3	NA
1/30/2025 0:00	7.81	9.15	99.67	11.17	0
1/31/2025 0:00	7.96	11.42	116.68	11.14	NA
2/1/2025 0:00	7.77	10.87	112.53	12.31	0
2/2/2025 0:00	7.42	9.26	99.5	13.28	NA
2/3/2025 0:00	6.74	13.83	135.33	16.01	NA
2/4/2025 0:00	6.92	13.09	129.85	15.25	NA
2/5/2025 0:00	7.02	11.3	115.84	12.36	NA
2/6/2025 0:00	7.13	10.54	110.82	9.36	NA
2/7/2025 0:00	7.17	10.2	107.8	7.5	NA
2/8/2025 0:00	7.24	11.2	115.3	10.26	0
2/9/2025 0:00	7.33	11.31	117.57	11.74	NA
2/10/2025 0:00	7.37	12.54	125.99	16.76	0
2/11/2025 0:00	7.45	13.2	130.81	20.19	NA
2/12/2025 0:00	7.52	12.1	122.03	11.9	0
2/13/2025 0:00	7.6	12.22	122.65	9.83	NA
2/14/2025 0:00	7.72	14.22	138.08	13.3	NA
2/15/2025 0:00	7.55	13.01	129.22	20.79	0
2/16/2025 0:00	7.3	8.14	91.72	16.49	0
2/17/2025 0:00	7.37	7.36	85.45	11.75	NA
2/18/2025 0:00	NA	NA	NA	NA	NA
2/19/2025 0:00	NA	NA	NA	NA	NA
2/20/2025 0:00	NA	NA	NA	NA	NA
2/21/2025 0:00	NA	NA	NA	NA	NA
2/22/2025 0:00	NA	NA	NA	NA	NA
2/23/2025 0:00	NA	NA	NA	NA	NA
2/24/2025 0:00	NA	NA	NA	NA	NA
2/25/2025 0:00	NA	NA	NA	NA	NA
2/26/2025 0:00	NA	NA	NA	NA	NA
2/27/2025 0:00	NA	NA	NA	NA	NA
2/28/2025 0:00	NA	NA	NA	NA	NA
3/1/2025 0:00	NA	NA	NA	NA	NA
3/2/2025 0:00	NA	NA	NA	NA	NA
3/3/2025 0:00	NA	NA	NA	NA	NA
3/4/2025 0:00	NA	NA	NA	NA	NA
3/5/2025 0:00	NA	NA	NA	NA	NA
3/6/2025 0:00	NA	NA	NA	NA	NA
3/7/2025 0:00	NA	NA	NA	NA	NA
3/8/2025 0:00	NA	NA	NA	NA	NA
3/9/2025 0:00	NA	NA	NA	NA	NA
3/10/2025 0:00	NA	NA	NA	NA	NA
3/11/2025 0:00	NA	NA	NA	NA	NA
3/12/2025 0:00	NA	NA	NA	NA	NA
3/13/2025 0:00	NA	NA	NA	NA	NA
3/14/2025 0:00	NA	NA	NA	NA	NA
3/15/2025 0:00	NA	NA	NA	NA	NA
3/16/2025 0:00	NA	NA	NA	NA	NA
3/17/2025 0:00	NA	NA	NA	NA	NA

3/18/2025 0:00	7.3	10.75	80.56	15.34	0
3/19/2025 0:00	7.16	15.1	98.86	25.78	0
3/20/2025 0:00	7.27	17.3	101.87	31.13	0
3/21/2025 0:00	7.39	12.91	94.47	24.32	0
3/22/2025 0:00	7.5	12.29	85.53	25.82	0
3/23/2025 0:00	7.6	10.28	78.17	27.68	0
3/24/2025 0:00	7.69	12.95	90.61	42.64	0
3/25/2025 0:00	7.8	12.45	66.71	23.2	NA
3/26/2025 0:00	7.86	16.18	80.04	32.87	0
3/27/2025 0:00	7.54	21.28	94.54	50.46	NA
3/28/2025 0:00	7.35	12.68	70.54	24.38	NA
3/29/2025 0:00	7.54	14.59	71.35	26.88	NA
3/30/2025 0:00	7.6	17.63	81.33	33.41	0
3/31/2025 0:00	7.35	20.42	82.08	38.64	0
4/1/2025 0:00	7.44	21.6	88.38	42.28	0
4/2/2025 0:00	7.51	21.28	92.35	43.82	NA
4/3/2025 0:00	7.6	16.58	75.27	32.19	0
4/4/2025 0:00	7.41	7.55	53.55	15.01	NA
4/5/2025 0:00	7.25	10.65	60.74	20.75	0
4/6/2025 0:00	7.4	16.17	72.19	30.53	0
4/7/2025 0:00	7.54	17.2	74.22	31.74	0
4/8/2025 0:00	7.68	19.63	77.24	35.76	NA
4/9/2025 0:00	7.82	26.62	123.8	75.19	NA
4/10/2025 0:00	7.92	21.32	81.63	38.68	NA
4/11/2025 0:00	7.63	23.34	86.4	42.36	0
4/12/2025 0:00	7.5	21.9	83.63	39.48	NA
4/13/2025 0:00	7.32	21.78	82.24	39.12	NA
4/14/2025 0:00	7.17	21	84.45	39.12	0
4/15/2025 0:00	7.3	18.03	73.57	32.49	NA
4/16/2025 0:00	7.47	22.87	85.8	41.86	NA
4/17/2025 0:00	7.62	25.08	90.52	45.81	NA
4/18/2025 0:00	7.81	25.82	91.65	46.76	0
4/19/2025 0:00	7.71	26.53	92.29	47.79	0
4/20/2025 0:00	7.48	26.81	92.57	48.12	NA
4/21/2025 0:00	7.6	26.58	92.27	47.81	0
4/22/2025 0:00	7.61	26.6	96.73	51.73	NA
4/23/2025 0:00	7.61	26.47	92.16	47.53	NA
4/24/2025 0:00	7.72	26.51	92.1	47.73	NA
4/25/2025 0:00	7.56	26.59	92.49	47.86	NA
4/26/2025 0:00	7.54	26.6	92.51	47.95	NA
4/27/2025 0:00	7.25	26.63	92.44	47.86	0
4/28/2025 0:00	NA	NA	NA	NA	NA
4/29/2025 0:00	7.54	26.07	92.45	47.7	0
4/30/2025 0:00	8.13	26.4	92.01	47.45	0
5/1/2025 0:00	8.66	26.6	92.53	47.76	0
5/2/2025 0:00	8.66	26.63	92.51	47.72	0
5/3/2025 0:00	8.65	26.5	92.16	47.4	0
5/4/2025 0:00	8.66	26.59	92.44	47.75	0
5/5/2025 0:00	8.67	26.69	92.6	47.88	0
5/6/2025 0:00	8.66	26.59	92.53	47.82	0
5/7/2025 0:00	8.67	26.66	92.59	47.83	0
5/8/2025 0:00	8.67	26.82	92.87	48.37	0
5/9/2025 0:00	8.67	26.81	92.62	48.08	0
5/10/2025 0:00	8.67	26.67	92.68	48.02	0
5/11/2025 0:00	8.67	26.84	92.96	47.96	0
5/12/2025 0:00	8.67	26.6	92.49	48.12	0
5/13/2025 0:00	8.67	26.74	92.69	48.06	0
5/14/2025 0:00	8.66	26.9	92.87	48.09	0

5/15/2025 0:00	8.66	26.61	92.3	47.71	0
5/16/2025 0:00	8.67	26.74	92.71	47.91	0
5/17/2025 0:00	8.68	26.9	93.13	48.94	0
5/18/2025 0:00	NA	NA	NA	NA	NA
5/19/2025 0:00	NA	NA	NA	NA	NA
5/20/2025 0:00	NA	NA	NA	NA	NA
5/21/2025 0:00	NA	NA	NA	NA	NA
5/22/2025 0:00	8.92	18.11	3.55	14.29	NA
5/23/2025 0:00	NA	NA	NA	NA	NA
5/24/2025 0:00	NA	NA	NA	NA	NA
5/25/2025 0:00	NA	NA	NA	NA	NA
5/26/2025 0:00	NA	NA	NA	NA	NA
5/27/2025 0:00	NA	NA	NA	NA	NA
5/28/2025 0:00	7.78	13.32	27.57	9.02	0
5/29/2025 0:00	7.75	17.85	36.6	13.02	0
5/30/2025 0:00	7.69	12.86	26.29	7.9	0
5/31/2025 0:00	7.66	10.84	23.45	5.15	0



ANNEXURE-R-4

Real Time Data Acquisition And Monitoring System		
Jakraya Sugar Ltd Solapur		
Custom Report		
From Date: 2024-10-01 00:00:00 To Date: 2024-12-31 23:59:59		
Report Created by otp@nevcoengineers.com on 2025-08-21 12:05:04		
SI No	Time Stamp	Stack 1 PM (mg/Nm3)
1	01/10/2024 00:00:00	NA
2	02/10/2024 00:00:00	NA
3	03/10/2024 00:00:00	NA
4	04/10/2024 00:00:00	NA
5	05/10/2024 00:00:00	NA
6	06/10/2024 00:00:00	NA
7	07/10/2024 00:00:00	NA
8	08/10/2024 00:00:00	NA
9	09/10/2024 00:00:00	NA
10	10/10/2024 00:00:00	NA
11	11/10/2024 00:00:00	NA
12	12/10/2024 00:00:00	NA
13	13/10/2024 00:00:00	NA
14	14/10/2024 00:00:00	NA
15	15/10/2024 00:00:00	NA
16	16/10/2024 00:00:00	NA
17	17/10/2024 00:00:00	NA
18	18/10/2024 00:00:00	NA
19	19/10/2024 00:00:00	NA
20	20/10/2024 00:00:00	NA
21	21/10/2024 00:00:00	NA
22	22/10/2024 00:00:00	NA
23	23/10/2024 00:00:00	NA
24	24/10/2024 00:00:00	NA
25	25/10/2024 00:00:00	NA
26	26/10/2024 00:00:00	NA
27	27/10/2024 00:00:00	NA
28	28/10/2024 00:00:00	NA
29	29/10/2024 00:00:00	NA
30	30/10/2024 00:00:00	NA
31	31/10/2024 00:00:00	NA
32	01/11/2024 00:00:00	NA
33	02/11/2024 00:00:00	NA
34	03/11/2024 00:00:00	NA
35	04/11/2024 00:00:00	NA
36	05/11/2024 00:00:00	NA
37	06/11/2024 00:00:00	NA
38	07/11/2024 00:00:00	NA
39	08/11/2024 00:00:00	NA
40	09/11/2024 00:00:00	NA
41	10/11/2024 00:00:00	NA
42	11/11/2024 00:00:00	NA
43	12/11/2024 00:00:00	NA
44	13/11/2024 00:00:00	NA
45	14/11/2024 00:00:00	NA
46	15/11/2024 00:00:00	NA
47	16/11/2024 00:00:00	NA
48	17/11/2024 00:00:00	NA

49	18/11/2024 00:00:00	NA
50	19/11/2024 00:00:00	NA
51	20/11/2024 00:00:00	NA
52	21/11/2024 00:00:00	NA
53	22/11/2024 00:00:00	NA
54	23/11/2024 00:00:00	NA
55	24/11/2024 00:00:00	NA
56	25/11/2024 00:00:00	NA
57	26/11/2024 00:00:00	NA
58	27/11/2024 00:00:00	NA
59	28/11/2024 00:00:00	NA
60	29/11/2024 00:00:00	NA
61	30/11/2024 00:00:00	NA
62	01/12/2024 00:00:00	NA
63	02/12/2024 00:00:00	NA
64	03/12/2024 00:00:00	NA
65	04/12/2024 00:00:00	NA
66	05/12/2024 00:00:00	NA
67	06/12/2024 00:00:00	NA
68	07/12/2024 00:00:00	NA
69	08/12/2024 00:00:00	NA
70	09/12/2024 00:00:00	NA
71	10/12/2024 00:00:00	NA
72	11/12/2024 00:00:00	138.91
73	12/12/2024 00:00:00	140.72
74	13/12/2024 00:00:00	129.06
75	14/12/2024 00:00:00	124.34
76	15/12/2024 00:00:00	116.30
77	16/12/2024 00:00:00	105.40
78	17/12/2024 00:00:00	93.36
79	18/12/2024 00:00:00	99.98
80	19/12/2024 00:00:00	91.06
81	20/12/2024 00:00:00	111.58
82	21/12/2024 00:00:00	111.34
83	22/12/2024 00:00:00	120.27
84	23/12/2024 00:00:00	119.06
85	24/12/2024 00:00:00	124.91
86	25/12/2024 00:00:00	144.60
87	26/12/2024 00:00:00	113.38
88	27/12/2024 00:00:00	127.03
89	28/12/2024 00:00:00	134.29
90	29/12/2024 00:00:00	136.34
91	30/12/2024 00:00:00	141.32
92	31/12/2024 00:00:00	129.96
93	Prescribed Standards	150.00
94	Maximum Data	144.60
95	Minimum Data	91.06
96	Geometric Mean	120.57
97	Median	124.34
98	Standard Deviation	15.66
99	Maximum Value At Time	12/25/2024 12:00:00 AM
100	Minimum Value At Time	12/19/2024 12:00:00 AM
101	Valid Data Points	21
102	Total Data Points	92
103	Data Availability %	22.00

Real Time Data Acquisition And Monitoring System

Jakraya Sugar Ltd Solapur

Custom Report

From Date: 2025-01-01 00:00:00 To Date: 2025-03-31 23:59:59

Report Created by otp@nevcoengineers.com on 2025-08-21 12:07:15

Sl No	Time Stamp	Stack 1 PM (mg/Nm3)
1	01/01/2025 00:00:00	120.48
2	02/01/2025 00:00:00	101.63
3	03/01/2025 00:00:00	127.61
4	04/01/2025 00:00:00	133.02
5	05/01/2025 00:00:00	85.94
6	06/01/2025 00:00:00	104.98
7	07/01/2025 00:00:00	107.79
8	08/01/2025 00:00:00	76.64
9	09/01/2025 00:00:00	100.43
10	10/01/2025 00:00:00	93.23
11	11/01/2025 00:00:00	84.29
12	12/01/2025 00:00:00	86.52
13	13/01/2025 00:00:00	80.53
14	14/01/2025 00:00:00	91.39
15	15/01/2025 00:00:00	78.98
16	16/01/2025 00:00:00	92.50
17	17/01/2025 00:00:00	122.31
18	18/01/2025 00:00:00	123.22
19	19/01/2025 00:00:00	142.49
20	20/01/2025 00:00:00	145.09
21	21/01/2025 00:00:00	139.99
22	22/01/2025 00:00:00	144.74
23	23/01/2025 00:00:00	146.00
24	24/01/2025 00:00:00	144.95
25	25/01/2025 00:00:00	147.70
26	26/01/2025 00:00:00	143.58
27	27/01/2025 00:00:00	139.27
28	28/01/2025 00:00:00	146.19
29	29/01/2025 00:00:00	146.53
30	30/01/2025 00:00:00	144.81
31	31/01/2025 00:00:00	145.68
32	01/02/2025 00:00:00	137.94
33	02/02/2025 00:00:00	121.78
34	03/02/2025 00:00:00	114.26
35	04/02/2025 00:00:00	123.25
36	05/02/2025 00:00:00	140.59
37	06/02/2025 00:00:00	123.42
38	07/02/2025 00:00:00	NA
39	08/02/2025 00:00:00	NA
40	09/02/2025 00:00:00	NA
41	10/02/2025 00:00:00	NA
42	11/02/2025 00:00:00	NA
43	12/02/2025 00:00:00	NA

		NA
44	13/02/2025 00:00:00	141.54
45	14/02/2025 00:00:00	145.42
46	15/02/2025 00:00:00	146.83
47	16/02/2025 00:00:00	126.06
48	17/02/2025 00:00:00	102.63
49	18/02/2025 00:00:00	146.81
50	19/02/2025 00:00:00	149.94
51	20/02/2025 00:00:00	146.15
52	21/02/2025 00:00:00	149.29
53	22/02/2025 00:00:00	148.55
54	23/02/2025 00:00:00	141.10
55	24/02/2025 00:00:00	140.49
56	25/02/2025 00:00:00	140.78
57	26/02/2025 00:00:00	148.04
58	27/02/2025 00:00:00	101.91
59	28/02/2025 00:00:00	147.16
60	01/03/2025 00:00:00	149.87
61	02/03/2025 00:00:00	149.46
62	03/03/2025 00:00:00	150.00
63	04/03/2025 00:00:00	149.96
64	05/03/2025 00:00:00	149.84
65	06/03/2025 00:00:00	149.70
66	07/03/2025 00:00:00	149.83
67	08/03/2025 00:00:00	148.87
68	09/03/2025 00:00:00	149.07
69	10/03/2025 00:00:00	149.14
70	11/03/2025 00:00:00	149.82
71	12/03/2025 00:00:00	143.50
72	13/03/2025 00:00:00	148.87
73	14/03/2025 00:00:00	149.88
74	15/03/2025 00:00:00	146.93
75	16/03/2025 00:00:00	137.85
76	17/03/2025 00:00:00	113.26
77	18/03/2025 00:00:00	141.96
78	19/03/2025 00:00:00	146.35
79	20/03/2025 00:00:00	147.41
80	21/03/2025 00:00:00	144.67
81	22/03/2025 00:00:00	149.83
82	23/03/2025 00:00:00	149.91
83	24/03/2025 00:00:00	149.88
84	25/03/2025 00:00:00	149.35
85	26/03/2025 00:00:00	147.99
86	27/03/2025 00:00:00	147.66
87	28/03/2025 00:00:00	146.87
88	29/03/2025 00:00:00	NA
89	30/03/2025 00:00:00	NA
90	31/03/2025 00:00:00	150.00
91	Prescribed Standards	150.00
92	Maximum Data	76.64
93	Minimum Data	

94	Geometric Mean	131.01
95	Median	144.74
96	Standard Deviation	21.70
97	Maximum Value At Time	3/4/2025 12:00:00 AM
98	Minimum Value At Time	1/8/2025 12:00:00 AM
99	Valid Data Points	81
100	Total Data Points	90
101	Data Availability %	90.00

Real Time Data Acquisition And Monitoring System

Jakraya Sugar Ltd Solapur

Custom Report

From Date: 2025-04-01 00:00:00 To Date: 2025-05-31 23:59:59

Report Created by otp@nevcoengineers.com on 2025-08-21 12:09:53

SI No	Time Stamp	Stack 1 PM (mg/Nm3)
1	01/04/2025 00:00:00	NA
2	02/04/2025 00:00:00	NA
3	03/04/2025 00:00:00	NA
4	04/04/2025 00:00:00	NA
5	05/04/2025 00:00:00	NA
6	06/04/2025 00:00:00	NA
7	07/04/2025 00:00:00	NA
8	08/04/2025 00:00:00	131.65
9	09/04/2025 00:00:00	NA
10	10/04/2025 00:00:00	70.15
11	11/04/2025 00:00:00	132.77
12	12/04/2025 00:00:00	144.77
13	13/04/2025 00:00:00	137.64
14	14/04/2025 00:00:00	NA
15	15/04/2025 00:00:00	NA
16	16/04/2025 00:00:00	NA
17	17/04/2025 00:00:00	NA
18	18/04/2025 00:00:00	NA
19	19/04/2025 00:00:00	NA
20	20/04/2025 00:00:00	NA
21	21/04/2025 00:00:00	NA
22	22/04/2025 00:00:00	NA
23	23/04/2025 00:00:00	NA
24	24/04/2025 00:00:00	NA
25	25/04/2025 00:00:00	NA
26	26/04/2025 00:00:00	NA
27	27/04/2025 00:00:00	NA
28	28/04/2025 00:00:00	NA
29	29/04/2025 00:00:00	NA
30	30/04/2025 00:00:00	NA
31	01/05/2025 00:00:00	NA
32	02/05/2025 00:00:00	NA
33	03/05/2025 00:00:00	NA
34	04/05/2025 00:00:00	NA
35	05/05/2025 00:00:00	NA
36	06/05/2025 00:00:00	NA
37	07/05/2025 00:00:00	NA
38	08/05/2025 00:00:00	NA
39	09/05/2025 00:00:00	NA
40	10/05/2025 00:00:00	150.00
41	11/05/2025 00:00:00	149.99
42	12/05/2025 00:00:00	150.00
43	13/05/2025 00:00:00	148.72

