Before the Green Tribunal, Eastern Zone Bench at Kolkata

MEMORANDUM OF APPLICATION

[Under Section 18 (1) read with sections 14 & 15 and under Section 18 (2) of the National Green Tribunal Act, 2010]

Original Application No. …….. /2024/EZ

Ankur Sharma

…… Applicant

-Versus-

The State of West Bengal & Ors.

…… Respondents

Compilation – I

Ankur Sharma

Ankur Sharma
(Applicant-in-person)
Mobile No. 9433883322
E-mail: adv.ankursharma9@gmail.com

Before the Green Tribunal, Eastern Zone Bench at Kolkata

MEMORANDUM OF APPLICATION

[Under Section 18(1) read with sections 14 & 15 and under Section 18 (2) of the National Green Tribunal Act, 2010]

Original Application No. ..... /2024/EZ

Ankur Sharma

.....Applicant

-Versus-

The State of West Bengal & Ors.

.....Respondents

Compilation – II

Sl	Particulars	Annexures and page no.
1.	A photocopy of the report.	'P-1' (35-49)
2.	Photocopies of some news articles.	'P-2' (50-53)
3.	Photographs of Kolkata Leather Complex.	'P-3' (54-63)
4.	Photocopies of the emails.	'P-4 (64-70)
5.	Photocopy of another news article.	'P-5' (71-73)
6.	Photocopy of letter containing directions.	'P-6' (74-82)

Ankur Sharma

Ankur Sharma
(Applicant-in-person)
Mobile No. 9433883322
E-mail: adv.ankursharma9@gmail.com

Before the Green Tribunal, Eastern Zone Bench at Kolkata

MEMORANDUM OF APPLICATION

[Under Section 18(1) read with sections 14 & 15 and under Section 18 (2) of the National Green Tribunal Act, 2010]

Original Application No. ..... /2024/EZ

IN THE MATTER OF :

Ankur Sharma son of Shri Ambooj Sharma, resident of 13/3, Dr. P. K. Banerjee Road, P.O., P.S. & District – Howrah, West Bengal, PIN – 711101.

.....Applicant

-VERSUS –

1. The State of West Bengal represented by the Chief Secretary, Government of West Bengal having office at NABANNA (13th Floor), 325, Sarat Chatterjee Road, Shibpur, Howrah - 711102. Email : cs-westbengal@nic.in

2. Ministry of Environment, Forest and Climate Change, Government of India service through its Deputy Director General, Integrated Regional Office, Kolkata, IB-198,

Sector-III, Salt Lake City, Kolkata – 700106. Email :

iro.kolkata-mefcc@gov.in

3. Central Pollution Control Board represented by its Member Secretary having office at PARIVESH BHAWAN, East Arjun Nagar, Delhi - 110032.

Email : mscb.cpcb@nic.in.

4. Department of Environment, Government of West Bengal through its Principal Secretary having office at PRANISAMPAD BHAWAN, Block (5th Floor), LB-II, Salt Lake, Sector–III, Bidhannagar, Kolkata – 700 106. Email : prsecy.env-wb@gmail.com

5. West Bengal Pollution Control Board represented by its Member Secretary having office at PARIBESH BHAVAN, 10A, Block - L.A., Sector - III, Salt Lake City, Kolkata - 700 106. Email :

ms.wbpcb-wb@bangla.gov.in

6. The District Magistrate, South 24 Parganas, having office at 25, Belvedere Road, Alipore, Kolkata, West Bengal 700027.

Email : dm-ali@nic.in.

7. Kolkata Metropolitan Development Authority through its Chief Executive Officer having office at Unnayan Bhavan, DJ - 11, Sec - II, Salt Lake, Kolkata – 700091.

Email : ceokmda@gmail.com

8. State Water Investigation Directorate, West Bengal through its Director having office at Nirman Bhavan, DF Block, Sector 1, Bidhannagar, , West Bengal, PIN - 700091

Email : directorswid@gmail.com

9. Tardaha Gram Panchayet through its Secretary having office at Tardaha, Tardaha Kapasati, West Bengal, PIN -

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH
Regn. No. 3/1996
GOVT. OF W.B.

743502. Email ; pradhan.tardahgp@gmail.com

10. M/s. M. L. Dalmiya & Company Limited through one of its Directors Ms. Baishali Dalmiya having office at 32 Shakespear Sarani Kolkata, West Bengal, PIN – 700017

Email : mldalmiya@gmail.com

11. Calcutta Leather Complex Tanners Association through its General Secretary having office at Kolkata Leather Complex, Karaidanga, P.O. - Bhojerhat, P.S. Kolkata Leather Complex, South 24 Parganas, PIN -743502.

Email : clctanners@gmail.com

DEBABRATA CHAKRABORTY NOTARY GOVT. OF W.B. HOWRAH Regn. No 3/1996

TO

THE HON'BLE CHAIRMAN AND HIS COMPANION MEMBERS OF THE NATIONAL GREEN TRIBUNAL.

HUMBLE APPLICATION SUBMITTED BY THE APPLICANT ABOVE NAMED

Synopsis

The instant Application has been filed by the Applicant against gross pollution being caused and spread by Kolkata Leather

Complex. Kolkata Leather Complex is an industrial complex located at Karaidanga, P.O. - Bhojerhat, P.S. Kolkata Leather Complex, South 24 Parganas, PIN -743502 housing about 500 tanneries. Though the leather complex was set up by the government after an order was passed by the Hon'ble Supreme Court to curb pollution being caused by tanneries located in Tangra, Topsia and Tiljola areas of Kolkata but on the contrary KLC reflects a total failed industrial complex. River Bidyadhari and Sundarbans are also being grossly polluted due to effluents released by KLC through Basanti canal which collects effluents from KLC are drains such effluents to river Bidyadhari which has its end point at Sundarbans.

The KLC is causing massive water pollution by releasing untreated effluents containing chromium and other carcinogenic elements into Basanti canal leading to river Bidyadhari, air pollution, soil pollution by dumping toxic wastes into adjacent water bodies and vacant plots.

It is submitted that the present Application has been made seeking appropriate directions for (i) Directing the Respondent Authorities to ensure that no effluent is discharged into Basanti canal and Kolkata Leather Complex follows Zero Liquid Discharge (ZLD) technology and reuse recycled water to ease burden on groundwater; (ii) Directing the Respondent Authorities to ensure that no waste is dumped in and around Kolkata Leather Complex and water bodies ; (iii) Directing the Respondent Authorities to ensure overhauling and installation of more modules of Common Effluent Treatment Plant within Kolkata Leather Complex commensurate with the quantity of effluent

generated by KLC also considering proposed expansion of Kolkata Leather Complex, amongst others.

Gross violation of the environmental norms is observed. On one hand, the Central and the State Government are spending thousands of crores of rupees in cleaning the rivers of the country and on the other hand errant industries with conspicuous apathy of state authorities are flamboyantly discharging toxic effluents into rivers through canals openly in utter disregard of governments' wishes, policies and endeavour. Sheer inaction of the respondent authorities have resulted in this menace to continue for years. Effluents are openly being discharged into canal leading to river Bidyadhari while the civic authorities are sitting tight with their eyes shut. In spite of complaint to the authorities no effective step was taken by the Respondent Authorities, and finding no other alternatives the Applicant was compelled to approach this Hon'ble Tribunal for justice.

List of Dates

05//12/2020	Complaint vide email lodged with : (i) The Chief Secretary, Government of West Bengal (ii) The Principal Secretary, Department of Environment, Government of West Bengal (iii) The Chairman, West Bengal Pollution Control Board. (iv) The Member Secretary, West Bengal Pollution Control Board. (v) The Hon'ble Minister, Ministry of

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH * GOVT. OF W.B. * Regn. No 3/1996

	Environment, Forest and Climate Change, Government of India. (vi) The Secretary, Ministry of Environment, Forest and Climate Change, Government of India. (vii) The Chairman, Central Pollution Control Board. (viii) The Chief Environment Officer, Department of Environment, Government of West Bengal.

FACTS IN BRIEF

MOST RESPECTFULLY SHEWETH :

1. That the Applicant is an Advocate. The Applicant is working, amongst others, for the protection of the environment and water bodies and protection of the right to a clean environment for every citizen guaranteed under Article 21 of the Constitution of India, 1950 and in discharge of his duty under Article 51A he has raised his voice in past against many other illegalities throughout State of West Bengal, particularly against air pollution, filling of water bodies, pollution by fish markets, conversion of the cities into concrete jungles, pollution of river Hooghly, devastation of East Kolkata Wetlands, devastation of Dankuni Wetlands, etc. The Applicant is filing the instant application under Section 14 and 15 read with section 18 of the National Green Tribunal Act, 2010.

2. That the Respondent no. 1 herein is the head of all other State Respondents. The Respondent no. 2 is the representative of the

Government of India. The Respondent no. 3 is a body which provides technical assistance and guidance to the State Pollution Control Boards, carry out and sponsor investigation and research relating to problems of water and air pollution, and for their prevention, control or abatement. The Respondent no. 4 herein is responsible for preservation of environment and ecology in State. The Respondent no. 5 herein is the regulatory authority for implementation of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Rules under these Acts. The Respondent no. 6 herein is responsible for total administration of its District and prepares, publishes and supervises implementation of District Environment Plan. The Respondent no. 7 herein is the authority of the state which is presently developing expansion part of Kolkata Leather Complex. The Respondent no. 8 is an independent Directorate under the Water Resources, Investigation & Development Department, Government of West Bengal, which issues Permit for groundwater extraction, monitoring the Groundwater Level and carries assessment of groundwater, etc. The Respondent no. 9 is the local body/panchayet. The Respondent no. 10 is the company which was awarded Build-operate-transfer rights of Kolkata Leather Complex. The Respondent no. 11 is the association of all tanneries present within Kolkata Leather Complex.

3. That the Applicant is filing this Application against gross pollution and environmental damages being caused by Kolkata Leather Complex (also called as Calcutta Leather Complex) located at Karaidanga, P.O. - Bhojerhat, P.S. Kolkata Leather Complex,

South 24 Parganas, PIN - 743502 (hereinafter for the sake of brevity referred and called as "KLC"). Though KLC has its own Common Effluent Treatment Plant (hereinafter for the sake of brevity referred to as "CETP") toxic metal and chemical laden effluent are being drained into a canal (known as Basanti canal in the locale) leading to river Bidyadhari which drains into Bay of Bengal at Sundarbans – an internationally recognized RAMSAR site.

4. That Kolkata Leather Complex is one such industrial complex set up in the year 2005 resulted from aftermath of an order passed by Hon'ble Supreme Court related to pollution of river Ganga by tanneries spread over different states.

5. That originally leather industries/tanneries of Kolkata were mainly located in Tangra, Tiljola and Topsia areas of Kolkata. After passing of Hon'ble Supreme Court's order, all tanneries were, however, either forced to shut down or shifted to Kolkata Leather Complex as set up by the Government of West Bengal.

6. That the Government of West Bengal decided to implement the Kolkata Leather Complex project on Build-operate-transfer (hereinafter referred to as BOT) basis. The BOT contract was awarded to one M/s. M. L. Dalmiya & Company Limited i.e. the Respondent no. 10 herein in the year 1997. The said company became the principal lessee of the entire KLC and was responsible for creating all infrastructures of the KLC viz. roads, canals, pipework, CETP etc.

7. That it is gathered from a report of September, 2001 published on website of The United Nations Industrial Development Organisation Leather and Leather Products Industry Panel that :

"It was decided that this complex would accommodate all industrial and commercial activities related to leather manufacture and production of leather goods. For this purpose 438 ha land had been identified in the district South 24 Parganas, about 22 km from Kolkata on the eastern side of the E.M. Bypass, along the road from Kolkata to Basanti and adjacent to the SWF (or Bhangar Kata) canal.

A CETP has been planned for the KLC. In anticipation of phased migration of tanneries to KLC, it has been proposed to construct the CETP in six modules, each of 5,000 m3 /d. The treated effluent of the CETP will be discharged into one of Kolkata's storm water drainage canals, the Karaidanga (or SWF) Canal, transporting drainage water from Kolkata to a tidal river, which flows into the sea (Bay of Bengal).

The United Nations Industrial Development Organization (UNIDO), in agreement with the United Nations Development Programme and the Government of India, has provided technical assistance to the GoWB in designing one module of the CETP and corresponding solid waste disposal facilities.

The BOT contractor will be responsible for protection of the environment in KLC. For this purpose the BOT contractor shall establish an appropriate Environmental Management System (EMS) in KLC.

The management of the wastewater and solid waste disposal is a key responsibility of the BOT contractor. As such the BOT contractor has to set up an appropriate organisation for

operation and maintenance of the wastewater and solid waste facilities."

A photocopy of the said report in annexed herewith and marked by the letter and figure 'P-1'.

8. That as the tanneries started shifting to KLC it steadily became a huge hub of leather manufacturing. Again, as days passed pollution from KLC started increasing. At present KLC houses about 500 tanneries.

9. That though KLC was responsible to have state of art CETP and very many other pollution abatement systems but on the contrary KLC reflects a total failed industrial complex.

10. The basic foundation of KLC is very weak which transpires from a news article published on the internet showing how Calcutta Leather Complex Tanners Association filed a criminal case against M/s. M. L. Dalmiya & Company Limited for cheating each of them and not creating adequate infrastructures. News reports also indicates how tanneries within KLC installed borewells in violation of law. It transpires from a news report that :

"According to a member of the tanners' association, the main problem is in the pipes carrying waste to the effluent-treatment plant. "The pipes, built by the developers, are getting clogged. Why will we clog it up when we have to pay for the use of the system at the rate of around Rs 8 per square metre. We have agreed to the appointment of an administrator," he said.

Allegations have also surfaced that units in the complex are installing tubewells in violation of regulations on groundwater use, and that the sludge thrown up during leather processing is not

being disposed in vats. The tanners' association and Dalmiya have traded charges over these alleged lapses."