44	14/05/2025 00:00:00	62.98
45	15/05/2025 00:00:00	143.70
46	16/05/2025 00:00:00	148.15
47	17/05/2025 00:00:00	142.92
48	18/05/2025 00:00:00	150.00
49	19/05/2025 00:00:00	150.00
50	20/05/2025 00:00:00	150.00
51	21/05/2025 00:00:00	150.00
52	22/05/2025 00:00:00	150.00
53	23/05/2025 00:00:00	141.40
54	24/05/2025 00:00:00	143.17
55	25/05/2025 00:00:00	146.71
56	26/05/2025 00:00:00	63.01
57	27/05/2025 00:00:00	100.81
58	28/05/2025 00:00:00	142.95
59	29/05/2025 00:00:00	146.04
60	30/05/2025 00:00:00	139.63
61	31/05/2025 00:00:00	136.07
62	Prescribed Standards	150.00
63	Maximum Data	150.00
64	Minimum Data	62.98
65	Geometric Mean	130.55
66	Median	143.70
67	Standard Deviation	26.74
68	Maximum Value At Time	5/10/2025 12:00:00 AM
69	Minimum Value At Time	5/14/2025 12:00:00 AM
70	Valid Data Points	27
71	Total Data Points	61
72	Data Availability %	44.00



ANNEXURE-R-5

**MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL LABORATORY, PUNE**

Phone no. : 020-25811698
Visit us at : <http://mpcb.gov.in>
mail : sopunelab@mpcb.gov.in



"Your Service is our Duty"

Regional Laboratory, Pune, Maharashtra
Pollution Control Board, Jog Center, 3rd
Floor, Mumbai Pune Road,
Wakdevadi, Pune- 411 003

NABL Certificate No.:

Validity

Laboratory MoEF Recognition :

Validity

Test Report No.: MPCB/RL-Pune/JVS/22-23/03/87

Date: 06/03/2023 05:17 PM

Analysis Report-Water (JVS)

Field Sample ID :	BR-0041039		
Name & Address of the Industry	Jakraya Sugar Ltd. R12 Sugar (excluding Khandsari)		
Sampling Location :	ETP (Outlet)		
Lab code :	MPCB/RL-Pune/JVS/22-23/2514		
Sampling Method(s) :		Sample Details (Water/Air/HW) :	Water
Sampling drawn by (Officer name):	FO-Solapur (Shri. S.S. Kendule)	Sample Volume Received :	
Sample submitted by (Name) :	FO-Solapur (Shri. S.S. Kendule) (SRO-Solapur)	Seal No. :	90
Date of Sample Collection.(dd/mm/yyyy) :	09/02/2023 11:00 AM	Date of Sample receipt to Laboratory (dd/mm/yyyy) :	15/02/2023 12:10 PM
Analysis start Date (dd/mm/yyyy). :	17/02/2023 03:25 PM		

Test Report

Sr.No	Parameter	Results	Unit	Method Adopted	MU(If required)
1	pH	7.5			
2	Total Dissolved Solids(TDS)	1862.0	mg/l		
3	Suspended Solids (SS)	36.0	mg/l		
4	Biochemical Oxygen Demand (BOD)	74.0	mg/l		
5	Chloride	424.87	mg/l		

Sr.No	Parameter	Results	Unit	Method Adopted	MU(If required)
6	Chemical Oxygen Demand (COD)	208.6	mg/l		
7	Sulphate	369.30	mg/l		
8	Oil & Grease	2.0	mg/l		

End of The Report

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, * Not covered under NABL scop.

Comment (if any):

Comment for Amended Report:

Remark: - Note: This test report refers only to the sample submitted for the testing.

Results Compiled by: Dr P D Khadkikar

Results Approved by: Dr P D Khadkikar

Results Reviewed by: Dr P D Khadkikar

Dr P D Khadkikar
Scientific Officer,
I/c Regional Laboratory,
Pune,

This is an Electronically generated report does not require signature

Note :

- 1 . Results relate only to the sample/s tested, only in case of samples submitted by customer & not drawn by MPCB.
2. # indicates paramters are not in scope of NABL(ISO:17025:2017)
3. Samples will be preserved for a period 10 days from the delivery of Test Certificate.
4. Customer complaint register is available at laboratory.
5. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
6. MU values will be reported on request.

**MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL LABORATORY, PUNE**

Phone no. : 020-25811698
Visit us at : <http://mpcb.gov.in>
mail : sopunelab@mpcb.gov.in



"Your Service is our Duty"

Regional Laboratory, Pune, Maharashtra
Pollution Control Board, Jog Center, 3rd
Floor, Mumbai Pune Road,
Wakdevadi, Pune- 411 003

NABL Certificate No.:

Validity

Laboratory MoEF Recognition :

Validity

Test Report No.: MPCB/RL-Pune/JVS/23-24/04/139

Date: 17/04/2023 12:37 PM

Analysis Report-Water (JVS)

Field Sample ID :	BR-0042818		
Name & Address of the Industry	Jakraya Sugar Ltd. R12 Sugar (excluding Khandsari)		
Sampling Location :	OTHERS (Effluent from CPU outlet of Jakraya Sugar Ltd, Watwate, Tal- Mohol, Dist-Solapur)		
Lab code :	MPCB/RL-Pune/JVS/22-23/2889		
Sampling Method(s) :	Sample Details (Water/Air/HW) :	Water	
Sampling drawn by (Officer name):	FO-Solapur (Shri. S.S. Kendule)	Sample Volume Received :	
Sample submitted by (Name) :	FO-Solapur (Shri. S.S. Kendule) (SRO-Solapur)	Seal No. :	90
Date of Sample Collection.(dd/mm/yyyy) :	25/03/2023 01:00 PM	Date of Sample receipt to Laboratory (dd/mm/yyyy) :	27/03/2023 06:16 PM
Analysis start Date (dd/mm/yyyy). :	27/03/2023 06:46 PM		

Test Report

Sr.No	Parameter	Results	Unit	Method Adopted	MU(If required)
1	pH	8.4			
2	Total Dissolved Solids(TDS)	1836.0	mg/l		
3	Suspended Solids (SS)	70.0	mg/l		
4	Biochemical Oxygen Demand (BOD)	38.0	mg/l		

Sr.No	Parameter	Results	Unit	Method Adopted	MU(If required)
5	Chloride	379.88	mg/l		
6	Chemical Oxygen Demand (COD)	92.0	mg/l		
7	Sulphate	406.00	mg/l		
8	Oil & Grease	BDL	mg/l		

End of The Report

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, * Not covered under NABL scop.

Comment (if any):

Comment for Amended Report:

Remark: - Note: This test report refers only to the sample submitted for the testing.

Results Compiled by: Dr P D Khadkikar

Results Approved by: Dr P D Khadkikar

Results Reviewed by: Dr P D Khadkikar

Dr P D Khadkikar
Scientific Officer,
I/c Regional Laboratory,
Pune,

This is an Electronically generated report does not require signature

Note :

1. Results relate only to the sample/s tested, only in case of samples submitted by customer & not drawn by MPCB.
2. # indicates paramters are not in scope of NABL(ISO:17025:2017)
3. Samples will be preserved for a period 10 days from the delivery of Test Certificate.
4. Customer complaint register is available at laboratory.
5. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
6. MU values will be reported on request.

**MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL LABORATORY, PUNE**

Phone no. : 020-25811698
Visit us at : <http://mpcb.gov.in>
mail : sopunelab@mpcb.gov.in



"Your Service is our Duty"

Regional Laboratory, Pune, Maharashtra
Pollution Control Board, Jog Center, 3rd
Floor, Mumbai Pune Road,
Wakdevadi, Pune- 411 003

NABL Certificate No.:

Validity

Laboratory MoEF Recognition :

Validity

Test Report No.: MPCB/RL-Pune/JVS/23-24/05/18

Date: 08/05/2023 03:30 PM

Analysis Report-Water (JVS)

Field Sample ID :	BR-0045556		
Name & Address of the Industry	JAKRAYA SUGAR LTD R60 Distillery (molasses / grain /yeast based)		
Sampling Location :	OTHERS (CPU Outlet- M/s. Jakraya Sugar Ltd Watwate, Tal- Mohol, Dist- Solapur)		
Lab code :	MPCB/RL-Pune/JVS/23-24/208		
Sampling Method(s) :	Sample Details (Water/Air/HW) :	Water	
Sampling drawn by (Officer name):	FO-Solapur (Shri. S.S. Kendule)	Sample Volume Received :	
Sample submitted by (Name) :	FO-Solapur (Shri. S.S. Kendule) (SRO-Solapur)	Seal No. :	90
Date of Sample Collection.(dd/mm/yyyy) :	26/04/2023 12:00 PM	Date of Sample receipt to Laboratory (dd/mm/yyyy) :	02/05/2023 03:00 PM
Analysis start Date (dd/mm/yyyy) . :	02/05/2023 03:55 PM		

Test Report

Sr.No	Parameter	Results	Unit	Method Adopted	MU(If required)
1	pH	8.3			
2	Total Dissolved Solids(TDS)	1886.0	mg/l		
3	Suspended Solids (SS)	21.0	mg/l		
4	Biochemical Oxygen Demand (BOD)	52.0	mg/l		

Sr.No	Parameter	Results	Unit	Method Adopted	MU(If required)
5	Chloride	369.89	mg/l		
6	Chemical Oxygen Demand (COD)	140.0	mg/l		
7	Sulphate	258.00	mg/l		
8	Oil & Grease	1.0	mg/l		

End of The Report

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, * Not covered under NABL scop.

Comment (if any):

Comment for Amended Report:

Remark: - Note: This test report refers only to the sample submitted for the testing.

Results Compiled by: Dr P D Khadkikar

Results Approved by: Dr P D Khadkikar

Results Reviewed by: Dr P D Khadkikar

Dr P D Khadkikar
Scientific Officer,
I/c Regional Laboratory,
Pune,

This is an Electronically generated report does not require signature

Note :

1. Results relate only to the sample/s tested, only in case of samples submitted by customer & not drawn by MPCB.
2. # indicates paramters are not in scope of NABL(ISO:17025:2017)
3. Samples will be preserved for a period 10 days from the delivery of Test Certificate.
4. Customer complaint register is available at laboratory.
5. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
6. MU values will be reported on request.

MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL LABORATORY, PUNE

Phone no. : 020-25811698
Visit us at : <http://mpcb.gov.in>
mail : sopunelab@mpcb.gov.in



"Your Service is our Duty"

Regional Laboratory, Pune, Maharashtra
Pollution Control Board, Jog Center, 3rd
Floor, Mumbai Pune Road,
Wakdevadi, Pune- 411 003

NABL Certificate No.:

Validity

Laboratory MoEF Recognition :

Validity

Test Report No.: MPCB/RL-Pune/JVS/23-24/08/214

Date: 24/08/2023 05:46 PM

Analysis Report-Water (JVS)

Field Sample ID :	BR-0051673		
Name & Address of the Industry	Jakraya Sugar Ltd. R12 Sugar (excluding Khandsari)		
Sampling Location :	OTHERS (Old ETP near Nalla premises)		
Lab code :	MPCB/RL-Pune/JVS/23-24/865		
Sampling Method(s) :		Sample Details (Water/Air/HW) :	Water
Sampling drawn by (Officer name):	FO-Solapur (Abhijeet Lohiya)	Sample Volume Received :	
Sample submitted by (Name) :	FO-Solapur (Abhijeet Lohiya) (SRO-Solapur)	Seal No. :	264
Date of Sample Collection.(dd/mm/yyyy) :	10/08/2023 12:00 PM	Date of Sample receipt to Laboratory (dd/mm/yyyy) :	14/08/2023 05:26 PM
Analysis start Date (dd/mm/yyyy). :	14/08/2023 07:18 PM	Analysis end Date (dd/mm/yyyy). :	24/08/2023 04:10 PM

Test Report

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.0		
2	Total Dissolved Solids(TDS)	1688.0	mg/l	
3	Suspended Solids (SS)	31.0	mg/l	
4	Biochemical Oxygen Demand (BOD)	55.0	mg/l	
5	Chloride	349.89	mg/l	
6	Chemical Oxygen Demand (COD)	148.0	mg/l	

Sr.No	Parameter	Results	Unit	Method Adopted
7	Sulphate	414.00	mg/l	
8	Oil & Grease	BDL	mg/l	

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, * Not covered under NABL scop.

Comment (if any):

Comment for Amended Report:

Remark: - Note: This test report refers only to the sample submitted for the testing.

Results Compiled by: Dr P D Khadkikar

Results Approved by: Dr P D Khadkikar

Results Reviewed by: Dr P D Khadkikar

This is an Electronically generated report does not require signature

Note :

1. Results relate only to the sample/s tested, only in case of samples submitted by customer & not drawn by MPCB.
2. Samples will be preserved for a period 10 days from the delivery of Test Certificate.
3. Customer complaint register is available at laboratory.
4. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
5. MU values will be reported on request.

Dr P D Khadkikar
Scientific Officer,
I/c Regional Laboratory,
Pune,

End of The Report

MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL LABORATORY, PUNE

Phone no. : 020-25811698
Visit us at : <http://mpcb.gov.in>
mail : sopunelab@mpcb.gov.in



Regional Laboratory, Pune, Maharashtra
Pollution Control Board, Jog Center, 3rd
Floor, Mumbai Pune Road,
Wakdevadi, Pune- 411 003

NABL Certificate No.:

Validity

Laboratory MoEF Recognition :

Validity

Test Report No.: MPCB/RL-Pune/JVS/23-24/12/361

Date: 29/12/2023 10:54 AM

Analysis Report-Water (JVS)

Field Sample ID :	BR-0060749		
Name & Address of the Industry	JAKRAYA SUGAR LTD R60 Distillery (molasses / grain /yeast based)		
Sampling Location :	ETP (Outlet)		
Lab code :	MPCB/RL-Pune/JVS/23-24/1826		
Sampling Method(s) :		Sample Details (Water/Air/HW) :	Water
Sampling drawn by (Officer name):	FO-Solapur (Abhijeet Lohiya)	Sample Volume Received :	
Sample submitted by (Name) :	FO-Solapur (Abhijeet Lohiya) (SRO-Solapur)	Seal No. :	264
Date of Sample Collection.(dd/mm/yyyy) :	03/12/2023 02:20 PM	Date of Sample receipt to Laboratory (dd/mm/yyyy) :	05/12/2023 01:35 PM
Analysis start Date (dd/mm/yyyy). :	05/12/2023 02:36 PM	Analysis end Date (dd/mm/yyyy). :	28/12/2023 04:26 PM

Test Report

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.3		standard
2	Total Dissolved Solids(TDS)	1862.0	mg/l	standard
3	Suspended Solids (SS)	24.0	mg/l	standard
4	Biochemical Oxygen Demand (BOD)	43.0	mg/l	standard
5	Chloride	289.91	mg/l	standard
6	Chemical Oxygen Demand (COD)	116.0	mg/l	standard

Sr.No	Parameter	Results	Unit	Method Adopted
7	Sulphate	598.00	mg/l	standard
8	Oil & Grease	BDL	mg/l	standard

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, * Not covered under NABL scop.

Comment (if any):

Comment for Amended Report:

Remark: - Note: This test report refers only to the sample submitted for the testing.

Results Compiled by: Dr P D Khadkikar

Results Approved by: Dr P D Khadkikar

Results Reviewed by: Dr P D Khadkikar

This is an Electronically generated report does not require signature

Note :

1. Results relate only to the sample/s tested, only in case of samples submitted by customer & not drawn by MPCB.
2. Samples will be preserved for a period 10 days from the delivery of Test Certificate.
3. Customer complaint register is available at laboratory.
4. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
5. MU values will be reported on request.

Dr P D Khadkikar
Scientific Officer,
I/c Regional Laboratory,
Pune,

End of The Report

**MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL LABORATORY, PUNE**

Phone no. : 020-25811698
Visit us at : <http://mpcb.gov.in>
mail : sopunelab@mpcb.gov.in



"Your Service is our Duty"

Regional Laboratory, Pune, Maharashtra
Pollution Control Board, Jog Center, 3rd
Floor, Mumbai Pune Road,
Wakdevadi, Pune- 411 003

NABL Certificate No.:

Validity

Laboratory MoEF Recognition :

Validity

Test Report No.: MPCB/RL-Pune/JVS/23-24/01/5

Date: 03/01/2024 04:25 PM

Analysis Report-Water (JVS)

Field Sample ID :	BR-0062388		
Name & Address of the Industry	Jakraya Sugar Ltd. R12 Sugar (excluding Khandsari)		
Sampling Location :	ETP (Outlet)		
Lab code :	MPCB/RL-Pune/JVS/23-24/2068		
Sampling Method(s) :		Sample Details (Water/Air/HW) :	Water
Sampling drawn by (Officer name):	SRO-Solapur (Shri. Nikhil More)	Sample Volume Received :	
Sample submitted by (Name) :	SRO-Solapur (Shri. Nikhil More) (SRO-Solapur)	Seal No. :	94
Date of Sample Collection.(dd/mm/yyyy) :	22/12/2023 03:35 PM	Date of Sample receipt to Laboratory (dd/mm/yyyy) :	26/12/2023 04:35 PM
Analysis start Date (dd/mm/yyyy). :	26/12/2023 09:39 PM	Analysis end Date (dd/mm/yyyy). :	03/01/2024 04:21 PM

Test Report

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.3		
2	Total Dissolved Solids(TDS)	1702.0	mg/l	
3	Suspended Solids (SS)	72.0	mg/l	
4	Biochemical Oxygen Demand (BOD)	72.0	mg/l	
5	Chloride	158.95	mg/l	

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	196.0	mg/l	
7	Sulphate	516.00	mg/l	
8	Oil & Grease	BDL	mg/l	

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, * Not covered under NABL scop.

Comment (if any):

Comment for Amended Report:

Remark: - Note: This test report refers only to the sample submitted for the testing.

Results Compiled by: Dr P D Khadkikar

Results Approved by: Dr P D Khadkikar

Results Reviewed by: Dr P D Khadkikar

This is an Electronically generated report does not require signature

Note :

1. Results relate only to the sample/s tested, only in case of samples submitted by customer & not drawn by MPCB.
2. Samples will be preserved for a period 10 days from the delivery of Test Certificate.
3. Customer complaint register is available at laboratory.
4. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
5. MU values will be reported on request.

Dr P D Khadkikar
Scientific Officer,
I/c Regional Laboratory,
Pune,

End of The Report

**MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL LABORATORY, PUNE**

Phone no. : 020-25811698
Visit us at : <http://mpcb.gov.in>
mail : sopunelab@mpcb.gov.in



Regional Laboratory, Pune, Maharashtra
Pollution Control Board, Jog Center, 3rd
Floor, Mumbai Pune Road,
Wakdevadi, Pune- 411 003

NABL Certificate No.:

Validity

Laboratory MoEF Recognition :

Validity

Test Report No.: MPCB/RL-Pune/JVS/23-24/02/41

Date: 02/02/2024 04:07 PM

Analysis Report-Water (JVS)

Field Sample ID :	BR-0064370		
Name & Address of the Industry	Jakraya Sugar Ltd. R12 Sugar (excluding Khandsari)		
Sampling Location :	ETP (Outlet)		
Lab code :	MPCB/RL-Pune/JVS/23-24/2354		
Sampling Method(s) :		Sample Details (Water/Air/HW) :	Water
Sampling drawn by (Officer name):	SRO-Solapur (Shri. Nikhil More)	Sample Volume Received :	
Sample submitted by (Name) :	SRO-Solapur (Shri. Nikhil More) (SRO-Solapur)	Seal No. :	94
Date of Sample Collection.(dd/mm/yyyy) :	24/01/2024 03:25 PM	Date of Sample receipt to Laboratory (dd/mm/yyyy) :	25/01/2024 04:56 PM
Analysis start Date (dd/mm/yyyy). :	25/01/2024 04:56 PM	Analysis end Date (dd/mm/yyyy). :	01/02/2024 10:47 PM

Test Report

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	5.8		
2	Total Dissolved Solids(TDS)	1024.0	mg/l	
3	Suspended Solids (SS)	51.0	mg/l	
4	Biochemical Oxygen Demand (BOD)	85.0	mg/l	
5	Chloride	53.98	mg/l	

Sr.No	Parameter	Results	Unit	Method Adopted
6	Chemical Oxygen Demand (COD)	220.0	mg/l	
7	Sulphate	76.40	mg/l	
8	Oil & Grease	2.0	mg/l	

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed, * Not covered under NABL scop.

Comment (if any):

Comment for Amended Report:

Remark: - Note: This test report refers only to the sample submitted for the testing.

Results Compiled by: Dr P D Khadkikar

Results Approved by: Dr P D Khadkikar

Results Reviewed by: Dr P D Khadkikar


This is an Electronically generated report does not require signature

Note :

1. Results relate only to the sample/s tested, only in case of samples submitted by customer & not drawn by MPCB.
2. Samples will be preserved for a period 10 days from the delivery of Test Certificate.
3. Customer complaint register is available at laboratory.
4. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.
5. MU values will be reported on request.

Dr P D Khadkikar
Scientific Officer,
I/c Regional Laboratory,
Pune,

End of The Report

 MAHARASHTRA "Your Service is our Duty"	MAHARASHTRA POLLUTION CONTROL BOARD Regional Laboratory, Pune. Regional Laboratory, Pune, Maharashtra Pollution Control Board, Jog Center, 3rd Floor, Mumbai Pune Road, Wakdewadi, Pune- 411 003 Tel : 020-25811698 Fax : 020-25811698 e-mail : sopunelab@mpcb.gov.in website : http://mpcb.gov.in	
---	---	---

NABL Accreditation: ISO/IEC 17025:2017, TC-11275	Issue Date: 10-01-2023 Validity: 09-01-2025
Certification Standards: ISO 9001: 2015, C.NO.944015/r1-S-2	Issue Date: 18-04-2023 Validity: 25-02-2024
Certification Standards: ISO 45001: 2018, C.NO.944015/S-2	Issue Date: 09/04/2021 Validity: 25-02-2024
MoEF Recognition: LB/99/7/2021-INST LAB-CPCB-HO/Govt./6646	Issue Date: 16-06-2023 Validity: 25-02-2024

COA/Test Report No.: MPCB/RL-Pune/JVS/24-25/05/23	Date: 07/05/2024 12:55 PM
ULR No.: TC-112752400000180F	

Test Report-Water (JVS)

Field Sample ID	BR-0068919	Type of Industry	Red (LSI)	
Name & Address of the Industry	Jakraya Sugar Ltd.			
Industry Consent No./UAN No.	85200000	Type of Sample	Water	
Sample collected by (Officer Name)	FO-Solapur (Abhijeet Lohiya) (SRO-Solapur)	Location of sample collection	CPU Outlet	
Seal No.:	264	Method of sample collection	Grab	
Sample Collection	Date	15/04/2024	Total No. of Containers	1
	Time	01:30 PM	Nature/Description of Sample	-

Lab ID	MPCB/RL-Pune/JVS/24-25/159			
Receipt	Date	19/04/2024	Anylysis Started On	22/04/2024 12:04 PM
	Time	05:33 PM	Anylysis Completed On	07/05/2024 11:54 AM
Sample received by (Name & Degration)	Anil Sandansing (Scientific Officer)			

Sr.No	Parameter	Results	Unit	Test Method	Permissible Limit
1	pH	7.7		APHA 23 rd Edition 4500-H+ B (Electrometric Method)	-

Sr.No	Parameter	Results	Unit	Test Method	Permissible Limit
2	Total Dissolved Solids(TDS)	114.0	mg/l	APHA 23 rd Edition 2540 C	-
3	Suspended Solids (SS)	25.0	mg/l	APHA 23 rd Edition 2540 D (Gravimetric Method)	-
4	Biochemical Oxygen Demand (BOD)	29.8	mg/l	IS 3025 (Part 44)	-
5	Chloride	21.99	mg/l	APHA 23rd Edition 4500-Cl-B (Argentometric Method)	-
6	Chemical Oxygen Demand (COD)	80.0	mg/l	APHA 23 rd Edition 5220 B (Open Reflux Method)	-
7	Sulphate	6.07	mg/l	APHA 23 rd Edition 4500-SO4 E (Turbidimetric Method)	-
8	Oil & Grease	BDL	mg/l	APHA 23rd Edition 5520 B (Liquid-Liquid, Partition-Gravimetric Method)	-

Remarks:**Approved & Reviewed By**

Anil Sandansing
I/c Scientific Officer,
Regional Laboratory, Pune,

Note :

1. The results refer to the samples and parameters requested for analysis.
2. Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed
3. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.

*** End of the Report ***

 "Your Service is our Duty"	MAHARASHTRA POLLUTION CONTROL BOARD Regional Laboratory, Pune. Regional Laboratory, Pune, Maharashtra Pollution Control Board, Jog Center, 3rd Floor, Mumbai Pune Road, Wakdevadi, Pune- 411 003, Tel : 020-25811698 e-mail : sopunelab@mpcb.gov.in website : http://mpcb.gov.in	 TC-11275
---	--	---

NABL Accreditation:- ISO/IEC 17025:2017, TC-11275	Issue Date: 10-01-2023 Validity: 09-01-2025
Certification Standards:- ISO 45001: 2018, C.NO.944015/S-2	Issue Date: 26/02/2024 Validity: 25/02/2027
MoEF Recognition: LB/99/7/2021-INST LAB-CPCB-HO/Govt./6646	Issue Date: 16-06-2023 Validity: 25-02-2024

Test Report No.: MPCB/RL-Pune/JVS/24-25/12/152-A	Date: 17/12/2024 05:00 PM
ULR No.: TC-1127524000002704F	

Test Report-Water (JVS)

Field Sample ID	BR-0083939	Type of Industry	Red (LSI)
Name & Address of the Industry	Jakraya Sugar Ltd.		
Industry Consent No./UAN No.	85200000	Type of Sample	Water
Sample collected by (Officer Name)	FO-Solapur (Abhijeet Lohiya) (SRO-Solapur)	Location of sample collection	Treated Effluent Irrigation Pond
Seal No.:	264	Method of sample collection	Grab
Sample Collection	Date	28/11/2024	Total No. of Containers
	Time	03:15 PM	Nature/Description of Sample

Lab ID	MPCB/RL-Pune/JVS/24-25/1918		
Received by lab	Date	03/12/2024	Anylysis Started On
	Time	02:23 PM	Anylysis Completed On
Sample received by (Name & Designation)	Sumitra S Mahajan (Scientific Officer)		

Sr.No	Parameter	Results	Unit	Test Method
1	pH	8.6		APHA 24th Edition 4500-H+ B (Electrometric Method)
2	Total Dissolved Solids(TDS)	1416.0	mg/l	APHA 24th Edition 2540 C
3	Suspended Solids (SS)	16.0	mg/l	APHA 24th Edition 2540 D (Gravimetric Method)

Sr.No	Parameter	Results	Unit	Test Method
4	Biochemical Oxygen Demand (BOD)	12.5	mg/l	IS 3025 (Part 44)
5	Chloride	252.92	mg/l	APHA 24th Edition 4500-Cl B (Argentometric Method)
6	Chemical Oxygen Demand (COD)	48.0	mg/l	APHA 24th Edition 5220 B (Open Reflux Method)
7	Sulphate	770.00	mg/l	APHA 24th Edition 4500-SO4 E (Turbidimetric Method)
8	Oil & Grease	BDL	mg/l	APHA 24th Edition 5520 B (Liquid-Liquid, Partition-Gravimetric Method)

Remarks: Late submitted without preservation.

Approved & Reviewed By

Sumitra S Mahajan
Scientific Officer,
I/c Regional Laboratory, Pune,

Note :

1. The results refer to the samples and parameters requested for analysis.
2. Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed
3. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.

*** End of the Report ***

MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL LABORATORY, PUNE

Phone no. : 020-25811698
Visit us at : <http://mpcb.gov.in>
mail : sopunelab@mpcb.gov.in



Regional Laboratory, Pune, Maharashtra
Pollution Control Board, Jog Center, 3rd
Floor, Mumbai Pune Road,
Wakdewadi, Pune- 411 003

Test Report No.: MPCB/RL-Pune/JVS/24-25/01/319-B

Date: 31/01/2025 05:10 PM

Analysis Report-Water (JVS)

Field Sample ID :	BR-0087268		
Name & Address of the Industry	Jakraya Sugar Ltd. R12 Sugar (excluding Khandsari)		
Sampling Location :	ETP (Outlet)		
Lab code :	MPCB/RL-Pune/JVS/24-25/2149		
Sampling Method(s) :		Sample Details (Water/Air/HW) :	Water
Sampling drawn by (Officer name):	SRO-Solapur (Shri. Nikhil More)	Sample Volume Received :	
Sample submitted by (Name) :	SRO-Solapur (Shri. Nikhil More) (SRO- Solapur)	Seal No. :	169
Date of Sample Collection.(dd/mm/yyyy) :	23/12/2024 11:35 AM	Date of Sample receipt to Laboratory (dd/mm/yyyy) :	24/12/2024 03:36 PM
Analysis start Date (dd/mm/yyyy). :	25/12/2024 12:05 PM	Analysis end Date (dd/mm/yyyy). :	31/01/2025 05:10 PM

Test Report

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.3		APHA 24th Edition 4500-H+ B (Electrometric Method)
2	Total Dissolved Solids(TDS)	1339.0	mg/l	APHA 24th Edition 2540 C
3	Suspended Solids (SS)	20.0	mg/l	APHA 24th Edition 2540 D (Gravimetric Method)
4	Biochemical Oxygen Demand (BOD)	23.8	mg/l	IS 3025 (Part 44)
5	Chloride	217.33	mg/l	APHA 24th Edition 4500-Cl B (Argentometric Method)
6	Chemical Oxygen Demand (COD)	80.0	mg/l	APHA 24th Edition 5220 B (Open Reflux Method)

Sr.No	Parameter	Results	Unit	Method Adopted
7	Sulphate	69.10	mg/l	APHA 24th Edition 4500-SO4 E(Turbidimetric Method)
8	Oil & Grease	NA	mg/l	APHA 24th Edition 5520 B (Liquid-Liquid, Partition-Gravimetric Method)

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed

Remarks: sample was submitted I without preservation.

Remark for Amended Report:

Remark: - Note: This test report refers only to the sample submitted for the testing.

Results Compiled by: Sumitra S Mahajan

Results Approved by: Sumitra S Mahajan

Results Reviewed by: Sumitra S Mahajan

This is an Electronically generated report does not require signature

Note :

1. The results refer to the samples and parameters requested for analysis.
2. Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed
3. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.

Sumitra S Mahajan
Scientific Officer,
I/c Regional Laboratory,
Pune,

End of The Report

**MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL LABORATORY, PUNE**

Phone no. : 020-25811698
Visit us at : <http://mpcb.gov.in>
mail : sopunelab@mpcb.gov.in



"Your Service is our Duty"

Regional Laboratory, Pune, Maharashtra
Pollution Control Board, Jog Center, 3rd
Floor, Mumbai Pune Road,
Wakdewadi, Pune- 411 003

Test Report No.: MPCB/RL-Pune/JVS/24-25/03/309-B

Date: 20/03/2025 06:15 PM

Analysis Report-Water (JVS)

Field Sample ID :	BR-0090529		
Name & Address of the Industry	Jakraya Sugar Ltd. R12 Sugar (excluding Khandsari)		
Sampling Location :	ETP (Outlet)		
Lab code :	MPCB/RL-Pune/JVS/24-25/2751		
Sampling Method(s) :		Sample Details (Water/Air/HW) :	Water
Sampling drawn by (Officer name):	FO-Solapur (Abhijeet Lohiya)	Sample Volume Received :	
Sample submitted by (Name) :	FO-Solapur (Abhijeet Lohiya) (SRO-Solapur)	Seal No. :	(seal no. 264)
Date of Sample Collection.(dd/mm/yyyy) :	20/02/2025 05:05 PM	Date of Sample receipt to Laboratory (dd/mm/yyyy) :	21/02/2025 04:35 PM
Analysis start Date (dd/mm/yyyy). :	24/02/2025 02:50 PM	Analysis end Date (dd/mm/yyyy). :	20/03/2025 06:13 PM

Test Report

Sr.No	Parameter	Results	Unit	Method Adopted
1	pH	8.5		APHA 24th Edition 4500-H+ B (Electrometric Method)
2	Suspended Solids (SS)	9.0	mg/l	APHA 24th Edition 2540 D (Gravimetric Method)
3	Ammonical Nitrogen	0.63	mg/l	
4	Biochemical Oxygen Demand (BOD)	12.7	mg/l	IS 3025 (Part 44)
5	Chemical Oxygen Demand (COD)	36.0	mg/l	APHA 24th Edition 5220 B (Open Reflux Method)
6	Dissolved Oxygen	3.4	mg/l	IS 3025 (Part 38) Winkler Method
7	Total Kjeldahl Nitrogen (TKN)	2.24	mg/l	

Sr.No	Parameter	Results	Unit	Method Adopted
8	Faecal Coliform (MPN technique)	21.0	MPN/100 ml	APHA 24th Edition 9221 E (Std. Thermotolerant (Fecal) Coliform Procedure)

Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed

Remarks:

Remark for Amended Report:

Remark: - Note: This test report refers only to the sample submitted for the testing.

Results Compiled by: Sumitra S Mahajan

Results Approved by: Sumitra S Mahajan

Results Reviewed by: Sumitra S Mahajan

This is an Electronically generated report does not require signature

Note :

1. The results refer to the samples and parameters requested for analysis.
2. Abbreviations: - BDL=Below Detectable limit, N.D.=Not Detected, N.A.= Not Analyzed
3. The Contents of this Report shall not be reproduced in part or in full without written approval of laboratory.

Shantilal Nagare
Senior Scientific Officer,
I/c Regional Laboratory,
Pune,

End of The Report



ANNEXURE-R-6









IN THE SUPREME COURT OF INDIA
CIVIL APPELLATE JURISDICTION

CIVIL APPEAL NO(S). 757-760 OF 2013

D.P.C.C.

...APPELLANT(S)

VERSUS

LODHI PROPERTY CO. LTD. ETC.

...RESPONDENT(S)

WITH

CIVIL APPEAL NO(S). 1977-2011 OF 2013

J U D G M E N T

Contents

1. Introduction.....	2
2. Facts.....	3
3. Single Judge's Judgement and Orders.....	4
4. Impugned Order of the Division Bench.....	6
5. Submissions	8
6. Issue.....	11
7. Existing Legal Regime for Pollution Control in India	12
8. Insertion of Sections 33A & 31A in Water and Air Acts	14
9. Interpretation of and for Environmental Institutions.....	18
10. Duty to Restitute v. Power to Punish and Penalise.....	20
11. Principles	26
<i>A. Board's Responsibility to Choose Appropriate Course of Action.....</i>	<i>32</i>
<i>B. Powers Must Be Guided by Transparency and Non-Arbitrariness</i>	<i>33</i>

1. Introduction.

1. The Delhi Pollution Control Committee (DPCC)¹ is in appeal against the judgment of the Division Bench of the High Court holding that it is not empowered to levy compensatory damages in exercise of powers under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 and Section 31A of the Air (Prevention and Control of Pollution) Act, 1981² on the ground that such an action amounts to imposition of penalty provided for in Chapters VII and VI of the respective Acts, and as such, procedure contemplated thereunder will be the only method for imposing and collecting compensatory damage.

2. Having considered the principles that govern Indian environmental laws, we have held that the environmental regulators, the Pollution Control Boards exercising powers under the Water and Air Acts, can impose and collect restitutionary or compensatory damages in the form of fixed sum of monies or require furnishing of bank guarantees as an *ex-ante* measure to prevent potential environmental damage. These powers are

¹ DPCC is a regulatory body in the National Capital Territory of Delhi, established as a 'State Board'. These Boards are constituted under section 4 of the Water Act and under section 4 or section 5 of the Air Act, and exercise powers granted under section 33A of the Water Act and section 31A of the Air Act. Our interpretation of section 33A and 31A herein will apply to any such body established under said Acts.

² Hereinafter referred to as the Water Act and Air Act respectively.

incidental and ancillary to the empowerment under Sections 33A and 31A of the Water and Air Acts. At the same time, we have directed that the powers must be exercised as per procedure laid down by subordinate legislation incorporating necessary principles of natural justice, transparency and certainty.

2. Facts.

3. It is the case of the Delhi Pollution Control Committee that pursuant to the directions of the Ministry of Environment, Forest and Climate Change (MoEFCC) to take appropriate action against certain entities operating in violation of the environmental norms, show cause notices were issued for violation of Section 25 of the Water Act and Sections 21 and 22 of the Air Act. These entities were either residential complexes, commercial complexes or shopping malls. The show cause notices were issued on the ground that they proceeded with construction and in fact, were operating without obtaining the mandatory “consent to establish” and “consent to operate” under Section 25 of the Water Act and Section 21 of the Air Act. The show cause notices were challenged by way of 38 writ petitions before the Delhi High Court. The challenge culminated in the judgement of a single judge dated 30.09.2010 in

the case of *Splendor Landbase Ltd. v. DPCC*³. The learned single judge considered the question as to whether a State Board can levy environmental damages in the form of fixed sums of money or require an entity to furnish a bank guarantee as a condition for grant of consent under Section 33A of Water Act and/or Section 31A of Air Act. Similar writ petitions were considered and decided by another single judge bench in *Bharti Realty Ltd. v. DPCC* and *Anush Finlease and Construction v. DPCC* on 20.07.2011 and 15.09.2011 and were disposed of in terms of the decision in *Splendor Landbase Ltd. v. DPCC*. The reasoning adopted in the judgement and orders passed by the Single Judges are as follows.

3. Single Judge's Judgement and Orders.

4. In *Splendor Landbase Ltd. v. DPCC*⁴, the ld. single judge by his judgement dated 30.09.2010 dealt with two major issues – firstly, whether proprietors of properties over 20,000 square meters are required to obtain *consent to establish* and *consent to operate* under Water Act and Air Act independently, despite obtaining EIA Clearance from the Ministry; and secondly, whether Boards can levy penalties, fines, environmental damages in form

³ 2012 (195) DLT 177.

⁴ Hereinafter referred to as *Splendor*.

of fixed sums of monies or call for bank guaranties as a condition to grant consent under Water and Air Acts? While the first question was answered in the affirmative, the second was answered in the negative.

4.1 It was held that the power to levy penalty is in the nature of a penal power and as such a penalty cannot be imposed without there being an enabling statutory power. For this reason, the single judge held that Board has no power to levy penalty or damage, even on the basis of the general powers under Sections 31A or 33A of the Acts. The learned Judge criticized the monetary demand as a pre-condition for grant of consent under the Acts on the ground that it has no statutory backing.

4.2 In the other batch of cases i.e. in *Bharti Realty Ltd. v. DPCC* and *Anush Finlease and Construction Ltd. v. DPCC*, decided on 12.07.2011 and 15.09.2011, the learned Single Judge was constrained to enquire into the matter in detail as writ appeals against the judgement in *Splendor* were already pending before a Division Bench. Therefore, the Single Judge allowed the writ petitions following the decision in *Splendor* and holding that the Board has no power to impose and collect compensatory damages. In these cases, the learned Judge also directed refund of the

amounts collected. However, no interest was granted to the respondents as they chose to comply with the demand instead of challenging the same at the relevant point in time.