Another new reports shows how CAG has also flagged irregularities in the project :

"The project report on effluent transportation from the tanneries to the treatment plants at the complex were to be done as per the guidelines stipulated by United Nations. Non-corrosive and long-lasting HDPE pipelines were to be laid to transport the toxic effluents. But, the tanners' association recently found that there were no HDPE pipelines. Instead, brick sewer and RCC pipelines were found.

A CAG report had earlier pointed to the anomaly."

Photocopies of the said news articles are annexed herewith and collectively marked by the letter and figure 'P-2'.

11. That as a result of poor infrastructure, poor maintenance, erring approach of tannery owners and sheer apathy of the government, Kolkata Leather Complex is 'second to none' in environmental devastation in West Bengal.

12. The Applicant visited Kolkata Leather Complex on two occasions viz. 31.05.2023 and 16.02.2024 and noticed the following types of environmental violation/pollution :

(i) Water pollution - Large scale water pollution is caused by Kolkata Leather Complex, (a) the Common Effluent Treatment Plant (CETP) of the KLC does not function properly as a result of which untreated effluents are drained into the Basanti Canal ultimately leading to river Bidyadhari, (b) Effluent pipes are damaged en masse which

cause effluents to spread upon pathways and vacant plots causing massive pollution, (c) effluents from KLC drained into Basanti Canal release staunch smell which spread throughout the area and cause discomfort to nearby villages, (d) effluents from KLC reaches parts of East Kolkata Wetlands through Basanti canal and its adjoining canals causing damage to aquatic creatures.

(ii) Serious threat to river Bidyadhari and Sundarbans – The KLC not only causes water pollution but also seriously affects ecology of river Bidyadhari and Sundarbans. Draining of metal and chemical laden effluent into Basanti Canal flows to river Bidyadhari. Bidyadhari river drains such effluents into Bay of Bengal at Sundarban causing massive damage to the ecology of internationally recognized RAMSAR site – Sundarbans.

(iii) Soil pollution – Heaps of waste such as flesh linings and trimmings containing chromium, saving dust (end cuts of finished leather products), tail of animals, left over skin, raw hide, chromium, thermocol (expanded polystyrene), plastics, etc. are dumped in and around Kolkata Leather Complex mainly near water body located on the East of the complex causing massive damage to the environment.

(iv) Air pollution – Several tanneries located within KLC release toxic smoke and other fumes into the air causing massive air pollution and release of staunch smell into the environment. Majority of the factories within KLC do not have any Air Pollution Control Devices (APCDs) nor have any chimneys.

(v) Absence of green cover – Very few trees are present within the complex, though trees are very important for acting as buffer zone and filtering toxic air released from the industries. Many trees present within the complex are dying and many are unable to grow.

(vi) Groundwater depletion and contamination – Groundwater is being extracted rampantly without any checks and balance. Groundwater is being extracted by the industries unabated. Due to spillage of effluents containing metals and chemicals by defective pipes groundwater is at the same time getting contaminated.

(vii) Blatant violation of other environmental norms – Your Applicant during his two visits to the KLC was unable to find any unit within KLC having environmental data display board affixed at the gate of their unit. Raw hide were placed on pavements for drying, cattle such as cows were seen to be grazing around chemical infested grass etc.

Photographs of Kolkata Leather Complex captured by your Applicant are annexed herewith and marked by the letter and figure 'P-3' .

13. That Applicant on 30.05.2023 saw a news broadcast on television about local villagers around KLC agitating against destruction of environment by industrial units located at KLC. The Applicant visited the site on 31.05.2023 and noticed rampant air, water & soil pollution thereat viz. spillage of dirt acidic water spilled throughout KLC emitting filthy smell, heaps of waste lying throughout KLC, smoke and fumes being emitted by industries, etc.

14. That Applicant vide email dated 02.06.2023 lodged a complaint with the authorities containing list of some of polluting industries with the following prayers :

(a) Direct the Calcutta Leather Complex Tanners Association to immediately repair, if warranted and commission CETP,

(b) Direct all units located in the said complex to install captive ETP.

(c) Direct police authorities to register an F.I.R. against M. L. Dalmiya & Co. Ltd for illegalities practiced in construction of drainage system at Kolkata Leather Complex

(d) Impose exemplary environmental compensation upon units indulged in flouting environmental norms and draining effluents into canal and public lanes.

Photocopies of the said email and a forwarding email received by your Applicant from Central Pollution Control Board are annexed herewith and collectively marked by the letter and figure 'P-4'.

15. That numerous tanneries located in Kanpur, Uttar Pradesh migrated to Kolkata Leather Complex after the Government of Uttar Pradesh initiated a drive to crackdown erring tanneries flouting environmental norms and causing pollution as a result of which many tanneries shut down their business in Kanpur and migrated to KLC as the nation's premier safe hub for freedom of illegalities.

16. That Government of West Bengal in its pursuit of 'Ease of Doing Business' and filling coffers of the exchequer allowed industries to

flourish in KLC without keeping check on their pollution abatement systems.

17. That it is apparent that no attempts have been taken by any authority to stop the menace of pollution by KLC, may be, due to the policy of the state government 'Ease of doing Business". The CETP of KLC is not properly functional, nor tanneries within KLC are maintaining environmental norms viz. Chrome recovery units (CRUs) pre-treatment plants, air pollution control devices, etc.

18. That many fishermen of river Bidyadhari have also agitated against devastation of river Bidydhari by Kolkata Leather Complex. The following is gathered from a news article published in the year 2020 :

> "Around 10,000 families in the four blocks are solely dependent on fishing. But because of the pollution in this long stretch, several species of fish have disappeared," said a fisherman from Haroa who joined the protest march.
>
> An approximate 40km stretch of the Bidyadhari, from Haroa to Sandeshkhali, is polluted largely because of the alleged draining of industrial waste from the leather complex.
>
> "The leather complex authorities never realised they had been draining the poison into the river, not only endangering the riverine life forms but also robbing these people of their livelihood," said Gopesh Patra, a Trinamul Congress leader who is also the convener of the committee."

A photocopy of the said news article is annexed herewith and marked by the letter and figure 'P-5'.

19. That not just effluents are being drained into the river Bidyadhari through Basanti Canal but such effluents also reach internationally recognized East Kolkata Wetlands through other adjoining canals causing massive damage to the East Kolkata Wetlands.

20. That KLC has a wide network of open canals and drain pipes for carrying effluents from the tanneries located within the complex and transports such effluents into the Common Effluent Treatment Plant of KLC for treatment, and releasing treated effluents into Basanti canal. Most of the effluent transporting pipes are, however, damaged spilling effluent upon lanes, main arterial roads inside and vacant plots. Tanneries within KLC bypass effluent drain pipes and similarly drain effluents upon lanes and vacant plots causing massive pollution.

21. That during visit, the Applicant was shocked to feel obnoxious smell of effluents right from a distance of 1 km away from Kolkata Leather Complex showing how the environment is being plundered by KLC.

22. That the other alarming fact is that the said complex is situated in close proximity to East Kolkata Wetlands – a Ramsar Site. Such rampant draining of effluents into canals leading to East Kolkata Wetlands and river Bidyadhari is causing irreparable damage to the ecology of the East Kolkata Wetlands and river Bidyadhari.

23. The situation at KLC canvasses how KLC and its industrial units have turned environmental norms a hoax to be flouted in the State of West Bengal. It will also be revealed that the Common Effluent

Treatment Plant (CETP) of the complex is also not operating properly and/or already loaded to capacity.

24. Your Applicant states that it is true that tackling wastes is a challenging issue. However, there should be at least an initiative towards ensuring minimal damage to the environment. In the present case, it is evident that KLC and the government of West Bengal has no interest in stopping pollution nor does it bother for any stricture from the Hon'ble Judiciary which is evident from the fact that the government is allowing KLC to drain toxic effluents through Basanti canal into river Bidyadhari openly in broad daylight.

25. Your Applicant states that the Central Pollution Control Board issued directions to 14 tanneries of Unnao, Uttar Pradesh vide letter dated 20.11.2018 for abatement of pollution and if such directions are adopted by tanneries of KLC there would be drastic change in the present scenario.

A photocopy of said letter containing directions is annexed herewith and marked by the letter and figure 'P-6'.

26. Your Applicant states that on one hand crores of rupees are disbursed by Central Government for cleaning polluted river stretches across the country and on the other the Government of West Bengal in order to fetch revenue unabated is allowing KLC to drain toxic effluents into river Bidyadhari through Basanti canal. The Government of West Bengal is further expanding KLC for which an Environmental Clearance has also been obtained by Kolkata Metropolitan Development Authority in the year 2023.

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH
Regn. No. 3/1996
GOVT. OF W.B.

27. Your Applicant states that it is obligatory on part of the Private Respondents i.e. Calcutta Leather Complex Tanners Association and M/s. M. L. Dalmiya & Company Limited to ensure that KLC does not causes any form of pollution. Though assistance have been given by both central and state government, yet the private respondents are rampaging the environment by not treating effluents and other solid wastes causing various types of pollution.

28. Your Applicant states that industrialisation is essential for the country to develop but concerned industries must function with a sense of responsibility towards the environment and the community as a whole. An industry provides huge contribution to the nation's development but that does not grant them liberty and license to blatantly pollute the environment especially when there are technologies in place for abating pollution.

29. Your Applicant states that unabated extraction of ground water is being carried on by KLC and industries forming part of KLC. The ground water table of the district has already depleted to a great extent. Unabated extraction is further worsening the situation. Majority of the units present within KLC do have water monitors to check flow/quantity of groundwater extracted. Draining of toxic chemicals and metal laden effluents upon vacant land and water bodies is causing groundwater contamination. Contaminants include various types of carcinogen chemicals and metals such as chromium, hexavalent chromium, formaldehyde, cadmium, cobalt, lead, phenolics, nickel, sulphate, sulphide selenium, ammonia, arsenic, etc.

30. Your Applicant states that it may be considered difficult for West Bengal Pollution Control Board to single-handedly identify root

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH
Regn. No. 3/1996
GOVT. OF W.B.

cause of the menace and polluting industrial units forming KLC since there are hundreds of industrial units located within KLC. Joint teams comprising of officials from the Ministry of Environment, Forest and Climate Change, Government of India, West Bengal Pollution Control Board, Central Pollution Control Board, State Water Investigation Directorate and District Administration, ought to be constituted to inspect the areas and identify root cause of the menace and erring industrial units within KLC and produce records before the Hon'ble Tribunal.

31. That the Applicant states that a single visual inspection of KLC will reveal that KLC is hazardously devastating the environment and flouting provisions of the water prevention and control of pollution act 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment Protection Act, 1986, amongst others. The visual at site will also reveal that units within KLC are draining effluents on vacant lands and effluent carrying pipes of KLC are damaged beyond repair.

32. That not just the river Bidyadhari is being polluted by toxic effluents of the said canal released by KLC but such effluents also over flows in to farm lands and areas of EKW in vicinity of KLC.

33. That at first all effluents generating industrial units ought to install/repair Effluent Treatment Plants (ETPs) & Chrome Recovery Units (CRUs) then Common Effluent Treatment Plant ought to be overhauled to required capacity along with pipelines to ensure no leakage of effluent in case any ETP fails to functions. Proper treatment of effluents will ensure that no adverse impact is put on the environment nor the economy is affected thus ensuring implementation of sustainable development.

34. That due to huge quantity of toxic effluents the entire area in and around KLC stinks badly.

35. That due to the desperate rampant inaction of the Department of Environment, Government of West Bengal, West Bengal Pollution Control Board and other statutory authorities the environmental yard sticks in the state of West Bengal have become a hoax to violate as if it is part of the state policy compared to other states of the country which may also be the reason why tanneries from Uttar Pradesh are shifting to KLC. West Bengal is transforming into a safe haven for flouters of environmental norms and laws because maintaining healthy rapport by right from a Panchayat Member/Councillor of civic body to a Hon'ble Member of Cabinet of the Government with flouters of all laws around West Bengal has become the state policy and order of the day.

36. That the ecology of the river Bidyadhari and vicinity of KLC including EKW and other agricultural lands are devastated due to deliberate negligence by the state authorities resulting in gross pollution by KLC which is not only damaging the ecology of the river Bidyadhari and its vicinity but also pushing poor villagers residing in the vicinity of KLC to health risks owing to ground water contamination and other types of pollution.

37. The Statutory Authorities who are entrusted with the duty to prevent damage to the environment must monitor and take actions where they find any breach of law. In stead, they are sitting tight in spite of receiving complaint. No authority bothered to stop the menace of daylight dumping of toxic effluents into the river Bidyadhari through Basanti canal and upon vacant properties. Your Applicant wonders that there is hardly any seriousness of the

government in ensuring pollution free rivers and canals in the state that clearly canvasses the state policy of the government as stated herein above.

38. That it is quite unclear what prevents the Department of Environment, Government of West Bengal from implementing environmental norms and taking actions against wilful and desperate violators of such norms. If the Department of Environment, Government of West Bengal will continue to show a lackadaisical approach towards acting on complaints by common citizens, then the environment will continue to be plundered throughout the state.

39. That the Department of Environment, Government of West Bengal and the West Bengal Pollution Control Board ought to have been more active in stopping such gross violation of the environmental norms and laws.

40. That it can hardly be disputed that environmental pollution is a huge threat to man's physical surroundings, his health and those of other living species. The issue of pollution by tanneries ought to be dealt with utmost strictness by the authorities of the state. However, in the present case the state authorities allowed rampaging of the environment by not taking steps against the polluters. The entire vicinity of KLC is being devastated by "actions" of KLC and its polluting industrial units and "inaction" of the respondent authorities.

41. That environmental problems are often considered to be phenomena of highly developed and industrialized countries. However, developing countries suffer environmental problems due

to callous approach of industries towards the environment and lack of environmental belongingness of the concerned state authorities.

42. The Hon'ble Supreme Court of India has extended the dimension of Article 21 of the Constitution of India by declaring the right to a decent and clean environment as a Fundamental Right. The framers of the Constitution even prescribed duty upon the citizens to make every effort to keep the environment clean and to protect its forests, rivers, water-bodies, and to have compassion for the living creatures. That is the object of our holy constitution in relation to protection of environment with particular reference to rivers and water bodies.