4. Impugned Order of the Division Bench.

5. The decisions of the single judges were challenged by the appellant before the Division Bench of the High Court. By the judgement impugned before us, the Division Bench upheld the findings of the Single Judge in *Splendor* that the power to issue directions under Sections 33A and 31A under the two Acts does not confer the power to levy ‘penalty’. The High Court further observed that under Chapter VII and Chapter VI of the Water and Air Acts penalties can be levied only by courts and that too after taking cognizance of offences specified under the two Acts. Provided that the procedure so prescribed under the statute has to be followed mandatorily, the Division Bench held that the appellant would not be entitled to impose compensation or direct deposit of bank guarantees. The relevant portion of the Division Bench of the High Court is as follows –

“37. We concur with the reasoning of the learned Single Judge in paras 58 to 64 of the impugned decision and thus do not elaborate any further, but would additionally highlight that, the power to issue directions under Section 33A of the Water Act and the power to issue directions under Section 31A of the

Air Act, on their plain language, does not confer the power to levy any penalty. We would further highlight that under Chapter VII of the Water Act and under Chapter VI of the Air Act penalties and procedure to levy the same have been set out. A perusal of the provisions under the Water Act would reveal that penalties can be levied as per procedure prescribed and only Courts can take cognizance of offences under the Act and levy penalties, whether by way of imprisonment or fine. Similar is the position under the Air Act. The legislature having enacted specific provisions for levy of penalties and procedures to be followed has specifically made the offences cognizable by Courts and the power to levy penalties under both Acts has been vested in the Courts. The role of the Pollution Control Boards is to initiate proceedings before the Court of Competent jurisdiction and no more.

40. The language of Sub-Section 5 of Section 25 of the Water Act makes it plain clear that the only solution to a situation of a building being constructed to establish an industry, operation or process without obtaining prior consent of the State Pollution Control Board is the power of the Board to serve upon the person concerned a notice imposing such conditions as might have been imposed on an application, seeking prior consent and we find that the learned Single Judge has correctly so opined and has rightly issued the direction that the only way out, pertaining to the Water Act is to permit DPCC to inspect the shopping malls and the shopping commercial complexes and if it is found that pertaining to discharge of sewage from these buildings any steps are required to prevent water pollution DPCC would be authorized to issue notices requiring the owner of the building to take steps in terms of the notice issued. Pertaining to the Air Act notwithstanding there being no similar provision, but the concept of a post decisional hearing may be made applicable with the modification that no hearing would be required inasmuch as there is no decision, but DPCC should be empowered to inspect the shopping malls and the shopping, commercial complexes and pertaining to air pollution, if the owners of the buildings do not take corrective action, DPCC would always have the power to file criminal complaints before the Courts of Competent Jurisdiction, which Courts would alone have the power to impose fine and additionally impose sentence of imprisonment upon the offending persons.

42. In a few cases, we find that since DPCC was not permitting the buildings to be occupied, under protest, the owners paid the penalty to DPCC and have immediately approached the Court seeking refund and the same has been ordered for the reason neither under the Water Act nor under the Air Act there exists any power in DPCC to levy penalty or impose conditions

of furnishing bank guarantee. The decision of the learned Single Judge is correct in directing the bank guarantees to be discharged and penalties levied to be refunded for the reason the said act of DPCC is ultra-vires its power under the two statutes and the levy of penalty is without any authority of law. In the decision reported as 1997 [5] SCC 535 Mafatlal Industries Ltd. & Ors. Vs UOI & Ors., under writ jurisdiction refund can be directed where the levy is without jurisdiction and the same would include a penalty levied without any jurisdiction. In the instant case the penalty levied is unconstitutional being not sanctioned by any power vested in DPCC either under the Water Act or the Air Act. The impugned decisions where penalty levied has been directed to be refunded are upheld.”

5. Submissions.

6. Mr. Pradeep Mishra appearing on behalf of the appellant DPCC submitted that the High Court erred in holding that the State Boards are not empowered to impose environmental damages under Sections 33A and 31A of Water and Air Acts. He has argued that the application of the principle of *Polluter Pays* is distinct from the requirement of authority of law to impose tax or penalty.

7. On behalf of the respondents, Mr. Ninad Laud has submitted that as per broad scheme of the Acts and also the statement of objects and reasons, State Boards are empowered to act on their own while enforcing Sections 25 and 26 and also while issuing directions under Sections 33A and 31A. However, when faced with non-compliances, recourse to judicial process is contemplated

under Sections 49 and 43 of Water and Air Acts respectively. Further, neither Rule 34 of Water (Prevention & Control of Pollution) Rules 1975 nor Rule 20A of Air (Prevention & Control of Pollution) Rules 1983, while providing a mechanism to administer Section 33A and Section 31A, contemplate monetary penalties. Countering the submission of Mr. Pradeep Misra on the principle of *Polluter Pays* to encourage reading the power to impose and collect environmental damages under Sections 33A and 31A of the respective Acts, he would submit such an approach is impermissible as the said power is specifically and separately provided under Chapters VII and VI therein. Relying on the decision of this Court in *MC Mehta v. Kamal Nath*⁵, he would submit, after considering the scheme of penal provisions under Water Act, Air Act and Environment (Protection) Act 1986, the Supreme Court held that penalties under the Acts befall a person only after finding of guilt upon trial by a court of law. Referring to the legitimacy of State Board's action demanding bank guarantees to secure compliance with conditions, he would submit that no penalty, other than that contemplated in the statute or statutory

⁵ (2000) 6 SCC 213, para 13-17.

scheme can be imposed.⁶ We have also heard Mr. Pinaki Misra, Senior Advocate and other learned counsel and they have strongly supported the decision of the Division Bench.

7.1 Counsel for M/s Laxmi Buildtech Pvt Ltd⁷ has submitted that they have neither violated nor acted in breach of any provision of environmental laws and therefore they cannot be subjected to any penalty or criminal prosecution. Counsel for other respondents further submitted that they have deemed consent as well as EIA clearance from the Ministry. They have also submitted that imposition and collection of damages by the State Boards is outside the powers vested in them under the Water and Air Acts.

7.2 Counsel for M/s Bharti Realty Ltd has submitted that it is a settled principle of law that if a statute provides for a thing to be done in a particular manner, then it has to be done in that manner and no other.⁸ This principle, according to the learned counsel, squarely applies to the present case as Chapter VII and Chapter VI of the Water and Air Acts have a prescribed procedure to be followed before imposing penalties. It is further argued that the

⁶ *State of MP v. Centre for Environment Protection Research & Development*, (2020) 9 SCC 781.

⁷ Civil Appeal No. 2001 of 2013.

⁸ *Chandra Kishore Jha v. Mahavir Prasad & Ors*, (1999) 8 SCC 266.

role of any State Board is in the nature of a complainant and not that of an adjudicatory authority. In this vein, it is submitted that any other interpretation would render the chapter on 'Penalties and Procedures' nugatory and otiose. It is also submitted that the power to give directions under Sections 33A and 31A of the Water and Air Acts is "subject to provisions of this Act". Written submissions also refer to the recent amendments to the Water and Air Acts, empowering an Adjudicating Officer, not below the rank of Joint Secretary of Government of India or Secretary to State Government, for imposing penalties for contravention of provisions of the Acts.

6. Issue.

8. The core question in these appeals is - whether the regulatory boards can, in exercise of powers under Section 33A of the Water Act and Section 31A of the Air Act, impose and collect as restitutionary and compensatory damages fixed sums of monies or require furnishing bank guarantees as an *ex-ante* measure towards potential environmental damage?

7. Existing Legal Regime for Pollution Control in India.

9. Under the Water Act and the Air Act, the State Boards have a broad statutory mandate to prevent, control and abate water pollution and air pollution. Under Section 17 of the Water Act, the State Boards are to shoulder enormous responsibilities and their functions are reproduced herein for ready reference -

“Section 17. Functions of State Board – (1) Subject to the provisions of this Act, the functions of a State Board shall be—
(a) to plan a comprehensive programme for the prevention, control or abatement of pollution of streams and wells in the State and to secure the execution thereof;

(b) to advise the State Government on any matter concerning the prevention, control or abatement of water pollution;

(c) to collect and disseminate information relating to water pollution and the prevention, control or abatement thereof;

(d) to encourage, conduct and participate in investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution;

(e) to collaborate with the Central Board in organising the training of persons engaged or to be engaged in programmes relating to prevention, control or abatement of water pollution and to organise mass education programmes relating thereto;

(f) to inspect sewage or trade effluents, works and plants for the treatment of sewage and trade effluents and to review plans, specifications or other data relating to plants set up for the treatment of water, works for the purification thereof and the system for the disposal of sewage or trade effluents or in connection with the grant of any consent as required by this Act;

(g) to lay down, modify or annul effluent standards for the sewage and trade effluents and for the quality of receiving waters (not being water in an inter-State stream) resulting from the discharge of effluents and to classify waters of the State;

(h) to evolve economical and reliable methods of treatment of sewage and trade effluents, having regard to the peculiar conditions of soils, climate and water resources of different regions and more especially the prevailing flow characteristics of water in streams and wells which render it impossible to attain even the minimum degree of dilution;

(i) to evolve methods of utilisation of sewage and suitable trade effluents in agriculture;

(j) to evolve efficient methods of disposal of sewage and trade effluents on land, as are necessary on account of the predominant conditions of scant stream flows that do not provide for major part of the year the minimum degree of dilution;

(k) to lay down standards of treatment of sewage and trade effluents to be discharged into any particular stream taking into account the minimum fair weather dilution available in that stream and the tolerance limits of pollution permissible in the water of the stream, after the discharge of such effluents;

(l) to make, vary or revoke any order—

(i) for the prevention, control or abatement of discharges of waste into streams or wells;

(ii) requiring any person concerned to construct new systems for the disposal of sewage and trade effluents or to modify, alter or extend any such existing system or adopt such remedial measures as are necessary to prevent, control or abate water pollution;

(m) to lay down effluent standards to be complied with by persons while causing discharge of sewage or sullage or both and to lay down, modify or annul effluent standards for the sewage and trade effluents;

(n) to advise the State Government with respect to the location of any industry the carrying on of which is likely to pollute a stream or well;

(o) to perform such other functions as may be prescribed or as may, from time to time, be entrusted to it by the Central Board or the State Government.

(2) The Board may establish or recognize a laboratory or laboratories to enable the Board to perform its functions under this section efficiently, including the analysis of samples of water from any stream or well or of samples of any sewage or trade effluents.”

10. Section 17 of the Air Act⁹, substantially similar to its equivalent under the Water Act, also indicates the crucial

⁹ Section 17 of Air Act states –

17. Functions of State Boards.— (1) Subject to the provisions of this Act, and without prejudice to the performance of its functions, if any, under the Water (Prevention and Control of Pollution) Act, 1974, the functions of a State Board shall be—

(a) to plan a comprehensive programme for the prevention, control or abatement of air pollution and to secure the execution thereof;

(b) to advise the State Government on any matter concerning the prevention, control or abatement relating to air pollution;

responsibilities of the State Boards in discharge of their mandate. Chapter V of the Water Act and Chapter IV of the Air Act include provisions that prescribe the regulatory powers of the State Boards. These powers include the power to issue, modify or withdraw consent¹⁰, power to obtain information¹¹, power of entry and inspection¹² and power to take samples¹³.

8. Insertion of Sections 33A & 31A in Water and Air Acts.

11. In 1988, both Acts were amended. Notably, through amendments the State Boards were further empowered to give

(c) to collect and disseminate information relating to air pollution;

(d) to collaborate with the Central Board in organising the training of persons engaged or to be engaged in programmes relating to prevention, control or abatement of air pollution and to organise a mass-education programme relating thereto;

(e) to inspect, at all reasonable times, any control equipment, industrial plant or manufacturing process and to give, by order, such directions to such persons as it may consider necessary to take steps for the prevention, control or abatement of air pollution;

(f) to inspect air pollution control areas at such intervals as it may think necessary, assess the quality of air therein and take steps for the prevention, control or abatement of air pollution in such areas;

(g) to lay down, in consultation with the Central Board and having regard to the standards for the quality of air laid down by the Central Board, standards for emission of air pollutants into the atmosphere from industrial plants and automobiles or for the discharge of any air pollutant into the atmosphere from any other source whatsoever not being a ship or an aircraft: Provided that different standards for emission may be laid down under this clause for different industrial plants having regard to the quantity and composition of emission of air pollutants into the atmosphere from such industrial plants;

(h) to advise the State Government with respect to the suitability of any premises or location for carrying on any industry which is likely to cause air pollution;

(i) to perform such other functions as may be prescribed or as may, from time to time, be entrusted to it by the Central Board or the State Government;

(j) to do such other things and to perform such other acts as it may think necessary for the proper discharge of its functions and generally for the purpose of carrying into effect the purposes of this Act.

(2) A State Board may establish or recognise a laboratory or laboratories to enable the State Board to perform its functions under this section efficiently.

¹⁰ Sections 25, 27 of Water Act and Section 21 of Air Act

¹¹ Section 20 of Water Act and Section 25 of Air Act

¹² Section 23 of Water Act and Section 24 of Air Act

¹³ Section 21 of Water Act and Section 26 of Air Act

directions under Section 33A of the Water Act and Section 31A¹⁴ of the Air Act. These two provisions are identically worded. Section 33A of the Water Act is as under;

“Section 33A. Power to give directions.—Notwithstanding anything contained in any other law, but subject to the provisions of this Act, and to any directions that the Central Government may give in this behalf, a Board may, in the exercise of its powers and performance of its functions under this Act, issue any directions in writing to any person, officer or authority, and such person, officer or authority shall be bound to comply with such directions.

Explanation.—For the avoidance of doubts, it is hereby declared that the power to issue directions under this section includes the power to direct—

(a) the closure, prohibition or regulation of any industry, operation or process; or

(b) the stoppage or regulation of supply of electricity, water or any other service.”

12. The directions contemplated under Sections 33A and 31A of the Water and Air Acts must be in furtherance of the powers and functions of the Boards and they must be in writing. These provisions, declares that the power to issue directions will include the power to direct closure, prohibition or regulation of any

¹⁴ Section 31A of the Air Act states –

31A. Power to give directions.—Notwithstanding anything contained in any other law, but subject to the provisions of this Act, and to any directions that the Central Government may give in this behalf, a Board may, in the exercise of its powers and performance of its functions under this Act, issue any directions in writing to any person, officer or authority, and such person, officer or authority shall be bound to comply with such directions.

Explanation.—For the avoidance of doubts, it is hereby declared that the power to issue directions under this section includes the power to direct—

(a) the closure, prohibition or regulation of any industry, operation or process; or

(b) the stoppage or regulation of supply of electricity, water or any other service.

industry, operation or process. Further, this power extends to directing the stoppage or regulation of supply of electricity, water or any other service. The power to give directions has been worded broadly, and it allows the Boards significant flexibility in deciding the nature of directions. The legislative intention of granting these powers through the 1988 amendment can be inferred from the Statement of Objects and Reasons of the Water Act, which reads as follows –

“2. The Water Act is implemented by the Central and State Governments and the Central and State Pollution Control Boards. Over the past few years, the implementing agencies have experienced some more administrative and practical difficulties in effectively implementing the provisions of the Act. The ways and means to remove these difficulties have been thoroughly examined in consultation with the implementing agencies. Taking into account the views expressed, it is proposed to amend certain provisions of the Act in order to remove such difficulties....

3. The Bill, inter alia, seeks to make the following amendments in the Act, namely:—

....

(iv) in order to effectively prevent water pollution, the penal provisions of the Act are proposed to be made stricter and bring them at par with the punishments prescribed in the Air (Prevention and Control of Pollution) Act, 1981 as amended by Act 47 of 1987;

....

(vi) it is proposed to empower the Boards to give directions to any person, officer or authority including the power to direct closure or regulation of offending industry, operation or process or stoppage or regulation of supply of services such as water and electricity;”

13. Similar objective is expressed for the amendment introduced in the Air Act.¹⁵

14. An appeal against directions issued under Section 33A of the Water Act by the State Board can be filed before the National Green Tribunal under Section 33B, introduced in 2010¹⁶. Unlike the Water Act there is no specific Appeal provision against directions issued under Section 31A of the Air Act. This asymmetry must be addressed legislatively.

15. Offences and penalties under the two Acts, and the related procedures, are covered in Chapter VII of the Water Act and Chapter VI of the Air Act. These chapters have undergone significant and substantial amendments. Prior to the amendments, the two Acts stipulated penalties in the form of

¹⁵ Statement of Objects and Reasons for Air Act states, “2. *The Air Act is implemented by the Central and State Governments and the Central and State Boards. Over the past few years, the implementing agencies have experienced some administrative and practical difficulties in effectively implementing the provisions of this Act and have brought these to the notice of Government. The ways and means to remove these difficulties have been thoroughly examined in consultation with the concerned Central Government departments, the State Governments and the Central and State Boards. Taking into account the views expressed, the Government have decided to make certain amendments to the Act in order to remove such difficulties.* 3. *The Bill, inter alia, seeks to make the following amendments in the Act, namely—*

....

iv) In order to prevent effectively air pollution, the punishments provided in the Act are proposed to be made stricter.

....

(vii) It is proposed to empower the Boards to give directions to any person, officer or authority including the power to direct closure or regulation of offending establishments or stoppage or regulation of supply of services such as, water and electricity. (viii) It is proposed to empower the Boards to approach courts to obtain orders restraining any person from causing air pollution.”

¹⁶ Act 19 of 2010.

imprisonment, monetary fine or both for offences under the statute. Courts could only take cognizance of an offence if a complaint was filed by a Board or any officer authorized by it, or by any person who had given notice of the alleged offence and of his intention to make a complaint. No court inferior to that of a Metropolitan Magistrate or a Judicial magistrate of the first class can try an offence punishable under the two Acts. Be that as it may, for the present purpose we have to examine and interpret Sections 33A and 31A of the Water and Air Acts.

9. Interpretation of and for Environmental Institutions.

16. Our constitutionalism bears the hallmark of an expansive interpretation of fundamental rights. But such creative expansion is only a job half done if the depth of the remedies, consequent upon infringement, remain shallow. In other words, remedial jurisprudence must keep pace with expanding rights and regulatory challenges. It is not sufficient that courts adopt injunctory, mandatory and compensatory remedies, but our regulators also must be empowered in that regard. However, the legislative grammar must be elastic for us to infuse the regulators with power to fashion different remedies. This infusion must also be tampered with the necessary guidelines and parameters of

exercise of remedial powers, failing which such infusion would aid arbitrary use. Our firm view is that remedial powers or restitutionary directives are a necessary concomitant of both the fundamental rights of citizens who suffer environmental wrongs and an equal concomitant of the duties of a statutory regulator, which are informed by Part IV A of the constitution. To that extent, the functions and powers of a regulator must be inspired by the obligation in Part IV A and Article 48 A. The State's '*endeavour to protect and improve the environment*' will be partial, if it does not encompass a duty to retribute.

17. Of all the duties imposed under Article 51A, the obligation to conserve and protect water and air, is perhaps the most significant, amidst our climate change crisis. The Water Act and the Air Act institutionalised all efforts and actions that need to be taken to protect air that we breathe and water that we consume by creating the Pollution Control Boards. These Boards functioning as our environment regulators are expected to act with *institutional foresight* by evolving necessary policy perspectives and action plans. Working with perpetual seal and succession, they are to develop and retain *institutional memory* so that they can act on the basis of the experience, data and information that they would have

gathered and processed. *Institutional expertise* is critical, and these bodies are to employ human resource which have domain expertise and talent. These bodies are intended to maintain *institutional integrity* by taking independent and objective decisions without governmental or industrial control. These values flow naturally if there is *institutional transparency and accountability*. It is in this perspective that we need to interpret Section 33A of the Water Act and 31A of the Air Act.

10. Duty to Restitute v. Power to Punish and Penalise.

18. There is a distinction between an action for environmental damages for restitution or remediation and imposition of penalties or fines levied at the culmination of a punitive action. This Court in *M.C. Mehta* (supra), while referring to the provisions of the Water Act, Air Act and the Environment Protection Act observed –

“17. All the three Acts, referred to above, also contemplate the taking of the cognizance of the offences by the court. Thus, a person guilty of contravention of provisions of any of the three Acts which constitutes an offence has to be prosecuted for such offence and in case the offence is found proved then alone can he be punished with imprisonment and fine or both. The sine qua non for punishment of imprisonment and fine is a fair trial in a competent court. The punishment of imprisonment or fine can be imposed only after the person is found guilty.”

“24. Pollution is a civil wrong. By its very nature, it is a tort committed against the community as a whole. A person, therefore, who is guilty of causing pollution has to pay

damages (compensation) for restoration of the environment and ecology. He has also to pay damages to those who have suffered loss on account of the act of the offender....”

19. Therefore, Indian law distinguishes between the imposition of a monetary penalty or fine, which constitutes punitive action following a determination of guilt after adherence to the statutorily prescribed procedure, and the payment of damages for restitution or remediation as compensatory relief.

20. In this context, it is important to turn to one of the key principles of Indian environmental law – the *Polluter Pays* principle. This principle has been a part of Indian jurisprudence since 1996. In *Indian Council for Enviro-Legal Action v. Union of India*¹⁷, this Court held that according to the *Polluter Pays* principle the responsibility for repairing the damage is that of the offending industry. The Court further held that the powers of the Central Government to issue directions under Section 5 read with Section 3 of the Environment Protection Act include the power to impose costs for remedial measures -

“60. ... Section 3 of the Environment (Protection) Act, 1986 expressly empowers the Central Government (or its delegate, as the case may be) to “take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of environment...”. Section 5 clothes the Central Government (or its delegate) with the power to issue

¹⁷ (1996) 3 SCC 212

directions for achieving the objects of the Act. Read with the wide definition of ‘environment’ in Section 2(a), Sections 3 and 5 clothe the Central Government with all such powers as are “necessary or expedient for the purpose of protecting and improving the quality of the environment”. The Central Government is empowered to take all measures and issue all such directions as are called for for the above purpose. In the present case, the said powers will include giving directions for the removal of sludge, for undertaking remedial measures and also the power to impose the cost of remedial measures on the offending industry and utilise the amount so recovered for carrying out remedial measures. This Court can certainly give directions to the Central Government/its delegate to take all such measures, if in a given case this Court finds that such directions are warranted. ...

67. The question of liability of the respondents to defray the costs of remedial measures can also be looked into from another angle, which has now come to be accepted universally as a sound principle, viz., the “Polluter Pays” principle. ...Thus, according to this principle, the responsibility for repairing the damage is that of the offending industry. Sections 3 and 5 empower the Central Government to give directions and take measures for giving effect to this principle. In all the circumstances of the case, we think it appropriate that the task of determining the amount required for carrying out the remedial measures, its recovery/realisation and the task of undertaking the remedial measures is placed upon the Central Government in the light of the provisions of the Environment (Protection) Act, 1986. It is, of course, open to the Central Government to take the help and assistance of State Government, RPCB or such other agency or authority, as they think fit.”

(emphasis added)

21. Subsequently, the Court in *Vellore Citizens’ Welfare Forum v. Union of India*¹⁸, has held that the liability for environmental damage includes both a compensatory aspect and a restorative or remedial aspect-

“12. ... The “Polluter Pays Principle” as interpreted by this Court means that the absolute liability for harm to the

¹⁸ (1996) 5 SCC 647

environment extends not only to compensate the victims of pollution but also the cost of restoring the environmental degradation. Remediation of the damaged environment is part of the process of “Sustainable Development” and as such the polluter is liable to pay the cost to the individual sufferers as well as the cost of reversing the damaged ecology.”

(emphasis added)

22. Application of the *Polluter Pays* principle not only includes payment for restoring the damaged environment, taking remedial action to deal with the damage and compensating for the direct harm caused, but also for avoiding pollution. In *Research Foundation for Science (18) v. Union of India*¹⁹, this Court held -

“29. The polluter-pays principle basically means that the producer of goods or other items should be responsible for the cost of preventing or dealing with any pollution that the process causes. This includes environmental cost as well as direct cost to the people or property, it also covers cost incurred in avoiding pollution and not just those related to remedying any damage. It will include full environmental cost and not just those which are immediately tangible. The principle also does not mean that the polluter can pollute and pay for it. The nature and extent of cost and the circumstances in which the principle will apply may differ from case to case.”

(emphasis added)

23. The Court further held that the observations of the Court in *Deepak Nitrite Ltd. v. State of Gujarat*²⁰ that “mere violation of the law in not observing the norms would result in degradation of environment would not be correct” were confined to the facts of that

¹⁹ (2005) 13 SCC 186.

²⁰ (2004) 6 SCC 402

case. The Court clarified that the actual degradation of the environment is not a necessary condition for the application of polluter pays principle, as long as the offending activities have the potential of degrading the environment -

“30...The decision also cannot be said to have laid down a proposition that in the absence of actual degradation of environment by the offending activities, the payment for repair on application of the polluter-pays principle cannot be ordered. The said case is not relevant for considering cases like the present one where offending activities have the potential of degrading the environment. In any case, in the present case, the point simply is about the payments to be made for the expenditure to be incurred for the destruction of imported hazardous waste and amount spent for conducting tests for determining whether it is such a waste or not...”

(emphasis added)

24. The distinction between a punitive action and a direction to pay environmental damages was made by the National Green Tribunal in *State Pollution Control Board, Odisha v M/s Swastik Ispat Pvt Ltd and Others*²¹. The Tribunal in this case was considering the legality of forfeiture of bank guarantees in case a defaulting industry did not comply with the regulatory conditions within the stipulated timeframe. The Tribunal expressly considered the opinion of the High Court in the impugned judgment before us today and held -

“45. It is evident from the above facts and the reasoning that there was actual levy of penalty or damages by the DPCC and

²¹ 2014 SCC OnLine NGT 13.

it was in consequence of such imposition of penalty/ damages that the Units were called upon to furnish bank guarantees for granting of consent. In other words, bank guarantee was required to be furnished in furtherance to the imposition of a penalty or damages in that case. It was not an act de hors the imposition of penalty and had the element of punitive action. In the present case, it is not a consequence of a punitive or penal action but is in exercise of the powers vested in the Board in relation to recalling the conditions of consent and ensuring their implementation while also making compensatory provision for remedying the apprehended wrong to the environment. In the cases in hand, the Board has not imposed any penalty upon the units but has granted consent to them on certain conditions, none of which is punitive. They squarely fall within the power of the Board to prevent and control pollution in consonance with the scheme of the Acts concerned. Thus, on facts, the judgments of the High Court in Splendor (supra) do not have any application to the present case. In any case, we are of the considered view that asking for a bank guarantee as an interim measure for due performance of the conditions of the consent order being compensatory in nature, is not punitive.

46. We have already noticed above that there is a clear distinction between a penal and a compensatory provision. In such matters, the paramount question that would normally fall for determination before a court or tribunal would be whether the action contemplated is penal or compensatory. This issue shall have to be decided with reference to the facts of the case, the provisions of the law applicable and the intent of the authority concerned. Once it falls in the 'compensatory' field, then it will necessarily be beyond the purview of penalty...."

(emphasis added)

25. In *Swastik Ispat*, the Green Tribunal correctly interpreted Sections 33A and 31A of the Water and Air Acts. The judgment of the High Court in *Splendor* had not yet been taken up or considered by this Court at that time, the Tribunal had to distinguish the facts of *Splendor* to arrive at its own conclusion. In view of our reasoning and interpretation of Sections 33A and 31A

of the Water and Air Acts, we have no hesitation to hold that the Green Tribunal is correct in its approach.

26. More recently, in *T.N. Godavarman Thirumulpad, In Re v. Union of India*²², this Court while considering the issue of illegal construction in the Corbett Tiger Reserve drew the distinction between action against persons violating the law and measures for restoration of the environmental damage. The Court held -

“173. ... However, the principle of restoration of damaged ecosystem would require the States to promote the recovery of threatened species. We are of the considered view that the States would be required to take steps for the identification and effective implementation of active restoration measures that are localised to the particular ecosystem that was damaged. The focus has to be on restoration of the ecosystem as close and similar as possible to the specific one that was damaged.

175. We find that, bringing the culprits to face the proceedings is a different matter and restoration of the damage already done is a different matter. We are of the considered view that the State cannot run away from its responsibilities to restore the damage done to the forest. The State, apart from preventing such acts in the future, should take immediate steps for restoration of the damage already done; undertake an exercise for determining the valuation of the damage done and recover it from the persons found responsible for causing such a damage.”

(emphasis added)

11. Principles.

27. Based on a review of precedents on this issue, the following legal position emerges –

²² (2025) 2 SCC 641

- I. There is a distinction between a direction for payment of restitutionary and compensatory damages as a remedial measure for environmental damage or as an *ex-ante* measure towards potential environmental damage on the one hand; and a punitive action of fine or imprisonment for violations under Chapters VII of the Water Act and VI of the Air Act on the other hand.
- II. If directions in furtherance of restitutionary and compensatory measures are issued, these are not to be considered as punitive in nature. Punitive action can only be taken through the procedure prescribed in the statute for example under chapters VII and VI of the Water and Air Acts respectively.
- III. Indian environmental law has assimilated²³ the principle of *Polluter Pays* and there is also a statutory incorporation of this principle in our laws.²⁴ The invocation of this principle is triggered in the situations²⁵; i) when an established threshold or prescribed requirement is exceeded or

²³ *Indian Council for Enviro-Legal Action* (supra n.12); *Vellore* (supra n 13).

²⁴ **Section 20. Tribunal to apply certain principles-** *The Tribunal shall, while passing any order or decision or award, apply the principles of sustainable development, the precautionary principle and the polluter pays principle.*

²⁵ Loveleen Bhullar, 'The Polluter Pays Principle: Scope and Limits or Judicial Decisions'; in Shibani Ghosh (ed.), *Indian Environmental Law* (Orient BlackSwan 2019).

breached, and it does result in environmental damage, ii) when an established threshold or prescribed requirement is not exceeded or breached, nevertheless the act in question results in environmental damage and also iii) when a potential risk or a likely adverse impact to the environment is anticipated, irrespective of whether or not prescribed thresholds or requirements are exceeded or breached.

IV. Environmental regulators have a compelling duty to adopt and apply preventive measures irrespective of actual environmental damage. *Ex-ante* action shall be taken by these regulators and for this purpose a certain measure in exercise of powers under Sections 33A and 31A of the Water and Air Acts is necessary.

V. The powers of the Boards under Sections 33A and 31A of the Water and Air Acts are identical to that of Section 5 of the Environment Protection Act. Under Section 5, the Central Government or its delegate has the power to issue directions to the polluting industry to pay certain amounts and utilise the said fund for carrying out remedial measures. The Boards are empowered to take similar actions under Sections 33A and 31A of the Acts.

28. Having considered the principles that govern our environmental laws and on interpretation of Sections 33A and 31A of the Water and Air Acts, we are of the opinion that that the Division Bench of the High Court was not correct in restrictively reading powers of the Boards. We are of the opinion that these regulators in exercise of these powers can impose and collect, as restitutionary or compensatory damages fixed sum of monies or require furnishing bank guarantees as an *ex-ante* measure towards potential or actual environmental damage.

29. There is no doubt that Section 33A of the Water Act and Section 31A of the Air Act give the State Boards powers to issue necessary directions for environmental restoration, remediation and compensation and for the payment of costs for the same. The National Green Tribunal's judgment in *Swastik Ispat* correctly identified the Boards powers to issue directions for payment of environmental damages under Section 33A of the Water Act and the Section 31A of the Air Act. A restrictive interpretation which fails to differentiate between environmental damages and punitive action significantly encumbers the Boards ability to discharge its duties.

30. The Board's powers under Section 33A of the Water Act and Section 31A of the Air Act have to be read in light of the legal position on the application of *Polluter Pays* principle as formulated and explained. This means that State Board cannot impose environmental damages in case of every contravention or offence under the Water Act and Air Act. It is only when the State Board has made a determination that some form of environmental damage or harm has been caused by the erring entity, or the same is so imminent, that the State Board must initiate action under Section 33A of the Water Act and Section 31A of the Air Act.

31. At this stage, we must also take note of the recent 2024 amendments²⁶ to the Water and Air Acts. Two major changes relevant for our consideration are that of decriminalisation²⁷ and introduction of the office of "Adjudicatory Officer"²⁸. Even after the

²⁶ The Water (Prevention and Control of Pollution) Amendment Act, 2024, Jan Vishwas (Amendment of Provisions) Act, 2023.

²⁷ Section 41 in the erstwhile Water Act has been substituted by sections 41 and 41A, whereby contravention of directions issued under section 20 (for obtaining information), 32 (for imposing emergency measures in case of pollution), 33 (for restraining apprehended pollution) or 33A would now be punishable by penalty alone; thereby replacing the earlier penal framework comprising of imprisonment *and* fine. Similar amendments done for section 42 (penalty for certain acts), section 43 for contravention of directions under section 24 (prohibiting use of stream or well), section 44 (prohibiting alteration of meter, etc.), and section 45A (residuary). Correspondingly, under the Air Act criminal liability under section 37 for contravention of directions under section 22 (restricting emission beyond standards) or section 31A has been restricted to fine alone. Similar amendments have been brought in section 38 and 39 (residuary). Punishment for imprisonment has been retained only for violation of section 21 and failure to pay penalty or additional penalty under section 39D.

²⁸ In the Water Act, section 45B puts in place a new office by the title of 'Adjudicating Officer', who would be an officer not below the rank of Joint Secretary to the Centre or Secretary to the State, appointed by the Central Government. Adjudicating Officer is empowered to inquire

amendments, in our opinion, there is no conflict between the powers of the State Boards to direct payment of environmental damages under Sections 33A and 31A of the Water and Air Acts and the powers of the Adjudicating Officer to impose penalties under Chapter VII of the Water Act and Chapter VI of the Air Act. The decriminalization of offences under these Chapters has not removed the punitive nature of actions that can be taken under them. There remains a clear distinction between the nature of directions that the State Boards can issue under Sections 33A and 31A of the Water and Air Acts for payment of environmental damage and the determination by Adjudicating Officers. The former is compensatory in nature and will be resorted to when remedial measures are being undertaken to restore the degraded environment or pollution caused. The latter is a penalty for an offence under the law and is imposed with the objective of punishing the offender. This penalty collected here will not be specifically directed towards the restoration of the degraded environment (for instance, to decontaminate a pond that has been

and impose penalties under sections 41, 41A, 42, 43, 44, 45A and 48. Appeal against such imposition lies before the National Green Tribunal as per section 45C. The Adjudicating Officer is further empowered to file a complaint for cognizance under section 49. Corresponding additions have been made under the Air Act as well under sections 39A (Adjudicating Officer), 39B (Appeal to NGT) and 43 (Cognizance of offences).

polluted due to discharge of untreated sewage). It will be deposited in the Environmental Protection Fund that is to be set up under Section 16 of the Environment (Protection) Act. According to Section 16(3) of the EP Act, the Fund shall be used for, (a) the promotion of awareness, education and research for the protection of environment; (b) the expenses for achieving the objects and for purposes of the Air (Prevention and Control of Pollution) Act, 1981(14 of 1981) and under this Act; and (c) such other purposes, as may be prescribed.

A. Board's Responsibility to Choose Appropriate Course of Action.

32. Given their broad statutory mandate and the significant duty towards public health and environmental protection the Boards must have the power and distinction to decide the appropriate action against a polluting entity. It is essential that the Boards function effectively and efficiently by adopting such measures as is necessary in a given situation. The Boards can decide whether a polluting entity needs to be punished by imposition of penalty or if the situation demands immediate restoration of the environmental damage by the polluter or both.

B. Powers Must Be Guided by Transparency and Non-Arbitrariness.

33. While we hold that the Boards have the power to direct the payment of environmental damages, we make it clear that this power must always be guided by two overarching principles. First, that the power cannot be exercised in an arbitrary manner; and second, the process of exercising this power must be infused with transparency.

34. This Court has underscored the importance of strong institutional frameworks in environmental governance that are effective, accountable and transparent. In *Bengaluru Development Authority v. Sudhakar Hegde*²⁹, this Court held -

“95. The protection of the environment is premised not only on the active role of courts, but also on robust institutional frameworks within which every stakeholder complies with its duty to ensure sustainable development. A framework of environmental governance committed to the rule of law requires a regime which has effective, accountable and transparent institutions. Equally important is responsive, inclusive, participatory and representative decision-making. Environmental governance is founded on the rule of law and emerges from the values of our Constitution. Where the health of the environment is key to preserving the right to life as a constitutionally recognised value under Article 21 of the Constitution, proper structures for environmental decision-making find expression in the guarantee against arbitrary action and the affirmative duty of fair treatment under Article 14 of the Constitution. Sustainable development is premised not merely on the redressal of the failure of democratic institutions in the protection of the environment, but ensuring that such failures do not take place.”

(emphasis added)

²⁹ (2020) 15 SCC 63

35. To ensure that the Boards impose restitutionary and the compensatory environmental damages in a fair transparent, non-arbitrary manner, with procedural certainty, necessary subordinate legislation in the form of rules and regulations must be notified. This shall include methods by which environmental damage is determined, and the consequent quantum of damages are assessed. They may also incorporate certain basic principles of natural justice for fairness in action. At present environmental damages are being levied by the Boards on the basis of certain guidelines issued by the Central Pollution Control Board in its document “*General framework for imposing environmental damage compensation*” issue in December, 2022. These guidelines seem to have been issued pursuant to the directions of the NGT.³⁰ It is important that these guidelines are reviewed thoroughly and issued in the form of Rules and Regulations. This will enable declaration of a law that applies and ensures its recognition and easy implementation.

36. These Rules must also create enabling framework for citizens to file complaints about environmental damage. Public participation in environmental protection has assumed great

³⁰ Pursuant to the NGT in its order in O.A. No. 606/2018 dated 24.04.2019.

importance with climate change threatening to drastically disrupt our way of living. Boards, being the first line of defence against polluting activities, must provide easy accessibility and encourage public participation in their function and decision making.

37. While we have reversed the decision of the High Court on the principle of law and hold that the environmental regulators, the Pollution Control Boards, can impose and collect as restitutionary and compensatory damages fixed sums of monies or require furnishing bank guarantees as an *ex-ante* measure towards potential environmental damage in exercise of powers under Sections 33A and 31A of the Water and Air Acts, we issue the following consequential directions.

38. In view of the fact that the show cause notices in these cases relate to the year 2006 and those show cause notices were set-aside by the Single as well as by the Division Benches of the High Court, we are of the opinion that no purpose will be served in reviving the said show cause notices at this point of time. In the facts and circumstances of the case while we allow the appeal on the principle of law there shall not be any consequential direction for reviving the show cause notices which have been set-aside concurrently by the Single as well as by the Division Bench of the

High Court. If certain amounts have been collected on the basis of the said show cause notices they shall be returned by DPCC within a period of six weeks from the date of this order, and if amounts are not deposited or collected the appellant, DPCC shall not take any further action.

39. For the reasons stated above:

(a) we allow these appeals and set aside the judgement and order dated 23.01.2012, passed by the Division Bench of the High Court of Delhi in LPA No. 709/2011, LPA No. 710/2011, LPA No. 866/2011 and LPA No. 867/2011 to the extent of declaration of law but direct that the show cause notices that have been set aside by the High Court shall not be revived.