43. Appropriate directions of varied dimensions and of serious consequences in accordance with the law are required to be passed by this Hon'ble Tribunal to protect the environment in and around KLC and river Bidyadhari, and such other or further orders to penalize the polluters, and restore the water bodies and canals to their original status in terms of water quality, purity and its bio-diversity.

44. It can hardly be disputed that a major part of the State of West Bengal is eco-sensitive and geologically fragile. Indiscriminate, unabated dumping of toxic effluents by industrial units into water streams and dumping of toxic waste into water bodies and upon vacant lands will be opposed to the geographical and ecological characteristics of the State. Such acts would be completely opposed to the expected norms of 'Sustainable Development' which finds a statutory expression in the provisions of Section 20 of the National Green Tribunal Act, 2010. Every industrial activity

has to be carried on keeping in mind the limitation and responsibilities expressed by nature itself.

45. It is submitted that conducts of the Respondent Authorities are contrary to every environmental legislation and principles of environmental protection. In spite of getting knowledge about damages being done to the environment by KLC, the authorities chose to sit tight over the issue for their own reasons.

46. It is submitted that due to the rapid growth of industries in KLC water streams are getting highly deteriorated in every aspect. Dumping of toxic waste in the vicinity of KLC is causing huge damage to the environment and environmental degradation.

47. It is submitted that the respondents are oblivious to the fact that rampant draining of toxic effluents and dumping of toxic waste in to water streams and vacant land is a grave concern which needs no elaboration.

48. It is submitted that due to aforesaid activities river Bidyadhari is turning toxic and will render to be unfit to support any life form.

49. It is submitted that the Respondent Authorities have turned a blind eye to the pollution and damages caused to the river Bidyadhari for their own reasons, may be, only to sabotage the efforts of Government of India of cleaning river throughout the country.

50. It is submitted that despite complaint, no stern actions were taken by the Respondent Authorities and effluents are still being drained into the river Bidyadhari through Basanti canal. The Respondent Authorities have miserably failed in performance of their duties.

51. The Respondents are in violation of several environmental laws and norms in so far as the manner in which toxic effluents are still

being drained into the river Bidyadhari through Basanti canal is concerned.

52. That having felt it necessary to protect he ecology of the area in and around KLC and river Bidyadhari which are getting devastated as a result of inaction and deliberate negligence of the Respondent authorities your Applicant begs to move the present application on the following amongst other grounds :

GROUNDS

A. For that the Respondent authorities have miserably failed to perform their duties as per the statute by way of allowing drainage of toxic effluents into the river Bidyadhari by KLC and its hundreds of industrial units through Basanti canal.

B. For that the Applicant has enough evidence to prove the devastation of the environment caused by KLC and its hundreds of industrial units located within the complex at Karaidanga, P.O. - Bhojerhat, P.S. Kolkata Leather Complex, South 24 Parganas, PIN -743502.

C. For that the Applicant has drawn the attention of the concerned government authorities vide email to awaken their conscience which are enclosed for kind consideration of this Hon'ble Tribunal and the government has turned their deaf ears.

D. For that government authorities ought to have taken stern legal actions against the perpetrators behind the unholy illegal act of polluting the environment and river Bidyadhari.

E. For that government authorities ought to have taken stern legal actions against the perpetrators engaged in illegal extraction of groundwater.

F. For that government authorities have deliberately neglected to stop industrials units of KLC from releasing toxic smoke and fumes polluting the air.

G. For that government authorities have deliberately neglected to stop industrials units of KLC from dumping toxic solid waste upon vacant plots in and around KLC.

H. For that government authorities have deliberately neglected to stop industrials units of KLC from dumping toxic effluents upon vacant plots in and around KLC.

I. For that government authorities have deliberately neglected Basanti canal and areas surrounding KLC for years since it falls outside city limits.

J. For that the Respondent Authorities have a duty under the law to protect rivers and waters bodies and safeguard them from pollutants, and maintain the rivers free from any contamination.

K. For that the inactions of the Respondent Authorities to perform their duties has resulted in the present predicament and violation of several environmental laws.

L. For that the Respondent Authorities ought to have considered that draining of toxic effluents in to river Bidyadhari through Basanti canal is against environmental laws.

M. For that the Respondent Authorities ought to have prevented the wrong doers from draining toxic effluents into river Bidyadhari through Basanti canal who candidly thwarted their authority itself.

N. For that the Respondent Authorities ought to have taken stern lawful steps against the perpetrators to prevent the ecology of the river Bidyadhari, Basanti canal and canals connected with EKW from devastation and steps to restore the river Bidyadhari and Basanti canal.

O. For that the Respondent Authorities ought to have been more vigilant in monitoring drainage of effluents and sewage from various canals into the river Bidyadhari, and not sitting tight even after receiving information of violations.

P. For that the failure of the respondents is violative of several environmental laws. It is also against the concept of sustainable development.

Q. For that the approach of the respondent authorities not to move an inch without any stricture from this Hon'ble Tribunal must be countermand.

R. For that section 18 (1) read with section 14 & 15 of the National Green Tribunal Act, 2010, the Hon'ble Court has ample jurisdiction to adjudicate this matter;

S. For that under section 18(2) of the National Green Tribunal Act, 2010, your applicant is competent to file this application before the Hon'ble Tribunal.

LIMITATION:

The Applicant declares that as per the National Green Tribunal Act 2010 this application is well within the prescribed time since there is continuous cause of action.

DEBABRATA CHAKRABORTY NOTARY HOWRAH GOVT. OF W.B. Regn. No. 3/1996

INTERIM RELIEF :

Pending disposal of the application, the applicants pray that this Hon'ble Tribunal be pleased to :

A. Constitute a committee comprising of officials from Ministry of Environment, Forest and Climate Change, Government of India, West Bengal Pollution Control Board, Central Pollution Control Board, State Water Investigation Directorate and District Administration to immediately cause inspection of KLC and all industries located therein along with inspection of all pipelines and Common Effluent Treatment Plant of KLC, amongst others and also identify factories/industrial units who are indulging (i) draining of effluents upon vacant lands and roads, (ii) illegal extraction of ground water, (iii) releasing toxic smoke and fumes into the air, (iv) dumping toxic waste upon vacant land and water bodies and submit report before this Hon'ble Tribunal ;

B. Direct the Respondents to immediately issue directions upon all industrial units to install/overhaul Effluent Treatment Plants (ETPs) and Chrome Recovery Units (CRUs) to ensure any effluent drained from such factories is pure and non-toxic ;

C. Direct the Respondent authorities and/or Committee so constituted to submit an Action Plan for stopping the pollution by KLC and pollution of river Bidyadhari through Basanti Canal due to draining of toxic effluents by KLC and restoration of the said canal.

D. Direct the Respondent authorities to issue directions upon all effluent generating industrial units forming part of KLC to ensure installation of Effluent Treatment Plants and Chrome

Recover Units having continuous online monitoring system connected with the web server of West Bengal Pollution Control Board and Central Pollution Control Board to ensure that the statutory authorities as well as common public are aware about the quality of effluents discharged in to Basanti canal ;

E. Direct the Respondents not to permit dumping of any waste or effluent into Basanti canal.

F. Impose an estoppel against further construction/expansion of KLC until the orders to be passed by this Hon'ble Tribunal are strictly adhered to.

G. And pass any such further order or orders as this Hon'ble Tribunal may deem fit proper and necessary up on considering the facts and circumstances of the case.

PRAYER

For the reasons stated above, it is humbly prayed that this Hon'ble Tribunal may be pleased to :

A. Admit the Application and issue notice upon the Respondents ;

B. Direct the Respondent authorities to immediately cause inspection of factories located within KLC at Karaidanga, P.O. - Bhojerhat, P.S. Kolkata Leather Complex, South 24 Parganas, PIN -743502, amongst others who are indulged in draining effluents upon vacant lands and cause an inspection of CETP plant and submit report before this Hon'ble Tribunal ;

C. Direct the Respondent authorities to issue directions upon all effluent generating industrial units forming part of KLC to ensure installation of Effluent Treatment Plants and Chrome Recover Units having continuous online monitoring system connected with the web server of West Bengal Pollution Control Board and Central Pollution Control Board to ensure that the statutory authorities as well as common public are aware about the quality of effluents discharged in to Basanti canal;

D. Direct the Respondent Authorities to inspect Ground water extraction permission and water meters of all industrial units forming part of KLC and take stern legal steps against units indulging in illegal extraction of groundwater ;

E. Direct the Respondent no. 3 to issue similar types of directions upon all tanneries of KLC as stated in paragraph no. 25 hereinabove (annexure 'P-6') ;

F. Direct the Respondent Authorities to ensure that no effluent is discharged into Basanti canal and KLC follows Zero Liquid Discharge (ZLD) technology and reuse recycled water to ease burden on groundwater ;

G. Direct the Respondent Authorities to ensure that no waste is dumped in and around KLC and water bodies ;

H. Direct the Respondent Authorities to ensure overhauling and installation of more modules of Common Effluent Treatment Plant within KLC commensurate with the quantity of effluent generated by KLC also considering proposed expansion of KLC ;

I. Direct the Respondent Authorities to cause thorough cleaning and dredging of Basanti Canal ;

J. Direct the Private Respondents to increase total green belt cover to at least 33% area within KLC ;

K. Direction to impose exemplary penalty upon perpetrators in consonance with the concept of "Polluters pay Principal" for discharging toxic effluents into Basanti canal and extraction of ground water beyond respective sanctioned limit ;

L. Direct the Respondent Authorities to take all steps to ensure that the ecology of the Basanti canal is restored and quality, healthy quality of water is maintained ;

M. Direct the Respondents to take remedial steps for restoring the damage cause to river Bidyadhari and Sundarbans ;

N. Issue an order to Constitute a high level committee to monitor installation of Effluent Treatment Plants (ETPs) and Chrome Recovery Units (CRUs) and restoration of the canal and submit periodical reports to this Hon'ble Tribunal ;

And pass any such further order or orders as this Hon'ble Tribunal may deem fit proper and necessary upon considering the facts and circumstances of the case.

VERIFICATION

I, Ankur Sharma son of Shri Ambooj Sharma, aged about 26 years, residing at 13/3, Dr. P.K. Banerjee Road, P.S. & District – Howrah, West Bengal, PIN – 711101 state that I am the Applicant of this Application. I do hereby verify the contents of paragraphs no. 1 to 25, and the rest are true to the best of my knowledge, and are my humble prayers before your Lordship and I have not suppressed any material facts herein.

NOTARIAL

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH GOVT. OF W.B.

Regn. No 3/1996

NOTARIAL

Date: 26/02/2024

Place: Howrah

Applicant

AFFIDAVIT

No. 74 Date 26/2/2024.

I, Ankur Sharma son of Shri Ambooj Sharma, aged about 26 years, residing at 13/3, Dr. P.K. Banerjee Road, P.S. & District – Howrah, West Bengal, PIN – 711101 state that I am the Applicant of this Application and I am well conversant with the facts and circumstances of the instant Original Application and I am competent to swear and affirm this Affidavit. I do hereby verify the contents of paragraphs no. 1 to 25, and the rest are true to the best of my knowledge, and are my humble prayers before your Lordship and I have not suppressed any material facts herein.

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH GOVT. OF W.B. Regn. No. 3/1996

Date: 26/02/2024

SOLEMNLY AFFIRMED AND DECLARED BEFORE ME BY THE DEPONENT ON IDENTIFICATION OF ADVOCATE

DEBABRATA CHAKRABORTY
NOTARY AT HOWRAH
GOVT. OF WEST BENGAL
Place-Judge's Court
Howrah - 711 101
W.B. (India)
26 FEB 2024

Place: Howrah

Applicant

Identified by
Sudipan Das Advocate
F 1091/2015

Annexure 'P-1'
-35-

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION

REGIONAL PROGRAMME FOR POLLUTION CONTROL IN THE TANNING INDUSTRY IN SOUTH EAST ASIA

US/RAS/92/120-MODEL CETPs

September 2001

COMMON EFFLUENT TREATMENT PLANT KOLKATA LEATHER COMPLEX KOLKATA, INDIA

Prepared by

A. Sahasranaman & K. V. Emmanuel
Regional Programme Office

Project Manager

Jakov Bu1jan, SIDO, UNIDO, Vienna

TABLE OF CONTENTS

Annexures

LIST OF SYMBOLS & ABBREVIATIONS

BOD_5	Biological oxygen demand
BOT	Build-operate-transfer
CCRP	Central chromium recovery plant
CETP	Common effluent treatment plant
KLC	Kolkata Leather Complex
CLRI	Central Leather Research Institute
COD	Chemical oxygen demand
GoWB	Government of West Bengal
ha	Hectares
INR	Indian Rupees
m	meter
mg/l	milligram/litre
mm	millimeter
MLD	Million litres per day
MoEF	Ministry of Environment and Forests
HDPE	High density poly-ethylene
PE	Poly-electrolyte
PVC	Poly-vinyl chloride
SWCD	Solid waste collection department
SWDD	Solid waste disposal department
SWDS	Solid waste disposal system
SWMS	Solid waste management section
UASB	Upflow anaerobic sludge blanket system
UNIDO	United Nations Industrial Development Organization
UNIDO-RePO	UNIDO Regional Programme Office
US-EPA	United States Environmental Protection Agency
WBPCB	West Bengal Pollution Control Board

Rate of exchange: 1 US $ = INR 46.80

steps towards implementation of the Kolkata Leather Complex soon after.

However when the complaints regarding the environmental pollution from these tanneries became strident, considering all related aspects, the Supreme Court of India directed the tanneries in 1996 to migrate to the new complex to be developed by the state Government.

The order of the Supreme Court gave an added impetus and speed to the implementation of the Kolkata Leather Complex already begun by the government. It was decided that this complex would accommodate all industrial and commercial activities related to leather manufacture and production of leather goods. For this purpose 438 ha land had been identified in the district South 24 Parganas, about 22 km from Kolkata on the eastern side of the E.M. Bypass, along the road from Kolkata to Basanti and adjacent to the SWF (or Bhangar Kata) canal. Much of the land being government property, the possession of such land was taken over by the GoWB.

The State Government decided to implement the KLC project on BOT basis as it neither had the technical expertise nor the resources. The BOT contract was awarded to M.L. Dalmiya & Co. Ltd., 32, Shakespeare Sarani, Kolkata in 1997.

Until now, 300 ha of land has been taken possession of and 84 ha is currently being purchased. An area of 54 ha is under litigation. Work on construction of the KLC started in 1997. Current works include land filling, construction of roads, canals and water bodies. The ground level of the entire area has been raised by about 1 m by land filling. The area is completely flat. The ground level is 1.8 m below the level of the Kolkata - Basanti road.

The estimated total electricity requirement of KLC is 80 MVA. Electricity will be supplied by WBSEB at 132 KV level. A sub station has been set up by the GoWB.

Water will be supplied by the BOT contractor from groundwater resources by means of 25 tube wells, each at a depth of 300 m with an estimated yield of 36.75 MLD, which is sufficient to meet the demands of the KLC. Additional water supply will be provided from surface waters within the KLC area, which provides for the harvesting of rainwater in ponds and canals within the complex.

The KLC is subdivided into 7 different zones:

- Zone 1, located in the eastern part of KLC. The chemical units, raw material market, common processing zone, by-product area and the CETP will be located in this. Zone 1 covers an area of about 76.7 ha.
- Zone 2 with an area of about 237.8 ha will provide space for all tanneries.
- Zone 3 with an area of about 50 ha will provide space for shoe and leather goods factories. Water bodies and green belts are also located in this zone.
- Zone 4 with an area of about 23 ha will accommodate small-scale leather goods unit.
- Zone 5 with an area of about 43.4 ha would be the KLC business district, with space for hotels, shopping centres, housing, museum, trade mart, administrative offices and the telecommunications centre.
- Zone 6 with an area of about 12.5 ha, is the theme park, including a research and

development centre and an exhibition area.
- Zone 7 with an area of 13.5 ha, is the strip of land between the main road and the KLC area. It will be used mainly as the transport yard and for security facilities.

For the CETP a site of 8.7 ha has been made available in the eastern part of KLC. Directly to the south of the KLC an area of about 20.2 ha will be used for solid waste and sludge disposal. When fully developed the KLC will provide about 80,000 jobs, including 33,000 in tanneries.

3. ENVIRONMENTAL IMPACT

A detailed Environmental Impact Assessment (EIA) of the KLC had been done and a report prepared in 1997. The report pays attention to all environmental, demographic, socio-economic, geographical, hydrological, ecological and spatial aspects of the establishment of the KLC.

The land, on which the KLC will be built, is mainly used for agriculture (paddy). As such the development of KLC will result in the loss of about 400 ha agricultural land, with related loss of paddy production and employment for the farmers (about 1,060 jobs). On the other hand the development of KLC will result in direct employment to about 80,000 people.

It is not expected that the establishment of KLC will lead to a loss of valuable ecological resources and water resources. If KLC operates well, it would lead to an improvement of the surface water quality in the area because the discharge of untreated tannery effluent in the open drains will stop as a result of the closure of the tanneries in their current locations.

It is not expected that the functioning of KLC will cause deterioration of the ambient air quality in the area.

4. PLANNING OF EFFLUENT MANAGEMENT IN KLC

A CETP has been planned for the KLC. In anticipation of phased migration of tanneries to KLC, it has been proposed to construct the CETP in six modules, each of 5,000 m^3/d. The treated effluent of the CETP will be discharged into one of Kolkata's storm water drainage canals, the Karaidanga (or SWF) Canal, transporting drainage water from Kolkata to a tidal river, which flows into the sea (Bay of Bengal).

The SWF canal has a maximum carrying capacity of 4,966 cusec (= 140 m^3/s). During the dry season the flow rate in the canal is about 500 cusec. At its full capacity (6 modules) the CETP will discharge about 30,000 m^3/d (= 12.2 cusec), which is a small quantity in proportion to the total water carrying capacity of the canal.

The United Nations Industrial Development Organization (UNIDO), in agreement with the United Nations Development Programme and the Government of India, has provided technical assistance to the GoWB in designing one module of the CETP and corresponding solid waste disposal facilities.

5. CEPT – DESCRIPTION

5.1. Preliminary treatment in tanneries

For this purpose 3 different categories of tannery effluents are considered, respectively: (a) beamhouse liquor (b) chromium bearing spent tanning liquor and (c) all other wastewaters including washings. An appropriate on-site pretreatment system consists of separate systems for pretreatment of the beamhouse and other waste liquors on the one part and the waste chromium liquor on the other.

The system consists of the following components:

- Channel with 2 screens for retaining coarse materials
- Grit chamber
- Sedimentation (three alternatives)
- Sludge drying and storage bed

- Segregation of spent chrome liquor, its collection in a tank within the tannery, to be transported to CCRU or to the tannery's own chrome recovery unit

- Combining all other effluent, passing through a screen, grit chamber, sedimentation, removal of sludge.
- Final discharge channel with fixed grate prior to discharge into the KLC wastewaster collection network.

Three alternative systems of sedimentation have been considered:

1. Gravity fed sedimentation tank with a weir to retain the settled sludge and an effluent outlet below the water surface to retain grease and oil. Sludge is removed manually.
2. Identical as Alt. 1, but the sludge is pumped out of it.
3. Collection sump for beamhouse liquor, from where it is pumped into an elevated sedimentation tank with hopper bottom. The sediments are discharged into the sludge drying bed, and the supernatant is discharged into the collection & conveyance system of the CETP.

Each tannery will adopt any of these depending on its size and the volume of effluent discharged.

5.2. Sewerage and stormwater collection

Designs for wastewater collection, storm water drainage network and water supply networks are currently under finalisation. The storm water collection system consists of covered roadside canals which discharge into the ponds and the water bodies. The water supply consists of 2 networks, one for distribution of well water (domestic purposes) and one for distribution of surface water (mainly process water).

The sewerage system consists of a network of branch lines and main lines. The branch lines are

made of HDPE pipes, with a minimum diameter of 200 mm. The main lines too are made of HDPE pipes. The main lines will have a maximum depth of 3.5 m below ground level and they will discharge into pump sumps, from where the wastewater will be pumped to the CETP. A minimum velocity of 1 m/s is maintained in the sewer pipes in order to minimise clogging and siltation risks. A mobile system for flushing and vacuum cleaning will be used for periodical cleaning of the sewerage system.

In the gravity network manholes are installed at 25 m intervals. Manholes are also installed at each bend and drop in the network and at each inlet of tannery wastewater into the sewer network.

The design of the network encompasses three wastewater pumping stations in the first phase of KLC. The gravity pipes flow out into the sumps of the pumping stations that subsequently pump the wastewater to the CETP.

The pumping mains are equipped with air release valves at certain intervals, in order to control the problem of likely build-up of H_2S in the pipes. These valves are located in well ventilated chambers.

The flat layout of the wastewater conveyance network, without any undulations and with the low designed velocity and pressure in the pumping mains, will suggest that no serious water conveyance problems are likely to appear.

A mobile system for flushing and cleaning will be used for keeping the collection network free of sediments and growth or scaling on the pipe walls. A jet rodding sewer cleaning machine will be used for this purpose. Maintaining unobstructed flow in the gravity pipes is extremely important especially for prevention of the build-up of H_2S gas in the network.

6. CETP – BASIC PARAMETERS & OPTIONS

6.1. Influent characteristics

One module of the CETP is designed for a flow of 5,000 m^3/d. The influent flow into the CETP consists of tannery wastewater, domestic wastewater from the tanneries, supernatant of the CCRP and leachate of the sludge and solid waste landfill. Typical effluent entering the CETP will have characteristics as described in the table below. The table also indicates the discharge standards to be achieved by the CETP, as prescribed by WBPCB.

Parameters	Raw effluent characteristics	Final effluent discharge quality standards (WBPCB norm*)
pH	8.0-9.0	6.5-9.0
BOD (3 days, 27 °C)	2,000 mg/l	100 mg/l
Suspended solids	4,000 mg/l	100 mg/l
Sulphide	150 mg/l	1 mg/l
Chromium	200 mg/l	2 mg/l
Oil and grease		10 mg/l

for discharge to inland surface water

The CETP module is currently designed for a final effluent BOD level of 80 mg/l (This designed BOD level was chosen as a safety factor to minimise the chance that the final effluent BOD will ever exceed 100 mg/l).

However, it may be possible that stricter final effluent quality standards are imposed in the future, e.g. for reaching an effluent BOD of 30 mg/l. When such a requirement is set, it will be necessary that additional aeration capacity is installed, not only for BOD degradation but possibly also for nitrification.

6.2. Alternative systems for tannery wastewater treatment

In implementation of the project various alternative wastewater treatment systems including UASB were evaluated and compared. After detailed evaluation by experts, the following system was chosen:

- Preliminary treatment consisting of screening, grit removal and equalisation
- Physical/chemical treatment
- High load activated sludge treatment.

7. FEATURES OF SELECTED TECHNOLOGY

7.1. Preliminary treatment

The preliminary treatment system consists of fine screens, grit removal, a distribution well and an equalisation tank. The wastewater from the collection network flows into a channel to fine screens which remove hair and other coarse solids; then, into a grit removal chamber, where easily settleable solids are separated from the wastewater. Each screen has a hydraulic capacity of 500 m^3/h of wastewater. The capacity of the grit chamber is 1,100 m^3/h of wastewater. The collected grit and fine screenings are disposed of with the sludge generated by the CETP.

From the grit chamber the wastewater flows into a distribution well. From here it is equally distributed to the CETP modules. First the wastewater enters the equalisation tank. This tank is equipped with an aeration system to prevent accumulation of solids and to provide for oxidation of sulphides. From the equalisation tank the wastewater is pumped at a continuous equal flow to the physical-chemical treatment unit.

7.2. Physical-chemical treatment (coagulation/flocculation/sedimentation)

In the physical-chemical treatment system the wastewater is mixed with specific chemicals, which enhance the separation of solids and chromium from the wastewater. Coagulating chemicals (e.g. aluminium sulphate) are added to promote the destabilisation of dissolved colloidal particles. Since the coagulation process is characterised by an optimum pH, chemicals for pH correction (usually lime solution) are added to the wastewater. For this purpose the pH of the equalisation tank is monitored continuously, using an automatic pH meter with a self-cleaning electrode. The actual dosage of chemicals is controlled automatically according to the measured pH value.

After addition of chemicals the wastewater flows into the flocculation tank, where the flocs of coagulated solids grow into larger and heavier particles. These subsequently settle at the bottom of the primary sedimentation tank. The flocculation process is improved by addition of anionic polyelectrolyte. The sludge from the primary sedimentation tank is pumped into a thickening tank, from where it is taken to the mechanical sludge dewatering plant.

About 80%of the suspended solids, 99% of chromium and 40% of BOD are recovered by physico-chemical treatment.

7.3. Biological treatment (high load activated sludge)

The overflow of the primary clariflocculator enters the aeration tank. Here it is mixed with flocs of aerobic micro-organisms (activated sludge). The wastewater and activated sludge are mixed and aerated by means of an aeration system, e.g. mechanical surface aerators or a diffused air system. The sludge flocs absorb suspended material. As they contain active aerobic micro-organisms, the organic matter is degraded aerobically. The organic matter acts as a substrate for the growth of new cells and as a source of energy. As a result the sludge mass in the aeration tank grows. Nutrients (N and P) may be added to the aeration tank contents in order to realise the optimum BOD/nutrients ratio of BOD : N : P = 100 : 5 :1. Tannery wastewater contains sufficient nitrogen but the phosphorus content is usually low and as such it may be necessary to add a phosphorus compound, e.g. superphosphate prior to biological treatment. The bio sludge/wastewater mixture flows from the aeration tank into the secondary clarifier, where the sludge settles at the bottom. The clear effluent flows out of the tank from the surface. Part of the sludge is recirculated to the aeration tank in order to maintain a constant concentration of activated sludge. The remainder of the sludge (surplus sludge) has to be removed.

A diffused air system has been chosen for aeration. It has been preferred over the surface aerators in view of higher oxygen transfer efficiency. There is plenty of experience in India in operation of diffused air aeration systems for tannery wastewater treatment.

7.4. Sludge treatment and disposal

The primary sludge and the surplus sludge from the secondary clarifier are pumped into the sludge thickening tank, where the dry solid concentration of the sludge will increase. From the thickener the sludge is subsequently conveyed to the mechanical sludge dewatering plant. To meet any emergency, some sludge drying beds are included in the system. The sludge can be diverted to these if and when the mechanical dewatering plant is out of operation.

7.5. Sludge and solid waste disposal

The sources of sludge generation are the primary and secondary sedimentation tanks, the grit chambers, the screens and the onsite preliminary treatment in the tanneries. The sludge from the primary clariflocculator is chemically precipitated organic and chromium sludge. The biological mass constitutes the sludge from the secondary clarifier. The mechanically dewatered sludge and the sludge from the drying beds will have different dry solids concentrations depending on the

mechanism selected. For the design of the landfill, solids concentration of about 27% has been assumed. The disposal of sludge from the CETP has to be handled so as to minimise potential adverse impacts and to comply with the regulatory requirements. The estimated volume of sludge generated per day, when all the six modules of the CETP will operate, is 540 m^3 (27% concentration).

The estimated quantity of solid waste from the tanneries is 44 m^3 /d (for a capacity of 100 t/d). The solid wastes, to be disposed of, include raw trimmings, fleshings, wet blue trimmings, shavings and buffing dust.

According to the Hazardous Waste (Management and Handling) Amended Rules 2000 (effective from 5th January 2000), sludge containing more than 5,000 mg/kg of trivalent chromium and / or 50 mg/kg of hexavalent chromium from tannery wastewater treatment plants is categorised as hazardous waste. It is however anticipated that the total chromium concentration in the sludge from the CETP of KLC will be less than 2,500 mg/kg, if proper chrome segregation and recovery are ensured.