(b) we direct that the Pollution Control Boards can impose and collect as restitutionary and compensatory damages fixed sums of monies or require furnishing bank guarantees as an *ex-ante* measure towards potential environmental damage in exercise of powers under Sections 33A and 31A of the Water and Air Acts.

(c) it is further directed that the power to impose or collect restitutionary or compensatory damages or the requirement to furnish bank guarantees as an *ex-ante* measure under Sections 33A and 31A of the Water and Air Acts shall be enforced only after

detailing the principle and procedure incorporating basic principles of natural justice in the subordinate legislation.

.....J.
[PAMIDIGHANTAM SRI NARASIMHA]

.....J.
[MANOJ MISRA]

**NEW DELHI;
AUGUST 04, 2025**



2596

2025 INSC 1060

REPORTABLE

**IN THE SUPREME COURT OF INDIA
CIVIL APPELLATE JURISDICTION**

CIVIL APPEAL NOS. 8119-8120 OF 2022

**M/S. TRIVENI ENGINEERING
AND INDUSTRIES LTD.**

APPELLANT(S)

VERSUS

**STATE OF UTTAR PRADESH
& ORS.**

RESPONDENT(S)

J U D G M E N T

UJJAL BHUYAN, J.

These two civil appeals filed under Section 22 of the National Green Tribunal Act, 2010 are directed against orders dated 15.02.2022 and 16.09.2022 passed by the National Green Tribunal, Principal Bench, New Delhi ('NGT' for short) in Original Application No. 71/2021 (*Chandra Shekhar Vs. State of Uttar Pradesh*).

Signature Not Verified

Digitally signed by
Nirmala Negi
Date: 2025.03.01
17:03:10 IST
Reason:

2. By the order dated 15.02.2022, NGT held that the project proponent (appellant herein) had violated the environmental norms which included illegal disposal of untreated effluent, dilution at outlet with fresh water to conceal real status, absence of flow meter at boiler/mill house to avoid monitoring, absence of record of oil and grease stored and absence of Effluent Treatment Plant (ETP) logbook. Thereafter, NGT observed that the joint committee needed to assess the past violations and recover compensation in accordance with law having regard to the nature of the violation, period of violation, cost of remediation and turnover of the project proponent (appellant). The joint committee was directed to submit a supplementary report in this regard.

2.1. By the second order dated 16.09.2022, NGT considered the supplementary report filed by the joint committee on 10.08.2022 and held that compensation of Rs. 18 crores at the rate of 2 percent of annual turnover would be justified. It was directed that the amount may be deposited by the project proponent (appellant) with the District

Magistrate, Muzaffarnagar, within one month to be utilized for restoration of the environment.

3. At the outset, a brief recital of facts is considered necessary.

4. Appellant i.e. M/s. Triveni Engineering and Industries Limited is a public limited company incorporated under the Companies Act, 1956. It is engaged in diverse business activities including manufacture of sugar. It is stated that appellant has seven sugar manufacturing units across the State of Uttar Pradesh.

4.1. In the year 1952, appellant under its earlier name, Ganga Sugar Corporation Limited, which was incorporated under the Companies Act, 1913, had acquired the sugar manufacturing unit at village Sheikhpura, Khatauli, Muzaffarnagar District in the State of Uttar Pradesh (sugar mill). It is stated that the sugar mill is a functional unit, having all the necessary permissions as required under the applicable statutes.

4.2. It appears from the record that in the month of March, 2021, respondent No. 2 filed a complaint before the NGT which was registered as Original Application No. 71/2021 (O.A. No. 71/2021) alleging that the sugar mill of the appellant was discharging untreated waste in a particular drain resulting in contamination of ground water in an area of about one and a half kilometer around the sugar mill having depth upto 50 metres.

4.3. By order dated 22.03.2021, NGT constituted a joint committee of Central Pollution Control Board (CPCB), Uttar Pradesh Pollution Control Board (UPPCB) and District Magistrate (DM), Muzaffarnagar. The joint committee was directed to conduct inspection and thereafter to file status report within two months.

4.4. It appears that the sugarcane crushing season for the year 2020-21 came to an end on 22.05.2021. Joint committee in its report dated 02.07.2021 stated that because of various reasons including conclusion of the sugarcane crushing season and the sugar mill remaining closed on

account of the covid pandemic, inspection could not be carried out and prayed for further time to carry out fresh inspection.

4.5. Thereafter, regional office of UPPCB, Muzaffarnagar carried out inspection of the sugar mill and the area around it on 13.09.2021 and observed that no contamination was found in the ground water samples. However, it was observed that further investigation could be carried out when the industry become operational during the next crushing season.

4.6. O.A. No. 71/2021 was heard on 21.09.2021. NGT on perusal of the report declared that it was not satisfied with the stand of the State PCB. NGT was of the view that there was no justification for carrying out inspection when the sugar mill was not functional due to off season. NGT, therefore, directed the joint committee to conduct inspection when the unit was functional and thereafter to furnish a report to it on or before 15.12.2021. It was clarified that the report should indicate status of compliance with the

standards as prior to the season, quality of treated effluence and utilization as per protocol/agreement with the users/farmers, further indicating that it should be mentioned whether effluents were reaching any drain leading to river/waterbody with direction to check the quality of ground water as per parameters relevant to the industry in question, particularly fluoride etc. Reference was made to an order dated 01.09.2021 passed by the NGT in O.A. No. 539/2019 (*Adil Ansari Vs. M/s. Dhampur Sugar Mills Limited*) wherein it was directed that ETPs must continue to run for maintenance of bio-mass even during the off season.

4.7. Pursuant to the aforesaid order dated 21.09.2021, the joint committee conducted inspection on 08.12.2021 and submitted report dated 11.01.2022. After extensively referring to the observations, conclusions and recommendations of the joint committee, NGT passed the first impugned order dated 15.02.2022 observing that the report showed violation of the environmental norms by the project proponent (appellant), such as, illegal disposal of untreated

effluents etc. while stating that such violation was required to be remedied in terms of the recommendations made in the report. For the past violations, the joint committee was directed to assess the compensation in accordance with law, having regard to the nature of violation, period of violation, cost of remediation and turn over of the project proponent. Joint committee was further directed to submit a supplementary report with copy to the project proponent (appellant) for its response.

4.8. Pursuant to the aforesaid directions, supplementary report was filed by the joint committee on 10.08.2022 whereafter the matter was taken up for hearing on 16.09.2022. NGT recorded that no response was filed by the project proponent (appellant). NGT referred to the report which mentioned that compensation amounts to Rs. 34,20,000.00 for 114 days of violation at the rate of Rs. 30,000.00 per day which works out to Rs. 18 crores at the rate of 2 percent of the annual turnover of Rs. 900 crores. After hearing the learned counsel for the UPPCB, NGT was of the view that having regard to the

established illegal discharge of untreated effluents, dilution at the outlet to conceal the real status, absence of monitoring, absence of record of oil and grease stored and ETP logbook, compensation of Rs. 18 crores at the rate of 2 percent of annual turnover would be justified. It was ordered *vide* the second impugned order dated 16.09.2022 that the compensation recovered may be utilized for restoration of the environment. Project proponent (appellant) was directed to deposit the aforesaid amount with the District Magistrate, Muzaffarnagar within one month. The compensation amount was directed to be utilized within six months in terms of the action plan to be prepared by the joint committee, clarifying that UPPCB would be the nodal agency for coordination and compliance.

5. Aggrieved by the aforesaid orders dated 15.02.2022 and 16.09.2022, appellant has preferred the related appeals. By order dated 02.11.2022, permission to file appeal was granted and delay was condoned. Thereafter, notice was issued. This Court also passed an interim order staying the operation

of the impugned orders dated 15.02.2022 and 16.09.2022 so far as imposing compensation on the appellant.

6. Learned senior counsel for the appellant submits that the impugned orders dated 15.02.2022 and 16.09.2022 are *non est* in the eye of law in as much as those orders were passed by the NGT in complete violation of the principles of natural justice. Though the entire allegations in O.A. No. 71/2021 were directed against the appellant and though the impugned orders have adversely affected the appellant yet appellant was not made a party to the proceedings in O.A. No. 71/2021. NGT failed to appreciate that the appellant was a necessary party and without issuing notice and giving opportunity of hearing to the appellant, no adverse order against the appellant such as the ones dated 15.02.2022 and 16.09.2022 could have been passed. That being the position, not only the impugned orders but also the entire proceedings in O.A. No. 71/2021 being in absolute violation of the principle of *audi alteram partem* are liable to be set aside and quashed on this ground alone.

6.1. Learned senior counsel asserts that no opportunity of hearing, not to speak of any fair opportunity of hearing, was afforded to the appellant before rendering the findings *vide* the impugned orders dated 15.02.2022 and 16.09.2022.

6.2. Adverting to the reports of the joint committee dated 11.01.2022 and 10.08.2022, learned senior counsel submits that findings recorded in the reports are scientifically not possible. Those are materially different from the readings shown by the data retrieved and recorded by the inspection team during the inspection on 08.12.2021. The joint committee relied upon the reports prepared by third party laboratories which were based on erroneous data. As a result, there are glaring contradictions in the above reports.

6.3. Learned senior counsel also questioned the methodologies adopted by the joint committee in carrying out the inspection and thereafter in submitting the reports. According to him, NGT and the joint committee gave a complete go-bye to the procedure laid down under Sections 21 and 22 of the Water (Prevention and Control of Pollution)

Act, 1974. That apart, the reports of the joint committee suffered from factual mistakes in as much as appellant has been maintaining ETP logbook at all times which were provided to the joint committee officials when they had visited the sugar mill for inspection. Likewise, boiler ash records were also maintained. Had an opportunity of hearing being given to the appellant, it could have explained its position *qua* the joint committee reports. NGT accepted the erroneous reports of the joint committee without subjecting the same to further scrutiny by permitting the appellant to have its say in the matter.

6.4. Learned senior counsel also referred to the provisions of Section 19(1) of the National Green Tribunal Act, 2010 which states that though the NGT shall not be bound by the procedure laid down by the Code of Civil Procedure, 1908, it shall be guided by the principles of natural justice. There is clear infraction of Section 19(1) of the National Green Tribunal Act, 2010 in the present case which has vitiated the impugned orders.

6.5. Summing up his arguments, learned senior counsel submitted that the impugned orders are wholly untenable in law as well as on facts and those are as such liable to be set aside.

7. Learned senior counsel for the respondents on the other hand has supported the impugned orders passed by the NGT. It is submitted that without treatment of the effluent, water was being discharged from the sugar mill of the appellant; the same was being released into the drain which has contaminated the ground water of the area in and around the sugar mill where about 10 to 15 thousand people reside. The entire population is thus exposed to the polluted water and resultant health hazards.

7.1. Learned senior counsel submits that NGT took cognizance of this alarming situation and constituted the joint committee to carry out necessary inspection. Joint committee carried out inspection in a scientific manner and thereafter submitted reports to the NGT. The reports being prepared by a committee of experts was rightly accepted by

the NGT. Based on the observations and conclusions reached by the joint committee, NGT passed the impugned orders which calls for no interference.

7.2. Learned senior counsel submits that principles of natural justice cannot be applied as a straight jacket formula. NGT was careful enough to direct the joint committee to furnish copies of its reports to the project proponent (appellant). Appellant was, therefore, very much aware of the contents of the two reports, yet it did not contest the same before the NGT. That being the position, the contentions advanced on behalf of the appellant are without any substance.

7.3. He finally submits that the civil appeals being devoid of merit are, therefore, liable to be dismissed.

8. Submissions made by learned counsel for the parties have received the due consideration of the Court.

9. At the outset, it would be apposite to refer to some of the relevant statutory provisions.

10. The Water (Prevention and Control of Pollution) Act, 1974 (briefly 'the Water Act' hereinafter) is an act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment with a view to carrying out the purposes aforesaid, of pollution control boards for the prevention and control of water pollution, for conferring on and assigning to such boards, powers and functions relating thereto and for matters connected therewith. Section 2 is the definition clause. Section 2(dd) defines 'outlet' to include any conduit, pipe or channel, open or closed, carrying sewage or trade effluent or any other holding arrangement which causes, or is likely to cause, pollution.

10.1. The expression 'pollution' is also defined. As per Section 2(e), 'pollution' means contamination of water. Section 2(e) reads thus:

“pollution” means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as

may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

10.2. 'Sewage effluent' has been defined in Section 2(g) and means effluent from any sewerage system or sewage disposal works and includes sullage from open drains. Section 2(gg) defines 'sewer' to mean any conduit pipe or channel, open or closed, carrying sewage or trade effluent.

10.3. 'Stream' has been defined in Section 2(j) and as per the said definition, stream includes:

- (i) river;
- (ii) water course (whether flowing or for the time being dry);
- (iii) inland water (whether natural or artificial);
- (iv) sub-terranean waters;
- (v) sea or tidal waters to such extent or, as the case may be, to such point as the State Government may, by notification in the Official Gazette, specify in this behalf.

10.4. 'Trade effluent' has been defined in Section 2(k) in the following manner:

"trade effluent" includes any liquid, gaseous or solid substance which is discharged from any premises used for carrying on any industry, operation or process or treatment and disposal system, other than domestic sewage.

10.5. Section 21 of the Water Act is included in Chapter V which deals with prevention and control of water pollution. Sub-section (1) of Section 21 empowers the State Pollution Control Board or any officer authorized by it to take samples of water from any stream or well or samples of any sewage or trade effluent which is passing from any plant or vessel or from or over any place into such stream or well for the purposes of analysis. Sub-section (2) however clarifies that the result of any analysis of a sample of any sewage or trade effluent taken under sub-section (1) shall not be admissible as an evidence in any legal proceedings unless the provisions of sub-sections (3), (4) and (5) are complied with. Sub-sections (1) and (2) of Section 21 are as follows:

21. Power to take samples of effluents and procedure to be followed in connection therewith. —

(1) A State Board or any officer empowered by it in this behalf shall have power to take for the purpose of analysis samples of water from any stream or well or samples of any sewage or trade effluent which is passing from any plant or vessel or from or over any place into any such stream or well.

(2) The result of any analysis of a sample of any sewage or trade effluent taken under sub-section (1) shall not be admissible in evidence in any legal proceeding unless the provisions of sub-sections (3), (4) and (5) are complied with.

10.6. As noticed above, analysis of any sample of any sewage or trade effluent taken under sub-section (1) would not be admissible as a piece of evidence in any legal proceedings unless the procedure contemplated under sub-sections (3), (4) and (5) are complied with. Let us therefore take note of the provisions contained in sub-sections (3), (4) and (5) of Section 21 which are extracted as under:

* * * * *

(3) Subject to the provisions of sub-sections (4) and (5), when a sample (composite or otherwise as may be warranted by the process used) of any sewage or

trade effluent is taken for analysis under sub-section (1), the person taking the sample shall—

(a) serve on the person in charge of, or having control over, the plant or vessel or in occupation of the place (which person is hereinafter referred to as the occupier) or any agent of such occupier, a notice, then and there in such form as may be prescribed of his intention to have it so analysed;

(b) in the presence of the occupier or his agent, divide the sample into two parts;

(c) cause each part to be placed in a container which shall be marked and sealed and shall also be signed both by the persons taking the sample and the occupier or his agent;

(d) send one container forthwith,—

(i) in a case where such sample is taken from any area situated in a Union Territory, to the laboratory established or recognised by the Central Board under Section 16; and

(ii) in any other case, to the laboratory established or recognised by the State Board under Section 17;

(e) on the request of the occupier or his agent, send the second container,—

(i) in a case where such sample is taken from any area situated in a Union Territory, to the laboratory established or specified under sub-section (1) of Section 51; and

(*ii*) in any other case, to the laboratory established or specified under sub-section (1) of Section 52.

(4) When a sample of any sewage or trade effluent is taken for analysis under sub-section (1) and the person taking the sample serves on the occupier or his agent, a notice under clause (*a*) of sub-section (3) and the occupier or his agent wilfully absents himself, then,—

(*a*) the sample so taken shall be placed in a container which shall be marked and sealed and shall also be signed by the person taking the sample and the same shall be sent forthwith by such person for analysis to the laboratory referred to in sub-clause (*i*) or sub-clause (*ii*), as the case may be, of clause (*e*) of sub-section (3) and such person shall inform the Government analyst appointed under sub-section (1) or sub-section (2), as the case may be, of Section 53, in writing about the wilful absence of the occupier or his agent; and

(*b*) the cost incurred in getting such sample analysed shall be payable by the occupier or his agent and in case of default of such payment, the same shall be recoverable from the occupier or his agent, as the case may be, as an arrear of land revenue or of public demand:

Provided that no such recovery shall be made unless the occupier or, as the case may be, his agent has been given a reasonable opportunity of being heard in the matter.

(5) When a sample of any sewage or trade effluent is taken for analysis under sub-section (1) and the person taking the sample serves on the occupier or his agent a notice under clause (a) of sub-section (3) and the occupier or his agent who is present at the time of taking the sample does not make a request for dividing the sample into two parts as provided in clause (b) of sub-section (3), then, the sample so taken shall be placed in a container which shall be marked and sealed and shall also be signed by the person taking the sample and the same shall be sent forthwith by such person for analysis to the laboratory referred to in sub-clause (i) or sub-clause (ii), as the case may be, of clause (d) of sub-section (3).

10.7. As can be seen from the above, the person who is taking the sample is required to serve on the person in charge of or having control over the plant or vessel etc. a notice of his intention to have the sample analyzed; take and divide the sample into two parts in the presence of the occupier or his agent. One container after being sealed and signed by both the persons taking the sample and the occupier or his agent is taken to the laboratory established or recognized by the pollution control board (whether central or state) and send the other container in the same manner to the laboratory

established under Section 51(1) in case of a union territory and Section 52(1) in any other case. In case the occupier or his agent willfully absents himself from the aforesaid process, then the person taking the sample shall inform the government analyst in writing about the willful absence of the occupier or his agent.

10.8. Section 22 of the Water Act is concerned with reports of the result of analysis on samples taken under Section 21. Section 22 reads thus:

22. Reports of the result of analysis on samples taken under section 21.—(1) Where a sample of any sewage or trade effluent has been sent for analysis to the laboratory established or recognised by the Central Board or, as the case may be, the State Board, the concerned Board analyst appointed under sub-section (3) of Section 53 shall analyse the sample and submit a report in the prescribed form of the result of such analysis in triplicate to the Central Board or the State Board, as the case may be.

(2) On receipt of the report under sub-section (1), one copy of the report shall be sent by the Central Board or the State Board, as the case may be, to the occupier or his agent referred to in Section 21, another copy shall

be preserved for production before the court in case any legal proceedings are taken against him and the other copy shall be kept by the concerned Board.

(3) Where a sample has been sent for analysis under clause (e) of sub-section (3) or sub-section (4) of Section 21, to any laboratory mentioned therein, the Government analyst referred to in that sub-section shall analyse the sample and submit a report in the prescribed form of the result of the analysis in triplicate to the Central Board or, as the case may be, the State Board which shall comply with the provisions of sub-section (2).

(4) If there is any inconsistency or discrepancy between, or variation in the results of, the analysis carried out by the laboratory established or recognised by the Central Board or the State Board, as the case may be, and that of the laboratory established or specified under Section 51 or Section 52, as the case may be, the report of the latter shall prevail.

(5) Any cost incurred in getting any sample analysed at the request of the occupier or his agent shall be payable by such occupier or his agent and in case of default the same shall be recoverable from him as arrears of land revenue or of public demand.

10.9. As is evident from the above, after a sample of any sewage or trade effluent is sent to the concerned laboratory,

the competent analyst shall analyse the samples and submit a report in the prescribed form of the result of such analysis to the pollution control board. A copy of such report shall also be forwarded to the occupier or his agent.