Until such time when proper chromium management measures are adopted by all the tanneries, the trivalent chromium concentration of the sludge may exceed the limit of 5,000 mg/kg. Thus, it is currently assumed that the sludge from CETP has to be handled as hazardous waste.

It has been recommended that the sludge be disposed of in a controlled landfill. In view of the potential for future utilisation of the sludge, it has been recommended that a landfill with a storage capacity for 5 years be established.

The main purpose of the safe landfill is to prevent and control the generation of leachate and its subsequent seepage into the ground. It is proposed to provide a HDPE liner below the drainage layer to prevent the seepage of leachate into the ground.

Design parameters for the first module of landfill / CETP are:

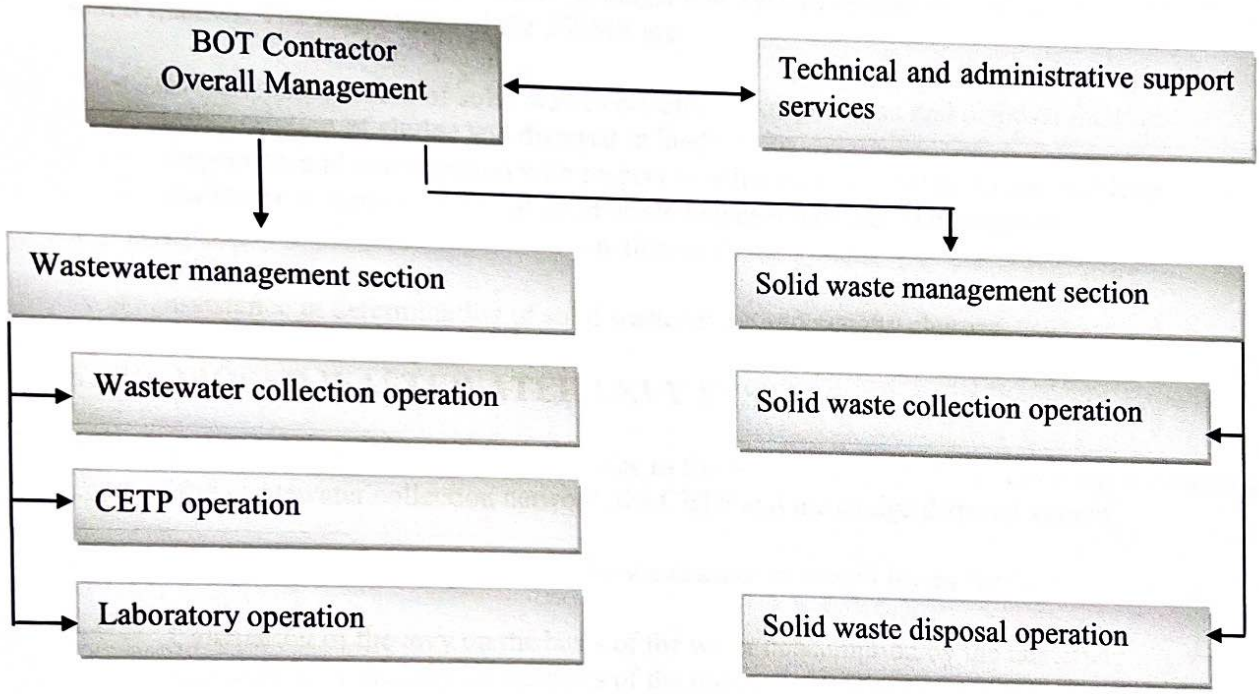
- Volume of wastewater: 5,000 m^3/d
- Sludge generation: 90 m^3/d (32,850 m^3 /y)
- Solid waste generation: 44 m^3/d (16,000 m^3/y)
- Annual rainfall: 1,600 mm
- Rainy days: Almost daily during the rainy season, May to October
- Depth of ground water table: 2 - 5 m
- Top soil: Semi impervious
- Land available: 20.23 ha or 202,300 m^3
- Design period: 5 years
- Sludge layer depth: 8 m
- Freeboard: 1.0 m
- Land earmarked by the GoWB: 20 ha

Operation and maintenance of the sludge and solid waste landfills will be supervised and monitored by the solid waste management section.

8. ORGANISATIONAL FRAMEWORK FOR WASTE MANAGEMENT

The BOT contractor will be responsible for protection of the environment in KLC. For this purpose the BOT contractor shall establish an appropriate Environmental Management System (EMS) in KLC. It is not within the scope of this project to contribute to the development of such an EMS for the KLC. The management of the wastewater and solid waste disposal is a key responsibility of the BOT contractor. As such the BOT contractor has to set up an appropriate organisation for operation and maintenance of the wastewater and solid waste facilities.

A possible organisational framework for operation and management of the wastewater collection and treatment system (further referred to as CETP) and of the solid waste collection and disposal system is shown below.



The major tasks of the BOT contractor in management of the wastewater and solid waste facilities are:

- overall technical management and support
- overall administrative management and support
- preparation and issue of environmental licences to the tanneries
- inspection and quality control, including compliance monitoring
- initiation and conduction of environmental investigations
- financial management of the systems
- determination of levies and penalties for wastewater discharge and solid waste production
- collection of levies and penalty charges
- reporting to government.

The responsibilities of wastewater management section are:

- management of operation and maintenance of wastewater collection, conveyance and treatment facilities
- inspection and investigation regarding water pollution problems
- assistance in determination of wastewater fees and penalties
- preparation of annual reports on functioning of the systems
- safety management
- quality assurance.

The solid waste management section (SWMS) is responsible for solid waste collection and disposal within KLC. As such the SWMS should monitor and supervise all related operations and ensure that the whole solid waste management system is operated in an environmentally sound manner. The major tasks of the SWMS are:

- overall management of solid waste collection, transportation and disposal facilities
- transportation of sludge and disposal in landfill site
- inspection and investigation with respect to solid waste related pollution problems
- assistance in determination of solid waste management fees and penalties
- preparation of annual reports on functioning of the system
- safety management
- assistance in determination of solid waste levies and penalty charges

9. PROPOSED WASTEWATER LEVY SYSTEM

The wastewater producers have to pay levies to the KLC management for covering the running costs of the wastewater collection network, the CETP and the sludge disposal system.

Options considered for determination of the wastewater treatment levies for the tanneries are:

- Calculation of the levy on the basis of the water consumption by the tanneries.
- Calculation of the levy on the basis of the production capacity, as tonnes per day
- Calculation of the levy on the basis of the actual pollution load of the wastewater discharged (as loads of BOD, suspended solids, sulphide and chromium)
- Calculation of the levy on the basis of the actual output (e.g. wet blue, crust or finished leather), e.g. as m^2 leather.

To start with, it has been recommended that Option 2 be used for calculation of the wastewater levy. In due course a more sophisticated levy system such as based on volume of effluent discharged and its pollution load could be considered. The levy may be charged on a monthly basis to enable smooth operation & maintenance of the system.

10. WASTEWATER LABORATORY

A wastewater laboratory will be established at the CETP. The major tasks of the laboratory are to sample and analyse effluent from the tanneries and other sources of wastewater within KLC, the sludge from the CETP and other solid wastes (as far as possible with the available analysis equipment in the laboratory). The laboratory is also equipped for routine physical/chemical monitoring of surface water and well water. The laboratory staff can also carry out a number of field analyses with mobile equipment, such as pH, dissolved oxygen and electrical conductivity.

The laboratory is equipped for the following analyses:

pH, electrical conductivity, dissolved oxygen, COD, BOD, chromium (total, 3^+ and 6^+) suspended solids, total solids, mohlman index, total kjeldahl nitrogen, total phosphorus chlorides, sulphides, sulphates.

The laboratory is proposed to be located on the ground floor of the administration building. The laboratory has an area of 60 m^2.

11. PROJECT IMPLEMENTATION

The BOT party would invite tenders based on the detailed tender documents prepared by UNIDO and award the work as a turnkey job to the successful tenderer. A high powered committee and a technical agency are expected to assist the BOT in this process.

An open tendering system has been suggested. To ensure the required quality control in project implementation, a dual pre-qualification system has been introduced. Detailed procedure for evaluation has been laid out. An evaluation committee for the evaluation of the offers received for CETP implementation has also been recommended.

The estimated duration of the tender procedure is 6 months.

After finalisation of the contract negotiations with the selected contractor the construction works will start. The estimated duration of the construction works is 2 years. Construction and installation works will be monitored and supervised by an Engineer, to be appointed by the BOT contractor, reporting to the Employer (BOT contractor) in close coordination with the Technical supervisor (engaged by the GoWB), reporting to the high-powered steering committee of the government.

After construction and commissioning of the CETP, the stabilization of the plant will start. It is foreseen that the process of stabilisation may take approximately six months. The CETP supplier will be responsible for further operation and maintenance of the CETP for a period of 6 months. During this period all problems and defects will be identified and mitigated. The supplier will also be responsible for training of CETP staff and for preparation of manuals for operation and maintenance. The defects liability period is one year.

12. COST

As per the detailed project report for the CETP, the installation and operating cost of one module of the CETP is as follows:

12.1. Capital Cost

Civil:	INR 47.50 million
Mechanical:	INR 38.55 million
Electrical:	INR 16.75 million
Piping:	INR 6.09 million
Instrumentation:	INR 7.34 million
Laboratory:	INR 2.04 million
CETP commissioning & stabilization	INR 6.11 million
Miscellaneous 10%	INR 12.44 million
Total:	**INR 136. 82 million**

12.2. Operating Cost:

INR 38.72 million p.a. or INR 25.82 per cubic meter or INR 0.93/kg of raw material processed

12.3. Landfill

The capital cost of landfill is estimated to be INR 112.17 million and the annual cost of operation is estimated at INR 3.83 million

13. PRESENT STATUS

The design, detailed engineering drawings and tender documents submitted by UNIDO to GoWB as part of the UNDP-project DG/IND/97/953, have been thoroughly evaluated by the technical committee of the GoWB and the MoEF, GoI and approved.

The MoEF, GoI, has agreed to provide 50% of the cost of the CETP, subject currently to a ceiling of Rs. 660 million, as an interest free loan to GoWB & the first installment of Rs. 50 million, already released.

The notice inviting offers for the construction of the CETP has been issued and offers are expected to be received by the end of November 2001. Two modules, each of 5,000 m^3/d capacity, will be taken up simultaneously.

It is foreseen that the award of work will take place before end of December 2001 & the first two modules of the CETP commissioned before the end of 2003.

Annexure P-21
50

The Telegraph online

Monday, 26 February 2024

Leather scan on Dalmiya - Administrator to review management of Bantala complex

Read more below

Staff Reporter | Calcutta | Published 27.05.08, 12:00 AM

-51-

Dalmiya and the Calcutta Leather Complex

Calcutta, May 26: An administrator will be appointed to sort out problems plaguing the Calcutta Leather Complex amid allegations about faulty waste pipes supplied by Dalmiya & Co, the developers of the cluster.

"We have decided to appoint an administrator who will look into the problems and review the management of the complex," commerce and industries secretary Sabyasachi Sen said after a business meet today.

Today's announcement follows the May 23 meeting Sen held with representatives of CLC Tanners' Association and Dalmiya & Co on the problems in the enclave in Bantala, near Tangra on the city's eastern fringes.

"There is already an officer for the complex, Moushumi Guha Roy, but we have to figure out how to upgrade her role by giving her powers from organisations like the pollution control board and others," Sen said on the sidelines of a business meet.

The administrator will be in place till a township authority, like Nabadiganta in the IT hub of Salt Lake's Sector V, is set up for the leather complex. Such an authority will comprise representatives of the panchayat, tanners and pollution control board officials.

Sen said the state might write to the Centre to set up a leather research institute, something Dalmiya & Co could not.

However, Dalmiya and Co promoter Jagmohan Dalmiya, whose company had set up the complex on a build-operate-transfer basis, shrugged off responsibility, saying he had nothing to do with its operations since its handover to the tanners three years ago.

"We have nothing to do with management problems anymore. Appointing an administrator is their problem," he said.

According to a member of the tanners' association, the main problem is in the pipes carrying waste to the effluent-treatment plant. "The pipes, built by the developers, are getting clogged. Why will we clog it up when we have to pay for the use of the system at the rate of around Rs 8 per square metre. We have agreed to the appointment of an administrator," he said.

Allegations have also surfaced that units in the complex are installing tubewells in violation of regulations on groundwater use, and that the sludge thrown up during leather processing is not being disposed in vats. The tanners' association and Dalmiya have traded charges over these alleged lapses.

The tanners say they are considering a government suggestion that the management of the effluent plant be handed to outsiders who can manage it more efficiently.

Another bone of contention is the 120-acre IT park in the complex. A member of the tanners' association contended that all of the 1,100 acres acquired by the government and leased for the purpose was meant for leather units.

'P-2'
- 58 -

Printed from
THE TIMES OF INDIA

Tanners' body files FIR against Dalmiya firm

TNN | Apr 16, 2015, 02.32 AM IST

KOLKATA: Calcutta Leather Complex Tanners' Association has lodged an FIR against Jagmohan Dalmiya and four other directors of M L Dalmiya & Co. alleging fraud and cheating in the construction of Kolkata Leather Complex. A case has been lodged against the company under sections 409, 420 and 34 of IPC.

The Supreme Court had ordered construction of KLC to shift tanneries from Tiljala-Topsia-Tangra belt after environmentalist M C Mehta moved the apex court in 1985. The project report on effluent transportation from the tanneries to the treatment plants at the complex were to be done as per the guidelines stipulated by United Nations. Non-corrosive and long-lasting HDPE pipelines were to be laid to transport the toxic effluents.

But, the tanners' association recently found that there were no HDPE pipelines. Instead, brick sewer and RCC pipelines were found. A CAG report had earlier pointed to the anomaly.

"This is cheating and misappropriation of funds. Both the central and state governments contributed in equal proportions in the Rs 19.52-crore pipeline project. We filed a case against M L Dalmiya & Co. and its five directors, including Jagmohan Dalmiya, on April 13," said association general secretary Imran Ahmed Khan. "Police visited the site to conduct a probe and turned the complaint into an FIR (no. 90/15)," he added.