10.10. Section 24 prohibits release or disposal of polluting matter into any stream or well or sewer or on land. Sub-section (1) of Section 24 is relevant and reads as under:

24. Prohibition on use of stream or well for disposal of polluting matter, etc.—(1) Subject to the provisions

of this section,—

(a) no person shall knowingly cause or permit any poisonous, noxious or polluting matter determined in accordance with such standards as may be laid down by the State Board to enter (whether directly or indirectly) into any stream or well or sewer or on land;
or

(b) no person shall knowingly cause or permit to enter into any stream any other matter which may tend, either directly or in combination with similar matters, to impede the proper flow of the water of the stream in a manner leading or likely to lead to a substantial aggravation of pollution due to other causes or of its consequences.

10.11. As per Section 43 of the Water Act, whoever contravenes the provisions of Section 24 shall be punishable with imprisonment for a term which shall not be less than one year and six months but which may extend to six years and with fine.

11. We now come to the Environment (Protection) Act, 1986 (briefly 'the Environment Act' hereinafter). It is an act to provide for the protection and improvement of environment and for matters connected therewith. Section 2(a) defines 'environment' in the following manner:

"environment" includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.

11.1. 'Environmental pollutant' has been defined in Section 2(b) to mean any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment. 'Environmental pollution' is defined under Section 2(c) and means the presence in the environment of any environmental pollutant. Section 2(f)

defines 'occupier' in relation to any factory or premises, to mean a person who has control over the affairs of the factory or the premises and includes, in relation to any substance, the person in possession of the substance.

11.2. Sections 7, 8, 14A, 15 and 15A are included in Chapter III which deals with prevention, control and abatement of environmental pollution. Section 7 says that no person carrying on any industry, operation or process shall discharge or emit or permit to be discharged or emitted any environmental pollutant in excess of such standards as may be prescribed. Similarly, Section 8 says that no person shall handle or cause to be handled any hazardous substance except in accordance with such procedure and after complying with such safeguards as may be prescribed.

11.3. Section 14A has been introduced by way of an amendment in the year 2023 with effect from 01.04.2024. It provides for penalty in the event of contravention of Sections 7 and 8. Section 14A is extracted hereunder:

14A. Penalty for contravention of section 7 or section 8.—(1) If any person, contravenes provisions of Section 7 or Section 8 or the rules made thereunder, he shall be liable to penalty in respect of each such contravention, which shall not be less than one lakh rupees but which may extend to fifteen lakh rupees.

(2) Where any person continues contravention under sub-section (1), he shall be liable to additional penalty of fifty thousand rupees for every day during which such contravention continues.

11.4. Be it stated that Section 15 was also introduced in the Environment Act by way of the 2023 amendment with effect from 01.04.2024. Section 15 deals with penalty for contravention of the provisions of the Environment Act, rules, orders and directions. Section 15 reads thus:

15. Penalty for contravention of provisions of Act, rules, orders and directions.—(1) Where any person contravenes or does not comply with any of the provisions of this Act or the rules made or orders or directions issued thereunder for which no penalty is provided, he shall be liable to penalty in respect of each such contravention which shall not be less than ten thousand rupees but which may extend to fifteen lakh rupees.

(2) Where any person continues contravention under sub-section (1), he shall be liable to additional penalty of ten thousand rupees for every day during which such contravention continues.

11.5. Similarly, Section 15A provides for penalty for contravention by companies. Section 15A is as follows:

15A. Penalty for contravention by companies.—(1)

Where any company contravenes any of the provisions of this Act, the company shall be liable to penalty for each such contravention which shall not be less than one lakh rupees but which may extend to fifteen lakh rupees.

(2) Where any company continues contravention under sub-section (1), the company shall be liable to additional penalty of one lakh rupees for every day during which such contravention continues.

12. To provide for the establishment of a National Green Tribunal for the effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to person and property and for matters connected therewith or incidental thereto, the

National Green Tribunal Act, 2010 has been enacted. Section 2(1)(c) defines the word 'environment'. It says 'environment' includes water, air and land and the inter-relationship which exists among and between water, air and land and human beings, other living creatures, plants, micro-organism and property.

12.1. Section 2(1)(m) defines 'substantial question relating to environment' and is as follows:

2(m) "substantial question relating to environment" shall include an instance where,—

(i) there is a direct violation of a specific statutory environmental obligation by a person by which,—

(A) the community at large other than an individual or group of individuals is affected or likely to be affected by the environmental consequences; or

(B) the gravity of damage to the environment or property is substantial; or

(C) the damage to public health is broadly measurable;

(ii) the environmental consequences relate to a specific activity or a point source of pollution.

12.2. As per Section 14, National Green Tribunal (NGT) has the jurisdiction over all civil cases where a substantial question relating to environment (including enforcement of any legal right relating to environment) is involved.

12.3. Section 15 deals with the relief, compensation and restitution that NGT may provide. Sub-section (1) of Section 15 reads as under:

15. Relief, compensation and restitution.—(1) The Tribunal may, by an order, provide,—

(a) relief and compensation to the victims of pollution and other environmental damage arising under the enactments specified in the Schedule I (including accident occurring while handling any hazardous substance);

(b) for restitution of property damaged;

(c) for restitution of the environment for such area or areas,

as the Tribunal may think fit.

12.4. Section 17 deals with liability to pay relief or compensation in certain cases. As per sub-section (1), where death of, or injury to, any person (other than a workman) or damage to any property or environment has resulted from an accident or the adverse impact of an activity or operation or

process under any enactment specified in Schedule I, the person responsible shall be liable to pay such relief or compensation for such death, injury or damage. Sub-section (2) says that if the death, injury or damage cannot be attributed to any single activity or operation or process but is the combined or resultant effect of several such activities, operations and processes, NGT may apportion the liability for relief compensation amongst those responsible for such activities, operations and processes on an equitable basis. In case of an accident, NGT shall apply the principle of no fault.

12.5. We now come to Section 19 which deals with the procedure and powers of NGT. Sub-section (1) says that NGT shall not be bound by the procedure laid down by the Code of Civil Procedure, 1908 but shall be guided by the principles of natural justice. For the purposes of discharging its functions, NGT shall have the same powers as are vested in a civil court under the Code of Civil Procedure, 1908 while trying a suit in respect of the matters mentioned in sub-section (4) and as per Clause (i), it has the mandate to pass an interim order

(including granting an injunction or stay) after providing the parties concerned an opportunity to be heard on any application made or appeal filed under the said Act. Sub-section (5) makes it abundantly clear that all proceedings before NGT shall be deemed to be judicial proceedings within the meaning of Sections 193, 219 and 228 for the purposes of Section 196 of the Indian Penal Code, 1860 and the NGT shall be deemed to be a civil court for the purposes of Section 195 and Chapter XXVI of the Code of Criminal Procedure, 1973.

13. Having adverted to the relevant statutory provisions, let us examine as to how the NGT proceeded in this matter. We have already noticed that a joint committee was constituted by NGT comprising of CPCB, UPPCB and District Magistrate, Muzaffarnagar to conduct inspection of the sugar mill of the appellant when it was functional and thereafter to file status report with regard to handling of the effluents. Pursuant thereto, inspection was carried out on 08.12.2021 whereafter report was submitted on 11.01.2022. General observations of

the joint committee as extracted in the impugned order dated 15.02.2022 are as follows:

3.0 OBSERVATIONS

1. The unit M/s Triveni Engineering and Industries Limited, Sugar Unit, Village Sheikhpura, Khatauli, Dist.- Muzaffarnagar is engaged in production of refined sugar by Defco melt Phosphatation followed by Ion Exchange Process (IER) with consented capacity of 16000 TCD.
2. The unit has started its crushing season 2021-22 on 07th November, 2021 and the unit was operational on the date of visit i.e. 08th December 2021.
3. As informed by the unit ETP was started on 27/09/2021 for stabilization purpose in compliance to notified standards in MoEF&CC Notification G.S.R. 35(E) dated 14th January, 2016
4. The unit has valid Consent to Operate under section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 (as amended) for 65 TPH boiler, which is valid up to 31.12.2023 and for two boilers of 120 TPH, which is valid up to 31.12.2024.
5. The unit has valid Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 (as amended) for discharge of effluent, which is valid up to 31.12.2023.
6. The unit has valid Authorization issued under the provisions of Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 for storage and

disposal of hazardous wastes valid up to 13.01.2023.

7. As per Daily Manufacturing Reports (DMRs) provided by the unit, the average actual crush rate (TCD) is 11975.56 TCD (for duration of 20th November 07th December, 2021), against the consented capacity of 16000 TCD.

8. The unit is an integrated backend refinery sugar unit with 45 MW cogeneration power plant for in-house activity in sugar manufacturing process and the unit has valid Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 (as amended) for discharge of effluent, which is valid up to 31.12.2024.

9. Being a Sugar Refinery SO₂ gas is not used in sugar manufacturing process, hence provision of separate Sulphur Recovery System (SRS) is not required.

10. The unit has installed Ion Exchange Resin Technology for decoloring of sugar syrups. The Ion Exchange resin gets saturated/ exhausted after repeated usage and has to be regenerated. The unit regenerates exhausted resin using caustic brine solutions.

11. The unit has submitted the details about the Brine recovery system, which is as follows:

Overall Operating Parameters	
Feed capacity	7500 LPH
Operating hr	20 hr
Overall permeate	6775 LPH
Final Reject	725 LPH
Overall Recovery	90 % ± 2%

12. The unit has 03 boilers with capacity of 120 TPH (02 nos.) for co-gen and one boiler with capacity of 65 TPH for sugar manufacturing process with valid consent. 65 TPH boiler has stack height of 40m from ground level and two boilers of 120 TPH has stack height of 74 meter from ground level.

13. The unit has 02 DG sets having capacity of 1010 KVA each with acoustic enclosure.

14. As informed, the unit transfers used oil to third party (Ramky Enviro Engineers Ltd.) for its disposal on quarterly basis. The unit has provided membership certificate (UPWMP – KNP – HzW – CHW – TSDF - 2174) with Ramky Group, valid up to 23.02.2022.

15. The unit has Permitted Quantity (kg/day) of 10.0 kg/day of Used Oil under Schedule I (Category 5.1) and Wastes or residues containing oil under Schedule I (Category 5.2) of Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 as per consent issued by UPPCB. The unit has not provided the details of quantity provided to Ramky Enviro Engineers Ltd.

16. The unit has not installed flow meter at mill house and boiling house to quantify the effluent generation separately. The effluent generated from the mill house and boiling house is being collected in a collection tank and further it goes to ETP inlet by gravity for further treatment.

17. The unit has setup environmental

laboratory; however, the unit has not maintained the ETP log book for daily analysis of sugar effluent parameter.

18. As informed by the unit representative, the boiler ash is used to fill low laying area, however, the unit has not provided record of generated boiler ash.

19. It was observed that the unit has not maintained the record of Press mud generation, however, it was informed that press mud was provided to local farmers as organic manure.

20. The unit has two underground reservoirs (UGR) for hot water and cold-water recirculation system having capacities of 300 m³ and 400 m³ each.

14. The joint committee also observed that there were two ponds filled with waste water at the backside of the sugar mill. It is stated that the inspecting team collected the samples from the ponds for physio-chemical analysis. Thereafter, the observations of the joint committee alongwith the analysis results were extracted by the NGT in the impugned order dated 15.02.2022 which reads as follows:

21. The Joint Team has observed two ponding (Pond 1- large in size and Pond 2- small in size) filled with waste water at the back side of the press mud storage area. The team has collected the sample from pond for

physico-chemical analysis. The analysis results of the collected samples are mentioned as below:

Table-1: Analysis results of Ponding behind press mud storage area

Sample Analysis	pH	COD	BOD	TSS	TDS	Cl ⁻	Col or 4 ²⁻	SO ^{4²⁻}	NO ₃ ⁻	NO ₂ ⁻	PO ₄ ⁻
Pond-1 (Large)	5.8	750	420	43	592	190	65	39	6.89	0.04	2.11
Pond-2 (Small)	5.1	1267	587	94	472	260	57	419	7.69	BDL	2.70

22. Analysis result of sample collected from pond-1 shows acidic pH-5.8, Color-65, high BOD-420 mg/l and COD- 750 mg/l, which indicate the characteristics of untreated effluent.

23. Analysis result of sample collected from pond-2 shows acidic pH-5.1, Color-57, high BOD-587 mg/l and COD-1267 mg/l, which reflect the characteristics of Refined Sugar effluent (pH-5.5- 6.5, Color- Light brown, BOD- 600-1000 mg/l, COD- 1500-2500 mg/l).

15. The joint committee also collected water samples from the sugar mill drain. The findings of the joint committee *qua* the samples collected from the sugar mill drain reads as under:

24. The team has also collected water samples from Sugar mill drain (name of the drain is Sugar mill drain), river Kali East i.e.

upstream and downstream of the Sugar mill drain & Canal near sugar mill (Lat-29.269901, Long-77.743243). The analysis results are mentioned as below:

Table-2: Analysis results of Sugar mill Drain, River Kali East i.e. upstream and downstream of the Sugar mill drain & Canal near sugar mill

Sample Analysis	River Kali East u/s Sugar Mill drain	Sugar Mill drain	River Kali East d/s Sugar Mill drain	Canal near Sugar mill (29.269901 77.743243)
pH	6.5	6.8	6.6	7.9
COD (mg/l)	198	402	529	7.0
BOD (mg/l)	68	98	166	-
TSS (mg/l)	79	567	901	33
TDS (mg/l)	196	120	328	122
Cl ⁻ (mg/l)	47	64	66	46
Color	30	46	43	BDL
SO ₄ ²⁻ (mg/l)	451	57	52	44
NO ₃ ^{-N} (mg/l)	1.95	2.62	1.87	1.3
NO ₂ ^{-N} (mg/l)	BDL	BDL	BDL	-
PO ₄ ^{-P} (mg/l)	0.64	0.75	0.73	0.07
Conductivity (µmho/cm)	-	-	-	216
Total hardness as CaCO ₃ (mg/l)	-	-	-	303
Total Alkalinity as CaCO ₃ (mg/l)	-	-	-	322
Fluoride (mg/l)	-	-	-	0.3

25. Analysis result of sample collected from River Kali East u/s Sugar Mill drain shows pH- 6.5, COD- 198 mg/l, BOD-68 mg/l, TSS-79 mg/l, TDS- 196 mg/l, Chloride-47 mg/l, SO_4^{2-} -451 mg/l, $\text{NO}_3\text{-N}$ -1.96 mg/l, $\text{NO}_2\text{-N}$ -BDL, $\text{PO}_4\text{-P}$ -0.64 mg/l.
26. Analysis result of sample collected from River Kali East d/s Sugar Mill drain shows pH- 6.6, COD- 529 mg/l, BOD-166 mg/l, TSS-901 mg/l, TDS- 328 mg/l, Chloride-66 mg/l, SO_4^{2-} -52 mg/l, $\text{NO}_3\text{-N}$ -1.87 mg/l, $\text{NO}_2\text{-N}$ -BDL, $\text{PO}_4\text{-P}$ -0.73 mg/l indicate the effect of effluent carried by sugar mill drain i.e. pH- 6.8, COD- 402 mg/l, BOD-98 mg/l, TSS-567 mg/l, TDS-120 mg/l, Chloride-64 mg/l, SO_4^{2-} -46 mg/l, $\text{NO}_3\text{-N}$ -2.67 mg/l, $\text{NO}_2\text{-N}$ -BDL, $\text{PO}_4\text{-P}$ -0.75 mg/l.
27. The increase in BOD, COD and TSS in River Kali East at downstream of Sugar mill drain is due to turbulent flow conditions contributing in higher TSS, thereby BOD & COD increased. The entire flow in drain was sewage. Direct discharge or outlet into the Sugar mill drain was not evident during inspection.
28. Analysis result of samples collected from Canal near Sugar mill shows pH- 7.9, COD- 7.0 mg/l, TSS-33 mg/l, TDS- 122 mg/l, Chloride-46 mg/l, SO_4^{2-} -44 mg/l, $\text{NO}_3\text{-N}$ - 1.3 mg/l, $\text{PO}_4\text{-P}$ -0.07 mg/l.
16. Similar analysis of water samples collected from borewells and handpumps of the sugar mill and nearby areas were made and results have been recorded. Likewise, analysis results of samples collected from the Sewage Treatment Plant

and Effluent Treatment Plant have been recorded. Thereafter, the joint committee concluded in the following manner:

5.0 CONCLUSION

A. Compliance with the Standards:

1. The analysis results of sample collected from ETP outlet after filtration show pH - 7.5, COD- 15 mg/1, BOD - 05 mg/1, TSS - BDL, TDS - 272 mg/1, Oil & Grease - BDL & from lagoon show pH-7.6, COD- 04 mg/1, BOD - 01 mg/1, TSS - BDL, TDS - 532 mg/1, which are complying w.r.t. the Notified standards in MoEF&CC Notification G.S.R. 35 (E) dated 14th January, 2016.
2. However, it seems from the percentage reduction by two Aeration Tank (in series) in BOD-99.27%, COD- 97.73% & TSS- 100% as compared from Primary Clarifier outlet to Secondary Clarifier-1, indicate dilution with fresh water by the unit.
3. MLSS value of 1674 mg/1 in Aeration Tank-I of ETP indicates presence of less biomass against desired level (2500-3000 mg/1).
4. Also, Secondary Clarifier-2 outlet characteristics TSS - BDL and TDS - 136 mg/1 (compared to Secondary Clarifier -1 outlet TDS 680 mg/1 with same influent) indicate provisions of dilutions using fresh water in the outlet.
5. The effluent stored (Pond 1 & Pond 2) behind press mud is an illegal disposal of untreated effluent and the characteristics i.e. BOD (420 mg/1 and 587 mg/1) and COD (750 mg/1 and 1267 mg/1) confirm stored/disposed effluent was untreated

which is a violation of consent conditions issued by UPPCB.

B. Quality of treated effluents and utilisation as per protocol/agreement with the users /farmers:

1. The unit has stored treated effluent in lagoon after ETP filtration units, which was in semi filled condition. The analysis results of sample collected from lagoon are complying w.r.t. the Notified standards in MoEF&CC Notification G.S.R. 35(E) dated 14th January, 2016.
2. The unit has not provided any agreement for providing treated effluent for irrigation to users/farmers, however as informed by the unit representative, treated effluent used in the plant.

C. Effluents are reaching any drain leading to river/water body:

1. Provision of direct discharge or outlet point from unit into the sugar mill drain was not evident during inspection. The entire flow in Sugar mill drain was carrying sewage. The increase in BOD, COD and TSS in River Kali East at downstream of Sugar mill drain is due to turbulent flow conditions contributing in higher TSS, thereby BOD & COD increased.

D. Ground water quality be checked as per parameters relevant to the industry in question, particularly, fluoride etc.:

1. The analysis result of sample collected from 01 borewell located inside and 04 handpumps located outside the unit premises shows fluoride within permissible limit i.e. 1.5 mg/l as per BIS IS 10522:2012 Standards.

2. However, analysis results of samples collected from borewells within unit premises and all 04 Handpumps outside the unit premises are within permissible limit as per drinking water standard BIS IS 10500:2012 except Fe- 0.62mg/l, 4.78 mg/l, 0.46 mg/l from Handpump Sugar Mill near canal, Handpump Sugar Mill near drain and Handpump near Main gate of sugar mill respectively. Selenium (Se)- 0.02 mg/l is also detected which is beyond the permissible limit i.e. 0.01 mg/l as per drinking water standard BIS IS 10500:2012 in the sample collected from Handpump near Main gate of sugar mill.

E. Others:

1. The unit M/s Triveni Engineering and Industries Limited, Sugar Unit, Village Sheikhpura, Khatauli, Distt Muzaffarnagar is an integrated refinery sugar unit with 45 MW cogen and having consented capacity of 16000 TCD. As per Daily Manufacturing Reports (DMRs) provided by the unit, the average actual crush rate (TCD) is 11975.56 TCD (for duration of 20th November 07th December, 2021).
2. The unit has valid Consent to Operate under section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 (as amended) for 65 TPH boiler, which is valid up to 31.12.2023 and for two boilers of 120 TPH, which is valid up to 31.12.2024.
3. The unit has valid Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 (as amended) for discharge of effluent, which is valid up to 31.12.2023. The unit has valid Authorization issued under the provisions of Hazardous and Other Wastes (Management and Trans-

Boundary Movement) Rules, 2016 for storage and disposal of hazardous wastes valid up to 13.01.2023.