IG-law and order of West Bengal Police Anuj Sharma confirmed that a case had been registered.

Annexure – P-3'
-54-

Chemical and metal laden effluent drained over vacant plot.

Chemical and metal laden effluent drained over vacant plot.

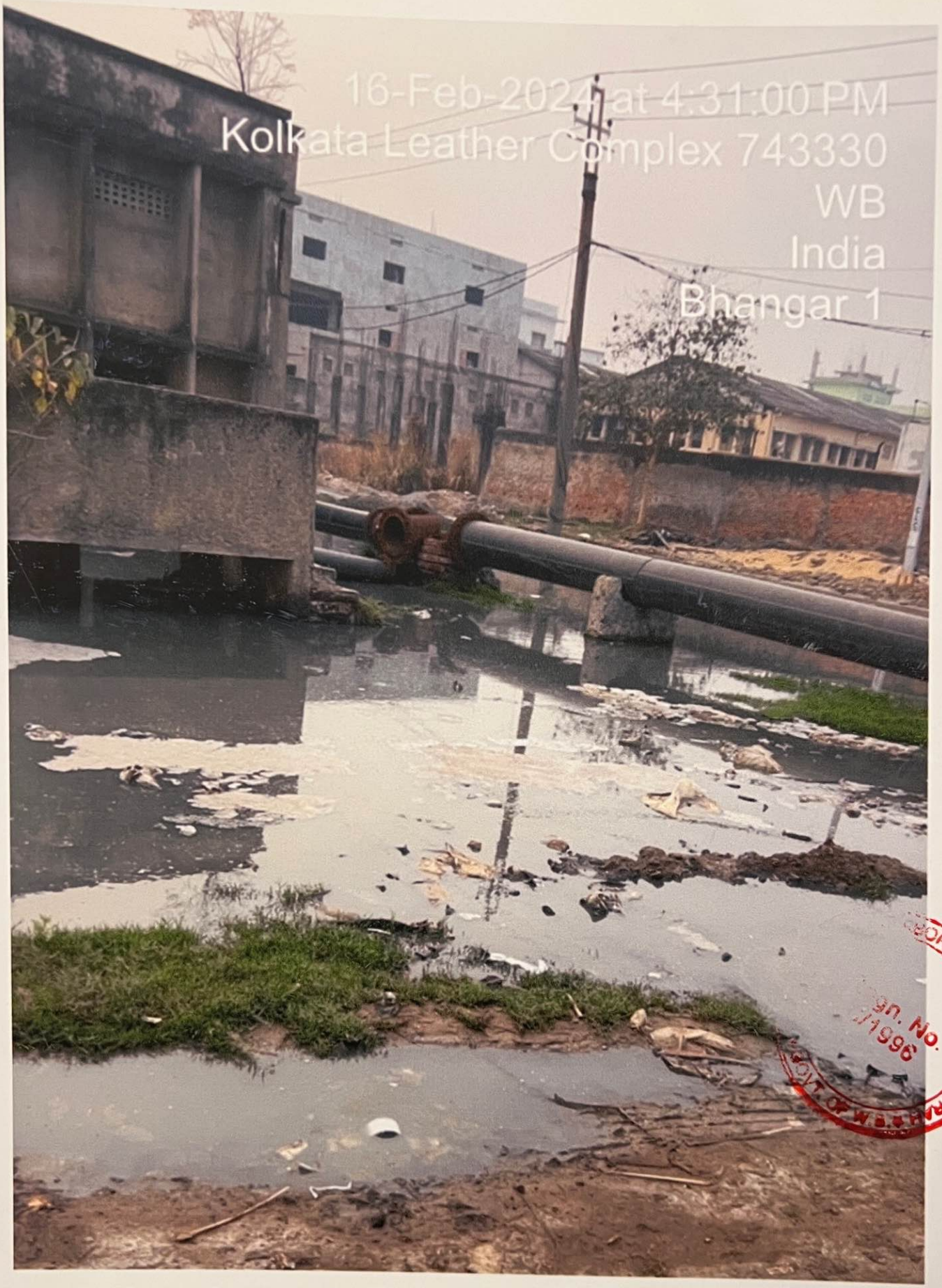
Chemical and metal laden effluent drained over vacant plot.

Chemical laden effluent and waste floating over internal canal.

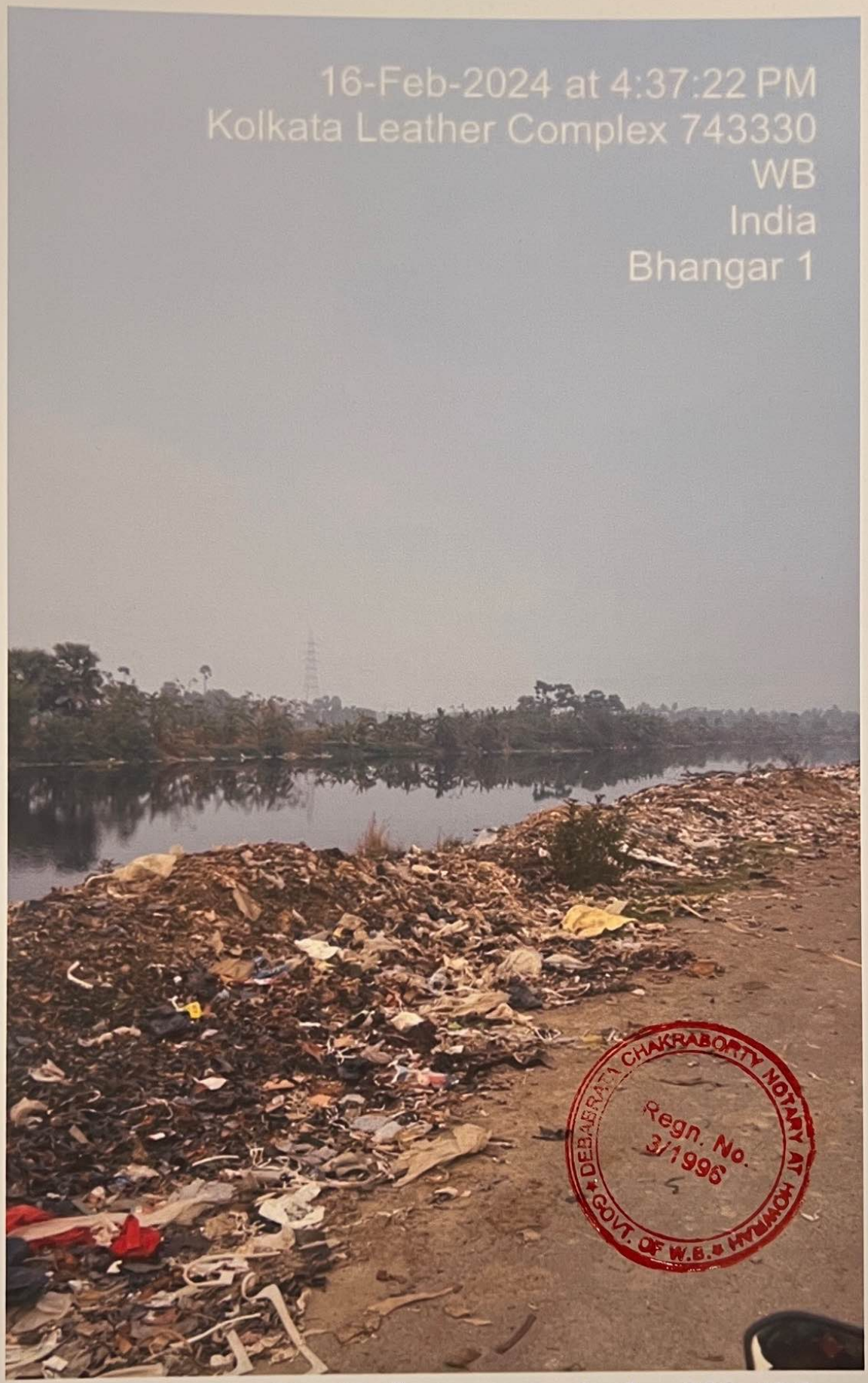
Canal containing toxic metals, chemicals and waste flowing towards Basanti canal.

Chemical and metal laden effluent drained over vacant plot.

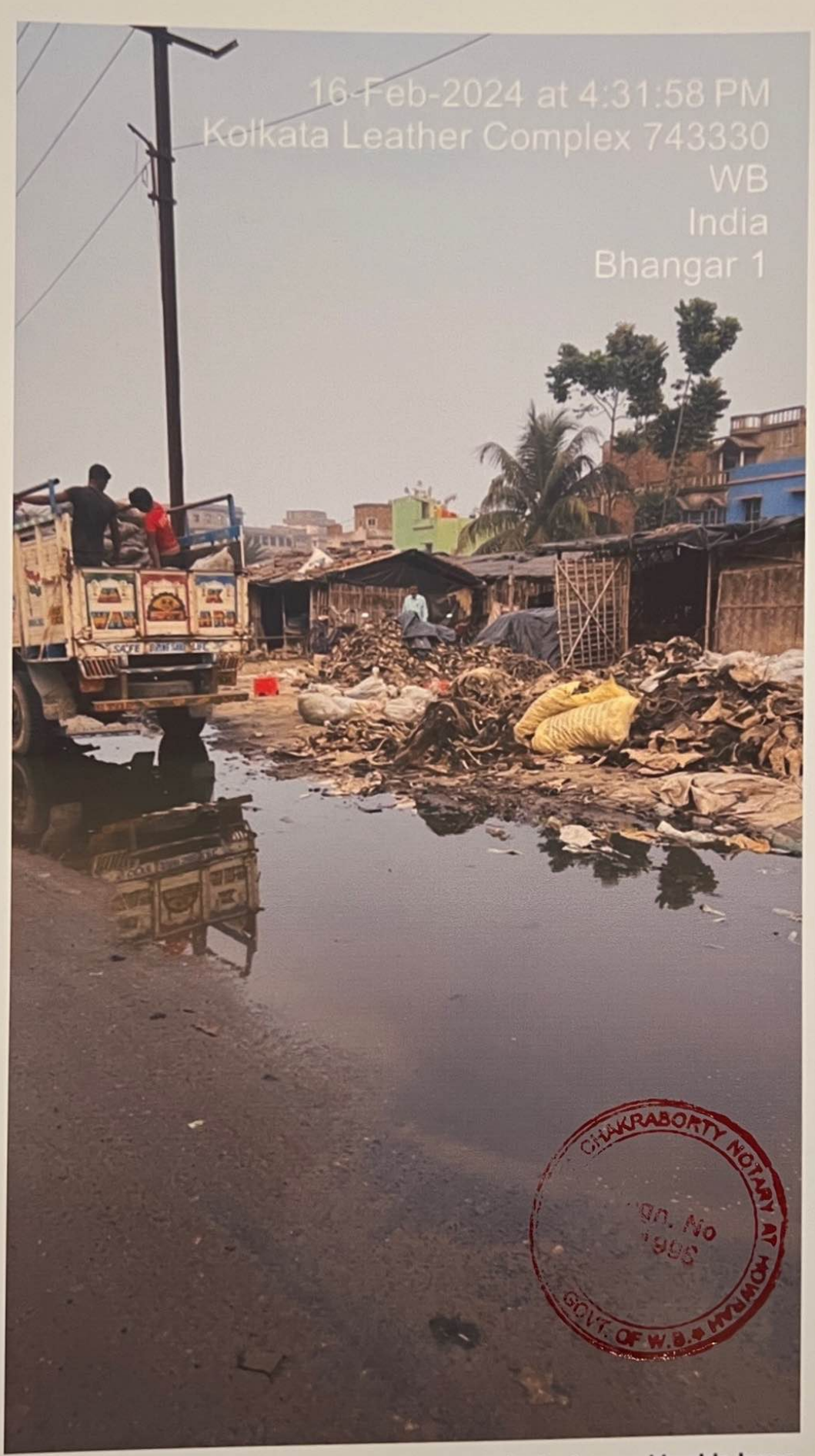
Hide scattered over vacant plot beside canal containing effluents



Broken pipes and effluents spilled over vacant plots



Waste dumped beside/into a water body within KLC



Lanes flooded with effluents and animal skin/tails dumped beside lanes

Annexure - P-41
-64-

Gmail

Ankur Sharma <adv.ankursharma9@gmail.com>

RE : Complaint against rampaging of environment by hundreds of tanneries/industrial units located at Kolkata Leather Complex, P.O. - Bhojerhat, P.S. - Kolkata Leather Complex, South 24 Parganas, West Bengal, PIN - 743502.

Ankur Sharma <adv.ankursharma9@gmail.com> Fri, Jun 2, 2023 at 10:57 AM
To: cs-westbengal@nic.in, psecy.env.wb@gmail.com, chrmn.wbpcb-wb@bangla.gov.in, ms.wbpcb-wb@bangla.gov.in
Cc: mefcc@gov.in, secy-moef@nic.in, environmentwb@gmail.com, bhogendra.prasad@gov.in

The Chief Secretary
Government of West Bengal

The Principal Secretary
Dept. of Environment, Government of West Bengal

The Chairman
West Bengal Pollution Control Board

The Member Secretary
West Bengal Pollution Control Board

Sub : Complaint against rampaging of environment by hundreds of tanneries/industrial units located at Kolkata Leather Complex, P.O. - Bhojerhat, P.S. - Kolkata Leather Complex, South 24 Parganas, West Bengal, PIN - 743502.

Sir,

I am constrained to bring the following to your kind notice :

1. On 30.05.2023 I saw a news report that was telecast on 31.05.2023 in News18 Bangla that local residents in and around Kolkata Leather Complex are agitating against destruction of environment by tanneries and other industrial units located at Kolkata Leather Complex, Bantala.

2. On 31.05.2023 I had occasion to make a short visit to Kolkata Leather Complex to see whether such menace actually exists. I was shocked to find that obnoxious smell of effluents was felt by me from a distance of 1 km away from Kolkata Leather Complex. Upon entering Kolkata Leather Complex through Gate no. 2 I noticed that a huge canal was flowing inside the complex containing toxic effluents (some photographs are attached herewith for ready reference).

3. I also noticed that effluents were being discharged/overflowing openly on adjoining public lanes by industrial units located within said complex. Solid wastes were also found dumped in every nook and corner.

4. Most alarming is the fact that the said complex is situated in close proximity to **East Kolkata Wetlands - Ramsar Site.** Such rampant draining of effluents into canals is causing irreparable damage to the ecology of the East Kolkata Wetlands. Cattles were found to be grazing around effluents present in public land and canals.

5. Some of the industries located within Kolkata Leather Complex which were found to be engaged in polluting the environment are as follows :

(i) Ajmeri Leather Works, Plot nos. 29 & 30, Zone - 01 ;
(ii) Alam Tannery, Plot no. 53, Zone - 01 ;
(iii) Dilshad Ahmed Tannery, Plot no. 118, Zone - 02 ;
(iv) Leather-N-Leather, Plot no. 184, Zone - 02 ;
(v) Salim Leather Corporation, Plot nos. 264 & 265, Zone - 03 ;
(vi) Olympic Tannery, Plot no. 407, Zone - 05 ;
(vii) RS Chemicals, Plot no. 366, Zone - 05 ;
(viii) Shih Mei Tannery, Plot no. 400, Zone - 05 ;
(ix) Ye Fong Tannery, Plot nos. 350 351 Zone - 05 ;
(x) Monira Leather Works, Plot no. 549, Zone - 06 ;
(xi) Lokenath Leather, Plot no. 525, Zone - 07 ;
(xii) Ashraf Tannery, Zone - 08 ;
(xiii) M and Sons, Plot no. 670, Zone - 08 ;
(xiv) Chung Yin Tannery Plot no. 665, Zone - 08 ;

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH
Regn. No. 3/1995
GOVT. OF W.B.

-65-

(xv) Tai Lim Tannery, Plot no. 648, Zone - 08 ;
(xvi) Koutein Tannery, Plot no. 661, Zone - 08 ;
(xvii) Shri Vinayak Creation, Plot no. 664, Zone - 08 ;
(xviii) Trust N Trade, Plot no. 658, Zone - 08 ;
(xix) Wing Sung Tannery, Plot 616, Zone - 08 ;
(xx) Chiu Lee Tannery, Plot nos. 632, 632A 633, Zone - 08 ;
(xxi) Azad Traders, Plot nos. 605 & 605A, Zone - 08 ;
(xxii) ASG Leather Plot nos. 607 & 607A, Zone - 08.

6. The situation at site showcased how industrial units have turned environmental norms a hoax to be flouted in the State of West Bengal. It also revealed that the Common Effluent Treatment Plant (CETP) of the complex is also in defunct condition and/or already loaded to capacity.

7. It is further gathered that there has been gross illegalities in construction of pipelines and drainage systems by M/s. M. L. Dalmiya & Co. Ltd. at the Kolkata Leather Complex due to which effluents are overflowing into adjoining public lanes and properties. Numerous tanneries are also indulged in illegal groundwater extraction through deep borewells.

In view of above, you are requested to cause an inspection at site and direct (i) the Calcutta Leather Complex Tanners' Association to immediately repair, if warranted and commission CETP, (ii) all units located in the said complex to install captive ETP. (iii) police authorities to register an F.I.R. against M. L. Dalmiya & Co. Ltd for illegalities in construction of drainage system at Kolkata Leather Complex and (iv) impose exemplary environmental compensation upon units indulged in flouting environmental norms and draining effluents into canal and public lanes.

Thanking you,
Yours faithfully,

Ankur Sharma
13/3, Dr. P.K. Banerjee Road
Howrah - 711101
Mob: 9433883322

Attachments : As stated above.

cc :

The Hon'ble Minister
Ministry of Environment, Forest and Climate Change
Government of India

The Secretary
Ministry of Environment, Forest and Climate Change
Government of India

The Chairman
Central Pollution Control Board

The Chief Environment Officer
Dept. of Environment, Government of West Bengal

- for taking necessary steps.

---

13 attachments

Image KLC1 (8).jpeg
172K

-66-

Image KLC1 (11).jpeg
160K

Image KLC1 (13).jpeg
166K

Image KLC1 (12).jpeg
80K

Image KLC1 (9).jpeg
160K

Image KLC1 (4).jpeg
132K

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH
Regn. No. 3/1996
GOVT. OF W.B.

-67-

Image KLC1 (7).jpeg
196K

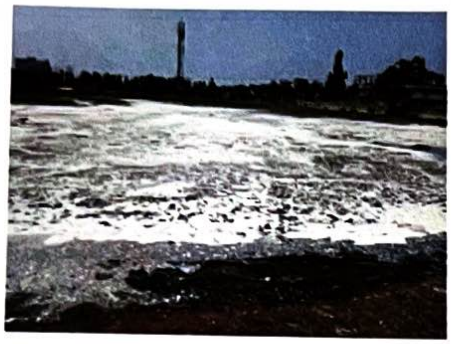


Image KLC1 (5).jpeg
177K

Image KLC1 (10).jpeg
167K

Image KLC1 (6).jpeg
189K

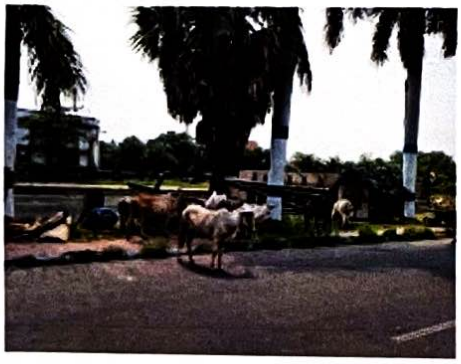


Image KLC1 (3).jpeg
167K

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH
Regn. No. 3/1996
GOVT. OF W.B.

-68-

Image KLC1 (2).jpeg
127K

Image KLC1 (1).jpeg
198K

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH
Regn. No 3/1996
GOVT. OF W.B.

-69-

Gmail

Ankur Sharma <adv.ankursharma9@gmail.com>

RE : Complaint against rampaging of environment by hundreds of tanneries/industrial units located at Kolkata Leather Complex, P.O. - Bhojerhat, P.S. - Kolkata Leather Complex, South 24 Parganas, West Bengal, PIN - 743502.

Public Complaints <prc.cpcb@nic.in> Mon, Jun 12, 2023 at 9:59 AM
To: RAJESH KUMAR <ms.wbpcb-wb@bangla.gov.in>, mspcbwb@gmail.com
Cc: CPCB RD Kolkata <rdkolkata.cpcb@gov.in>, Mrinal Kanti Biswas <mkbiswas.cpcb@nic.in>, CPCB RD Kolkata <zokolkatta.cpcb@nic.in>, Atul Singh Bisht <atul.bisht@gov.in>, adv.ankursharma9@gmail.com

Sir/ Madam,

I am directed to forward a trailing complaint for investigation and necessary action, under intimation to this office, please.

Regards,

Public Complaint Cell
MS Section
Central Pollution Control Board,
Delhi

From: "Member Secretary CPCB" <mscb.cpcb@nic.in>
To: "Public Complaints" <prc.cpcb@nic.in>
Sent: Friday, June 2, 2023 1:06:33 PM
Subject: Fwd: RE : Complaint against rampaging of environment by hundreds of tanneries/industrial units located at Kolkata Leather Complex, P.O. - Bhojerhat, P.S. - Kolkata Leather Complex, South 24 Parganas, West Bengal, PIN - 743502.

आवश्यक कार्यवाही हेतु।

From: "Atul Singh Bisht" <atul.bisht@gov.in>
To: "Member Secretary CPCB" <mscb.cpcb@nic.in>, "Sujit Kumar Bajpayee" <sujit.baju@gov.in>
Sent: Friday, June 2, 2023 1:01:36 PM
Subject: Fwd: RE : Complaint against rampaging of environment by hundreds of tanneries/industrial units located at Kolkata Leather Complex, P.O. - Bhojerhat, P.S. - Kolkata Leather Complex, South 24 Parganas, West Bengal, PIN - 743502.

O/o Additional Secretary (TK) & Addl. Charge Chairman, CPCB
M/o Environment, Forest & Climate Change
Tel.No.20819211, 20819176
I.Com, 2519, 2520, 2522

From: "Ms Leena Nandan" <secy-moef@nic.in>
To: "Mr Tanmay Kumar" <tanmay.kumar-rj@gov.in>, "Naresh Pal Gangwar" <asnpg.mefcc@gov.in>
Sent: Friday, June 2, 2023 11:19:41 AM
Subject: Fwd: RE : Complaint against rampaging of environment by hundreds of tanneries/industrial units located at Kolkata Leather Complex, P.O. - Bhojerhat, P.S. - Kolkata Leather Complex, South 24 Parganas, West Bengal, PIN - 743502.

O/o Secretary
M/o Environment, Forest & Climate Change
Tel.No.20819308/20819408
Fax No.20819238

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH Regn. No. 3/1996

From: "adv ankursharma9" <adv.ankursharma9@gmail.com>
To: "Shri H K Dwivedi" <cs-westbengal@nic.in>, "psecy env wb" <psecy.env.wb@gmail.com>, "KALYAN RUDRA" <chrmn.wbpcb-wb@bangla.gov.in>, "RAJESH KUMAR" <ms.wbpcb-wb@bangla.gov.in>
Cc: "Bhupender Yadav" <mefcc@gov.in>, "Ms Leena Nandan" <secy-moef@nic.in>, environmentwb@gmail.com, "bhogendra.prasad" <bhogendra.prasad@gov.in>
Sent: Friday, June 2, 2023 10:57:41 AM

Subject: RE : Complaint against rampaging of environment by hundreds of tanneries/industrial units located at Kolkata Leather Complex, P.O. - Bhojerhat, P.S. - Kolkata Leather Complex, South 24 Parganas, West Bengal, PIN - 743502.

-70-

[Quoted text hidden]

13 attachments

Image KLC1 (8).jpeg
172K

Image KLC1 (11).jpeg
160K

Image KLC1 (13).jpeg
166K

Image KLC1 (12).jpeg
80K

Image KLC1 (9).jpeg
160K

DEBABRAJA CHAKRABORTY NOTARY AT HOWRAH
Regn. No. 3/1996
GOVT. OF W.B.

Annexure - 'P-5'
-71-

The Telegraph online

Monday, 26 February 2024

12km march to protest delay in river cleansing

The fishermen said that the alleged pollution caused by the Bantala leather complex had been depleting several kinds of fish from the river

Subhasish Chaudhuri | Basirhat | Published 19.10.20, 12:24 AM

The march by the fishermen in Basirhat on Sunday

Pashupati Das

42-

Over 1,000 fishermen and nature activists from four blocks of Basirhat took out a 12km march on Sunday to protest the alleged administrative apathy to begin the long-awaited cleansing of the polluted Bidyadhari river.

The protesters said the National Green Tribunal had last year ordered the cleansing of the Bidyadhari, along with 351 other polluted rivers. Despite the approval of a grant by the Centre, the work is yet to begin.

Fishermen from Sandeshkhali, Hansnabad, Minakha and Haroa blocks gathered at Malancha on the Basanti Highway under the banners of the Bidyadhari Nadi Bachao Committee and the Dakshingan Matsyajibi Forum to start the march, which concluded at the Kulti crossing near Haroa.

The fishermen said it had become a serious livelihood issue for them as the alleged pollution caused by the Bantala leather complex had been depleting several kinds of fish from the river.

"Around 10,000 families in the four blocks are solely dependent on fishing. But because of the pollution in this long stretch, several species of fish have disappeared," said a fisherman from Haroa who joined the protest march.

An approximate 40km stretch of the Bidyadhari, from Haroa to Sandeshkhali, is polluted largely because of the alleged draining of industrial waste from the leather complex.

"The leather complex authorities never realised

YOU MAY ALSO LIKE

Citing court cases, Abhishek blames judiciary for delay in arrest of Sheikh...

Police detain local TMC leader Ajit Maiti in Sandeshkhali on land grab charges

The TMC is not shielding Shajahan Sheikh... We have a zero-tolerance policy against any crime

Abhishek Banerjee fires up TMC cadre with Brigade rally announcement for...

TMC delegation visits Sandeshkhali again, seeks time to address locals' grievances

they had been draining the poison into the river, not only endangering the riverine life forms but also robbing these people of their livelihood," said Gopesh Patra, a Trinamul Congress leader who is also the convener of the committee.

Last year, the National Green Tribunal directed state governments to ensure cent per cent treatment of sewage before release into river streams. The tribunal also directed the state government to begin installation of such treatment plants for sewerage and connecting drains by March 31, 2020

"After the order of the tribunal, the Centre had sanctioned Rs 4.5 crore for the work on a 20km stretch of the Bidyadhari. The state government was supposed to carry out the work, which is yet to begin," said Patra.

"We came to know that the state public health engineering department would do the work," he added.

A public health engineering department official in Calcutta said the detailed project report for the work has been finalised and sent for vetting. "We are hopeful of being able to begin the work soon."

A spokesperson for the Calcutta Leather Complex Tanners' Association dismissed the allegations as "baseless". "We have been adhering to the standard operating procedure from the state government and the state pollution control board. Had we not done so, they would have shut us down by now," he said.

Rakhal Halder, a fisherman from Haroa, said: "We want the state government to take care of the issue and ensure the work begins at the earliest, to save the river, to help us overcome the livelihood crisis."