4. The unit has a membership of TSDF with Ramky Enviro Engineers Ltd. as informed for disposal of used oil and wastes or residues containing oil on quarterly basis. Membership is valid up to 23.02.2022.
5. The unit has not installed flow meter at mill house and boiling house to quantify the effluent generation separately.
6. The unit has environmental laboratory for daily analysis of sugar effluent parameter, however, the unit has not maintained the ETP log book.
7. The unit has not provided record of generated Boiler ash.
8. The unit has not maintained the record of Press mud generation.
9. The unit has permission to abstract total 430 m³/hr of groundwater from four existing bore-wells as per No Objection Certificate (NOC) from Uttar Pradesh Ground Water Department (UPGWD), which is valid up to 13.01.2023.
10. The unit has Sewage Treatment Plant (STP) with capacity of 500 KLD for the treatment of domestic waste water generated from its residential colony/mill staff having population around 1000-1200 people. The analysis results (BOD-10 mg/l and COD-39 mg/l) of samples collected from STP inlet indicate dilution with fresh water by the unit.
11. The unit has installed flowmeters at the inlet & outlet of STP, however, flowmeters

were found non-operational at the time of inspection.

17. On the aforesaid basis, the joint committee made the following recommendations:

6.0 RECOMMENDATIONS

1. The unit shall not discharge partially treated effluent into the drain and on land within or outside the unit premises.
2. The unit shall install flow meters at mill house and boiling house to quantify the effluent generation separately.
3. The unit shall maintain the proper records for quantity of used oil & grease as per valid Authorization issued under the provisions of Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 for storage and disposal of hazardous wastes.
4. The unit shall maintain proper record of Press Mud which is provided to the local farmers.
5. The unit shall maintain the ETP log book for daily analysis of raw and treated effluent parameters.
6. The unit shall maintain the proper record of boiler ash generation, sludge and their disposal.
7. The unit shall maintain adequate MLSS & MLVSS concentration in Aeration Tank-I & II while operating the ETP to ensure proper stabilization of ETP.
8. The unit shall make proper color coding of pipelines for water distribution

network w.r.t. the defined coding of color for particular pipe carrying sugar effluent, treated effluent and fresh water.

9. The unit shall dismantle the Pond-1 and Pond-2 which contains waste water having characteristics of partially treated industrial effluent.
10. The unit shall restrict the use of Handpump near Main gate of sugar mill as the sample analysis shows Selenium (Se)- 0.02 mg/l which is beyond the permissible limit i.e. 0.01 mg/l as per drinking water standard BIS IS 10500.
11. The unit shall make flow meters operational installed at STP inlet and outlet.

18. The impugned order dated 15.02.2022 indicates that the said report was accepted by the NGT and held that appellant had violated the environmental norms. On that basis and following further report of the joint committee dated 10.08.2022, compensation amount of Rs. 18 crores at the rate of 2 percent of annual turnover was worked out and imposed on the appellant by the NGT *vide* the second impugned order dated 16.09.2022, further directing that the same may be deposited by the appellant with the District Magistrate, Muzaffarnagar within one month.

19. From a conjoint reading of the report of the joint committee and the impugned orders of the NGT, the following features are clearly discernable:

- (i) NGT constituted a joint committee to carry out inspection of the sugar mill of the appellant *vis a vis* maintenance of pollution control measures and discharge of effluents.
- (ii) This is an adhoc committee when the Water Act, more particularly Sections 21 and 22 thereof, clearly prescribe a statutory procedure to be followed while carrying out such inspection to examine pollution, if any, or the extent of pollution caused by the project proponent and to suggest remedial measures.
- (iii) The joint committee report dated 11.01.2022 as noticed above, is silent as to whether it has followed the procedure laid down in the aforesaid Act more particularly notice to the occupier or his agent and collection and sealing of samples in the presence of

the occupier or his agent having his signature on the sealed containers.

- (iv) NGT did not deem it appropriate to get the appellant impleaded as a party respondent in O.A. No. 71/2021 though the entire proceedings were directed against it.
- (v) No opportunity was granted to the appellant to contest the report of the joint committee and to have its say. Thus, there is clear violation of the provisions contained in Section 19 of the National Green Tribunal Act, 2010.
- (vi) It is the categorical stand of the appellant that the joint committee did not issue any notice to it before carrying out the inspection and it was not served with a copy of the report of the joint committee either.
- (vii) NGT accepted the report of the joint committee without any adjudication on it.

- (viii) Environmental compensation was quantified without any adjudication and without granting any opportunity of hearing to the appellant.
- (ix) Environmental compensation was imposed on the appellant without giving any opportunity to the appellant to contest the reports of the joint committee and without giving any opportunity of hearing to the appellant.

20. Let us now refer to and examine some of the relevant case laws on the subject.

21. In *A.K. Kraipak Vs. Union of India*¹, a Constitution Bench of this Court considered the question as to whether principles of natural justice applied to administrative proceedings, after observing that the dividing line between an administrative power and a quasi-judicial power is quite thin and is being gradually obliterated. This Court observed that horizon of natural justice is constantly expanding. Aim of the

¹ (1969) 2 SCC 262

rules of natural justice is to secure justice or to put it negatively to prevent miscarriage of justice. Rules of natural justice operate in areas not covered by any law validly made. Natural justice do not supplant the law of the land but supplement it. This Court answered the above question in the following manner:

20. The aim of the rules of natural justice is to secure justice or to put it negatively to prevent miscarriage of justice. These rules can operate only in areas not covered by any law validly made. In other words they do not supplant the law of the land but supplement it. The concept of natural justice has undergone a great deal of change in recent years. In the past it was thought that it included just two rules namely: (1) no one shall be a judge in his own case (*Nemo debet esse judex propria causa*) and (2) no decision shall be given against a party without affording him a reasonable hearing (*audi alteram partem*). Very soon thereafter a third rule was envisaged and that is that quasi-judicial enquiries must be held in good faith, without bias and not arbitrarily or unreasonably. But in the course of years many more subsidiary rules came to be added to the rules of natural justice. Till very recently it was the opinion of the courts that unless the authority concerned was required by the law under which it functioned to act

judicially there was no room for the application of the rules of natural justice. The validity of that limitation is now questioned. If the purpose of the rules of natural justice is to prevent miscarriage of justice one fails to see why those rules should be made inapplicable to administrative enquiries. Often times it is not easy to draw the line that demarcates administrative enquiries from quasi-judicial enquiries. Enquiries which were considered administrative at one time are now being considered as quasi-judicial in character. Arriving at a just decision is the aim of both quasi-judicial enquiries as well as administrative enquiries. An unjust decision in an administrative enquiry may have more far reaching effect than a decision in a quasi-judicial enquiry. As observed by this Court in *Suresh Koshy George v. University of Kerala* [1968 SCC OnLine SC 9] the rules of natural justice are not embodied rules. What particular rule of natural justice should apply to a given case must depend to a great extent on the facts and circumstances of that case, the framework of the law under which the enquiry is held and the constitution of the Tribunal or body of persons appointed for that purpose. Whenever a complaint is made before a court that some principle of natural justice had been contravened the court has to decide whether the observance of that rule was necessary for a just decision on the facts of that case.

22. As observed in *A.K. Kraipak* (supra), the rules of natural justice are constantly expanding. A Constitution Bench of this Court in *S.N. Mukherjee Vs. Union of India*² held that an administrative authority exercising quasi-judicial functions must record the reasons for its decision. An important consideration for holding so is that the reasons so recorded would enable the higher forum to effectively exercise appellate or supervisory powers. Further the requirement of recording reasons would guarantee consideration by the authority; introduce clarity in the decisions; and minimise chances of arbitrariness in decision making. Recording of reasons by an administrative authority serves a salutary purpose by excluding chances of arbitrariness and ensuring a degree of fairness in the decision making process. The Bench clarified that the requirement that reasons be recorded should govern the decisions of an administrative authority exercising quasi-judicial functions irrespective of the fact whether the decision is subject to appeal, revision or judicial

² (1990) 4 SCC 594

review. The Bench conclusively held that except in cases where the requirement has been dispensed with, expressly or by necessary implication, an administrative authority exercising judicial or quasi-judicial functions is required to record the reasons for its decision.

23. If this is true for an administrative authority exercising quasi-judicial functions, it is all the more true for a judicial tribunal vested with adjudicatory powers.

24. In *Municipal Corporation of Greater Mumbai Vs. Ankita Sinha*³, this Court referred to its earlier decision involving the same parties whereby and whereunder the question as to whether National Green Tribunal (NGT) can exercise *suo motu* jurisdiction or initiate *suo motu* action was answered in the affirmative. Thereafter, this Court held that even if NGT intends to initiate *suo motu* action, it must provide an opportunity of hearing to persons likely to be affected before passing any adverse order against them. In that context, this Court held that the impugned *ex-parte*

³ 2021 SCC Online SC 1298

preemptory order passed by the NGT without giving opportunity to the person likely to be affected by such order be treated as effaced from the record. This Court made it amply clear that NGT is obliged to hear the party before issuing any adverse directions which is likely to be directly affected by it, including an action initiated *suo motu*.

25. This Court in *T. Takano Vs. Securities and Exchange Board of India*⁴ examined the issue of disclosure of all relevant materials to the parties in the context of disclosure of investigative report submitted to the Securities and Exchange Board of India under Regulation 9 of the Securities and Exchange Board of India (Prohibition of Fraudulent and Unfair Trade Practices Relating to Securities Market) Regulations, 2003 to the noticee to whom the show cause was issued and held that possession of information by both the parties can aid the courts in determining the truth of the contentions. The role of the court is not restricted to interpreting the provisions of law but also in determining the

⁴ (2022) 8 SCC 162

veracity and truth of the allegations made before it. The court would be able to perform this function accurately only if both parties have access to information and possess the opportunity to address arguments and counter arguments related to the information.

25.1. Elaborating further, this Court held that principles of fairness and transparency of adjudicatory proceedings are the cornerstones of the principle of open justice. This is the reason why an adjudicatory authority is required to record its reasons for every judgment or order it passes. The purpose of disclosure of information is not merely individualistic that is to prevent errors in the verdict but is also towards fulfilling the larger institutional purpose of fair trial and transparency. Therefore, all relevant materials must be disclosed; otherwise it would be fundamentally contrary to the principles of natural justice. In the circumstances, this Court concluded as under:

50.1. A quasi-judicial authority has a duty to disclose the material that has been relied upon at the stage of adjudication.

50.2. An ipse dixit of the authority that it has not relied on certain material would not exempt it of its liability to disclose such material if it is *relevant* to and has a *nexus* to the action that is taken by the authority. In all reasonable probability, such material would have influenced the decision reached by the authority.

50.3. Thus, the actual test is whether the material that is required to be disclosed is relevant for purpose of adjudication. If it is, then the principles of natural justice require its due disclosure.

26. *State Bank of India Vs. Rajesh Agarwal*⁵ is a case where this Court once again reiterated that principles of natural justice are not mere legal formalities. They constitute substantive obligations that need to be followed by decision-making and adjudicating authorities. This Court held as under:

36. We need to bear in mind that the principles of natural justice are not mere legal formalities. They constitute substantive obligations that need to be followed by decision-making and adjudicating authorities. The principles of natural justice act as a guarantee against arbitrary action, both in terms of procedure and substance, by judicial, quasi-judicial,

⁵ (2023) 6 SCC 1

and administrative authorities. Two fundamental principles of natural justice are entrenched in Indian jurisprudence : (i) *nemo judex in causa sua*, which means that no person should be a Judge in their own cause; and (ii) *audi alteram partem*, which means that a person affected by administrative, judicial or quasi-judicial action must be heard before a decision is taken. The courts generally favour interpretation of a statutory provision consistent with the principles of natural justice because it is presumed that the statutory authorities do not intend to contravene fundamental rights. Application of the said principles depends on the facts and circumstances of the case, express language and basic scheme of the statute under which the administrative power is exercised, the nature and purpose for which the power is conferred, and the final effect of the exercise of that power.

26.1. Further, this Court held in clear terms that every order or proceeding which involves civil consequences or adversely affects a citizen should be in accordance with the principles of natural justice.

27. In *Kantha Vibhag Yuva Koli Samaj Parivartan Trust Vs. State of Gujarat* ⁶, this Court dealt with an appeal arising out of an order passed by the NGT dismissing an original application alleging environmental degradation and seeking restitution of the environment. This Court observed that it is important to differentiate expert committees which are set up by the courts/tribunals from those set up by the government in exercise of executive powers or under a particular statute and held as follows:

17. It is first important to differentiate Expert Committees which are set up by the courts/tribunals from those set up by the Government in exercise of executive powers or under a particular statute. The latter are set up due to their technical expertise in a given area, and their reports are, subject to judicially observed restraints, open to judicial review before the courts when decisions are taken solely based upon them. The precedents of this Court unanimously note that courts should be circumspect in rejecting the opinion of these committees, unless they find their decision to be manifestly arbitrary or mala fide. On the other hand, the courts/tribunals themselves set up Expert Committees on occasion. These committees are

⁶ (2023) 13 SCC 525

set up because the fact-finding exercise in many matters can be complex, technical and time-consuming, and may often require the committees to conduct field visits. These committees are set up with specific terms of reference outlining their mandate, and their reports have to conform to the mandate. Once these committees submit their final reports to the court/tribunal, it is open to the parties to object to them, which is then adjudicated upon. The role of these Expert Committees does not substitute the adjudicatory role of the court or tribunal. The role of an Expert Committee appointed by an adjudicatory forum is only to assist it in the exercise of adjudicatory functions by providing them better data and factual clarity, which is also open to challenge by all the parties concerned. Allowing for objections to be raised and considered makes the process fair and participatory for all the stakeholders.

27.1. This Court also referred to an earlier decision in the case of *Sanghar Zuber Ismail Vs. Union of India*⁷ wherein it was held that constitution of an expert committee does not absolve NGT of its duty to adjudicate. The adjudicatory functions of NGT cannot be assigned to committees, even expert committees. The decisions have to be that of NGT. NGT

⁷ (2021) 17 SCC 827

has been constituted as an expert adjudicatory authority under the statute. The discharge of its functions cannot be obviated by tasking committees to carry out a function which vests in the NGT. Adverting to the facts of that case, this Court held that NGT had abdicated its jurisdiction by entrusting judicial function to an administrative expert committee. An expert committee may be able to assist NGT, for instance, by carrying out a fact finding exercise but the adjudication has to be by NGT.

28. This Court in *Grasim Industries Limited Vs. State of Madhya Pradesh*⁸ noticed that NGT had followed a similar procedure as in the present case. The procedure followed by NGT has been summed up in the following manner:

4. After the NGT entertained the O.A. on the basis of the letter addressed by Respondent No. 1, it initially directed the plant of the appellant to be examined by the State Pollution Control Board. After the receipt of the report of the State Pollution Control Board, the Court appointed a Joint Committee to give its report. The said Joint Committee made certain

⁸ (2024) SCC Online SC 3538

recommendations and the NGT passed the impugned order on the basis of the said recommendations.

5. The material placed on record would also reveal that the appellant herein was not made a party to the proceedings before the learned NGT or before the Joint Committee. Though an application for impleadment was filed by the appellant, the same was rejected by the learned NGT.

6. It further appears that even the Joint Committee appointed by the NGT neither gave any notice to the appellant nor an opportunity was given of being heard. Though, this objection was specifically taken by the appellant, the NGT observed “We asked the learned Counsel whether the stand of the unit is that the violations found never existed or whether they existed but have been remedied. His answer is later. It is patent that there were violations.

28.1. It was in the above context that this Court held that the procedure followed by NGT was totally unknown to the settled principles of natural justice. Neither was any notice given by the joint committee to the appellant before giving an adverse report against the appellant nor the NGT permitted impleadment of the appellant as a party respondent. NGT could not have proceeded further with the matter even at the

initial stage without impleading the appellant as a party respondent. Approach adopted by the NGT clearly smacks of condemning a person unheard. NGT cannot outsource an opinion and base its decision on such opinion.

29. In *Delhi Pollution Control Committee Vs. Lodhi Property Company Limited*⁹, this Court examined the challenge of Delhi Pollution Control Board to a judgment of the Delhi High Court whereby it was held that Delhi Pollution Control Board is not empowered to levy compensatory damages in exercise of powers under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 and Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 on the ground that such an action amounts to imposition of penalty provided for in Chapters VI and VII of the aforesaid Acts and, as such, the procedure contemplated thereunder will be the only method for imposing and collecting compensatory damage. The core question in that case was whether the regulatory boards in exercise of powers under

⁹ 2025 SCC OnLine SC 1601

Section 33A of the Water Act and Section 31A of the Air Act can impose and collect as restitutionary and compensatory damages fixed sums of monies or require furnishing bank guarantees as an *ex-ante* measure towards potential environmental damage? The above question was answered in the affirmative by holding that pollution control boards can impose and collect as restitutionary and compensatory damages, fixed sums of monies or require furnishing bank guarantees as an *ex-ante* measure towards potential environmental damage in exercise of the aforesaid powers. However, what is relevant for our present consideration is the following declaration:

39. * * * * *

(c) it is further directed that the power to impose or collect restitutionary or compensatory damages or the requirement to furnish bank guarantees as an *ex-ante* measure under Sections 33A and 31A of the Water and Air Acts shall be enforced only after detailing the principle and procedure incorporating basic principles of natural justice in the subordinate legislation.

30. Having surveyed the relevant case law on the subject, let us revert back to the present case. From the

conspectus of facts and law, it is clearly evident that the impugned orders are in complete violation of the procedures laid down in the Water (Prevention and Control of Pollution) Act, 1974, the Environment (Protection) Act, 1986, more particularly Sections 21 and 22 of the Water Act and the National Green Tribunal Act, 2010, including Section 19 thereof. It is crystal clear that the impugned decisions which entail adverse civil consequences upon the appellant were passed without following the due procedure laid down under the statute as well as the elementary principles of natural justice. We, therefore, have no hesitation in declaring such orders to be illegal and null and void.

31. NGT exercises judicial functions. Therefore, it is all the more necessary for the NGT to adhere to a fair procedure which is statutorily laid down of which principles of natural justice are an inalienable part. Rigor of Section 19(1) of the National Green Tribunal Act, 2010 is *qua* the procedure to be adopted by the NGT in conducting its proceedings. It cannot be stretched to abandon the statutory procedure laid down

under Sections 21 and 22 of the Water Act and by outsourcing investigation to administrative committees by overlooking the statutory provisions and basing its decisions on the recommendation of such administrative committee. This is not within the remit of NGT.

32. As we have noticed above, this is a classic case where in the quest for doing justice, NGT has ended up doing just the reverse.

33. Ordinarily, in a case where there is violation of the principles of natural justice, parties are relegated to the adjudicatory forum to re-do the exercise after following the due process. But in this case, the entire exercise has been vitiated because of non-conforming to the laid down procedure contemplated under Sections 21 and 22 of the Water (Prevention and Control of Pollution) Act, 1974. In such circumstances, relegating the parties back to the NGT in our considered opinion would serve no useful purpose. However, we clarify that it will always be open to the UPPCB to carry out inspection and take remedial measures *qua* the sugar mill

of the appellant by following the procedure laid down under the Water Act and after complying with the due process statutorily laid down thereunder, including by adhering to the principles of natural justice.

34. Accordingly and in the light of the above, the impugned orders dated 15.02.2022 and 16.09.2022 passed by the NGT in O.A. No. 71/2021 are hereby set aside. Consequently, the civil appeals are allowed. However, there shall be no order as to cost.

.....J.
[MANOJ MISRA]

.....J.
[UJJAL BHUYAN]

**NEW DELHI;
SEPTEMBER 01, 2025.**