Annexure - 'P-6'
-74-

Speed Post

B-190188/CETP-Site-II, Unnao/PIAS/WQM-II/CPCB/2018-19/ **Date: 20/11/2018**

12966-979

To,

All 14 operational member tannery units of CETP, Unnao
(as per list Enclosed)
UPSIDC, Site-II
Unnao (UP)

Direction under Section 5 of the Environment (Protection) Act, 1986

Whereas, the Ministry of Environment & Forests, Govt. of India, vide notification S.O.157 (E) of 27.02.1996 has delegated powers vested under Section 5 of the Environment (Protection) Act, 1986 (29 of 1986) to the Chairman, CPCB, to issue direction to any industry, Municipal Corporation, Municipal Council, Cantonment Board or to any local or other Authority for the violation of emission and effluent standards notified under the Environment (Protection) Rules, 1986; and

Whereas, the Central Government has notified the standards for discharge of environmental pollutants from various categories of industries, Common Effluent Treatment Plants (CETP) and Sewage Treatment Plants (STP) under the Environment (Protection) Act,1986 and the rules framed there under; and

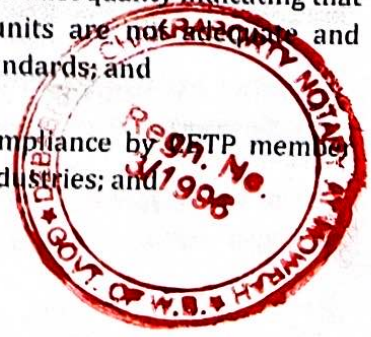
Whereas, amongst others, under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the State Pollution Control Boards (SPCBs)/Pollution Control Committees, constituted under the Water (Prevention and Control of Pollution) Act, 1974, is to plan a comprehensive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

Whereas, CETP at UPSIDC, Site-II, Unnao needed upgradation as the CETP was not able to comply with all parameter of the stipulated norms; and

Whereas, despite lapse of considerable time, the state of non-compliance of standards by the CETP at UPSIDC, Site-II, Unnao is continued unabated, no firm action has been taken for upgradation of CETP by either occupier of CETP or member units and it has become necessary to take action against the CETP member industries; and

Whereas, CETP, UPSIDC, Site-II, Unnao (Design Capacity 2.35 MLD) was inspected by official of CPCB on 08/05/2018 and found **non-complying** w.r.t. stipulated discharge standards **pH, TSS, BOD, COD, Chloride, Sulphate, Sulphide and Ammonical Nitrogen.** CETP was operational on the day of inspection. Effluent receiving at CETP inlet is also not meeting the desired inlet quality indicating that PETP and Chrome Recovery Unit (CRU) installed by the member units are not adequate and functioning properly to achieve desired PETP treated effluent quality standards; and

Whereas, non-compliance of standards by CETP is collective non-compliance by CETP member industries, and therefore action has to be taken against CETP member industries; and



Whereas, CPCB issued Show Cause Notice under section 5 of Environment Protection Act, 1986 dated 07/08/2018 **to all operational member units of CETP, UPSIDC, Site-II, Unnao (UP),** why should not be closed down until all necessary pollution control measures are planned and implemented including setting up of individual full-fledged ETP comprising to primary, secondary, biological and tertiary treatment system to provide requisite treatment to effluent, so as to comply with the prescribed effluent discharge standards notified under Environment (Protection) Act, 1986 to the satisfaction of CPCB and also why appropriate environmental compensation not be imposed; and

Whereas, a meeting was held on 25/09/2018 at CPCB, Delhi with officials of UPPCB, operator and member units of CETP, UPSIDC, Site-II, Unnao wherein it was agreed that there is a need to augment/upgrade PETPs & CRUs and to take necessary pollution control measures to ensure compliance of norms and finalized the action points for implementation by November 30, 2018; and

Now, Therefore, based on above observations and in exercise of powers delegated to Chairman CPCB under Section 5 of the Environment (Protection) Act, 1986 M/s (As per List enclosed).....is directed to comply with following directions:

1. The Unit shall implement following pollution control measures by November 30, 2018.
   - i. All borewells (water abstraction source) shall have electromagnetic flow meter with totalizer installed.
   - ii. To ensure independent/segregated conveyance system for chrome bearing effluent comprising of closed pipeline with appropriate covered facility for storage of recovered chrome and exhaust chrome liquor.
   - iii. To have only single discharge point for effluent having electro-magnetic flow meter and maintain log books.
   - iv. To adopt physical/mechanical de-salting of hides/skins to be adopted as a practice for cleaner technology. Salt shaker and drum shall be used to control TDS.
   - v. To maintain log Book for basic raw material i.e. hides/skins and chemicals consumed in the process.
   - vi. To install bar screens of different openings (bars clear spacing) at the inlet of the PETP system to trap the solid waste and prevent them from going into the PETP system.
   - vii. Retention time of equalization tank shall be minimum 24 hours. The chemicals dosing shall be done in separate tanks for Lime and Alum, with proper mixing arrangement.
   - viii. Primary Settling tank (PST) shall have SOR of 1.0 $m^3/m^2/hr$ (maximum), Retention time 4-5 hours and Flow rate to be controlled in accordance with the SOR. Tube settler or Lamella settler may be installed in addition to existing PST to improve settling area if required.
   - ix. To install mechanical sludge de-watering system such as Filter Press for speeding up the drying process and quick disposal of the solid waste.
   - x. To engage trained personnel for the operation & maintenance of PETP & CRU and submit the list of operator & workmen indicating the names & educational qualification to CPCB. The training of the operators may be carried out under some expert in this field.
   - xi. To introduce and adopt cleaner technologies in their unit.
2. Inventory of the functional units & electro-mechanical equipment forming part of the PETP of individual units shall be provided to the CPCB by November 30, 2018. Format for providing information is in annexure 1.
3. Self-certified Infrastructure details for mechanical desalting system, soaking pits/paddles and Drums to confirm that infrastructure installed is in accordance to the licensed/ installed capacity shall be submitted to CPCB.
4. Unit shall engage technical institutes for obtaining capacity assessment report of the Drums installed at their premises, in respect of number, types, drum size, production capacity,

DEBABRATA CHAKRABORTY NOTARY GOVT. OF W.B. Regn. No. 3/1996

operating time and number of hides can be processed and submit the report to CPCB by November 30, 2018.

5. Adequacy report of PETP & CRU shall be carried out from technical institutes like CLRI, IIT's etc. by November 30, 2018 and necessary improvement shall be implemented by November 30, 2018.
6. The adequacy assessment of CETP Site-II, Unnao shall be provided to CPCB by November 30, 2018.
7. The adequacy assessment of PETP and CETP shall specially focus on assessment of Primary and secondary sludge generation and capacity of sludge dewatering/ drying.
8. Unit shall submit monthly returns of Hazardous waste disposal to the secure land fill facility to CPCB by 10th of every month.
9. Daily reading of the electromagnetic flow meter at discharge point of member units be collected by the CETP operator and thereafter a consolidated monthly data shall be sent to the CPCB by 10th of every month.
10. Environment Management Cell (EMC) should be constituted for Site-II, Unnao cluster having at least two technical experts as member (eg. member from Technical institutes), one member from Uttar Pradesh Pollution Control Board, besides other members. The EMC may conduct meetings fortnightly to discuss on the environmental issues and minutes of EMC meetings shall to be forwarded to CPCB.
11. Basic testing facility for effluent quality norms shall be created at the CETP, which will be availed by the member units of the CETP. Daily analysis of PETP and CETP effluent quality shall be by carried out & log book shall also be maintained.
12. Quarterly cleaning of CETP conveyance system shall be ensured.
13. Individual action plan shall be developed and submitted by each Tannery by November 30, 2018 on the adoption of cleaner Technologies so as to meet all standards/ requirement of effluent discharge. Tanneries shall implement the plan by November 30, 2018. The action plan should be specific and clear covering process against the value chain, targeted effluent and possible intervention: (Indicative table)

Process	Targeted effluent	Intervention/ best practice
Before Soaking/ Salt Dusting		
After Soaking		
Liming Flashing		
Deliming		
Pickling		
Tanning		

The Unit shall acknowledge the receipt of these directions within 10 days and submit the action taken within the time line proposed from the date of issue of these directions. In case of default in compliance with the above directions by you, CPCB will be constrained to initiate appropriate action against you, in accordance with the provisions of the Environmental (Protection) Act, 1986.

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH
Regn. No. 3/1996
GOVT. OF W.B.

(S. P. Singh Parihar)
CHAIRMAN

Copy to:

1. **Chairperson,**
   U. P. Pollution Control Board
   Building No. TC-12V, VibhutiKhand,
   Gomti Nagar, Lucknow-226 010
   : For kind information please.

2. **Director General,**
   National Mission for Clean Ganga (MoWR, RD & GR)
   1st Floor, Major Dhyan Chand National Stadium
   India Gate, New Delhi – 110002
   : For kind information please.

3. **Joint Secretary (CP-Division),**
   Ministry of Environment Forests & CC
   Indira Paryavaran Bhawan, Jor Bagh Road,
   New Delhi-110 003
   : For kind information please.

4. **Regional Director**
   Regional Directorate-North
   Central Pollution Control Board, PICUP Bhawan,
   Vibhuti Khand, Gomti Nagar, Lucknow (UP)
   : For follow up.

5. **M/s Site-II, Unnao Industrial Pollution Control Company**
   UPSIDC Leather Technology Park ,
   Site-II, Unnao, Unnao (UP)
   : For implementation of action point.

6. **In-charge, IT Division, CPCB**
   : For uploading on CPCB website.

7. **Guard File, WQM - II Division, CPCB**

(Prashant Gargava)
MEMBER SECRETARY

DEBABRATA CHAKRABORTY NOTARY AT HOWRAH
Regn. No. 3/1996
GOVT. OF W.B.

Sl. No.	Operational member tannery units of CETP-Site-II, Unnao
1.	Superhouse leathers ltd Sole Division (Unit-3), B-16,17, Industrial Area Site-II, Dist. Unnao, UP
2.	Superhouse leathers ltd Goat Division (Unit-2), B-15, Industrial Area Site-II, Dist. Unnao, UP
3.	Kings International ltd., D-13, C-19, Site-II, UPSIDC, Industrial Area, Dist. Unnao, UP
4.	Sultan Tanneries &Leather Products Pvt. Ltd., D-16, Site-II, Industrial Area, UPSIDC, Dist. Unnao, UP
5.	Crescent Tanners Pvt.Ltd. Unit-II, D-17, Site-II, Industrial Area, Dist. Unnao, UP
6.	Leder fabric, D-16, Industrial Area, Site-II, Dist. Unnao, UP
7.	GBS Tanners Pvt. ltd., B-6, Site-II, Industrial Area, Dist. Unnao, UP
8.	Iqbal Leathers Ltd., C-2, Site-II, Industrial Area, Dist. Unnao, UP
9.	Superhouse L. Ltd. Chrome Division, A-1 C-1, Site-II, Industrial Area, Dist. Unnao, UP
10.	Model Tanners (india) Pvt. Ltd., A-7/1 & 8/3, UPSIDC, Industrial Area, Site-II, Dist. Unnao, UP
11.	Calico Trends, 17, Leather Complex, Site-II, Dist. Unnao,UP
12.	Crescent Tanners Pvt. Ltd. (Unit-I) 16, Leather Complex, Site-II, Dist. Unnao, UP
13.	Sultan Tanners, Plot/shed no.18, Leather Complex, Site-II, Dist. Unnao, UP
14.	Calico Trends, Shed/Plot no.15 Leather Complex (In place of Cosmos Tannery), Industrial Area, Site-II, Dist. Unnao, UP

DEBABRATA CHAKRABORTY NOTARY AT UNNAO
Regn. No. 3/1996
GOVT. OF W.B.

Annexure - 1

INVENTORY FORMAT FOR TANNERY				
1	Name and Address of Tannery And, Tannery Code as per List			
2	Member for the SPV for CETP	Yes / No		
3	Name of the Contact person a. Contact number b. E-mail ID			
5	Operational Status of the unit If closed, (closed by own or by CPCB/ SPCB) also , date of closure	(operational/closed)		
6	Operation Schedule (hours/ shift and Shift/ day)			
7	Consented capacity (Hides/ day)			
8	Type of process (Multiple response possible)	Raw to Finished leather (Chrome tanning) Raw to Finished leather (Vegetable tanning) Raw to Wet Blue (Chrome tanning) Raw to Wet Blue (Vegetable tanning) Wet Blue to Finished leather (Vegetable tanning) Wet Blue to Finished leather (Chrome tanning) Split to Finished leather Others (Specify)		
9	Raw material used	**Type of Hide**	**No. of hides/ day**	**Approximate total weight of hides (kg.)**
		Cow		
		Buffalo		
		Goat/Sheep Skin		
		Calf Hide		
		Mudella		
		Split		
		Others (specify)		
10	Installed Production capacity (kg/ day) including by-products	Semi-finished/ Finished/ Other (Specify) Total		
11	Actual production (Kg/day)	Semi-Finished - Finished- Other (specify)- Total		
12	Valid Consent orders to operate: ➢ Under Water Act, 1974 & ➢ Under Air Act, 1981 (copy to be enclosed)	Valid up to ..... Valid up to		
	If valid consent not available, Submission of renewal application & validity of expired consent	Consent expired on..... and renewal application submitted on		

DEBORATA CHAKRABORTY NOWRAH Regn. No. 3/1996 GOVT. OF W.B.

13	DETAILS OF PROCESS MACHINES						
	Make (Indigenous/ Imported)	Type (Manual/ Automated)	No.	Size	Unit operations performed in each	Running Schedule (hr/day)	Number of operational days in a year
Drums							
Pits/ Paddles							

14	WASTE AND WASTEWATER MANAGEMENT	
i.	Mechanical desalting of all hides processed	Yes / No
ii.	Segregation & evaporation of soaking effluent	Yes / No
iii.	Re-use of salt recovered from mechanical desalting/ evaporation	Yes / No
iv.	Segregation, treatment & reuse of pickling effluent	Yes / No
v.	Re-use of treated chroming/ re-chroming effluent	Yes / No
vi.	Re-use of chrome recovered from chrome recovery Plant (CRP)	Yes / No
vii.	Salt-free chilled hides/ skins procurement and chilled storage	Yes / No

15	EFFLUENT TREATMENT (PETP/ ETP)	
i.	Type of operation	Batch/ Continuous
ii.	Operation hours per day	
iii.	Primary-treatment if any (Oil and Grease trap, pre-settling tank)	
iv.	PETP/ ETP capacity (KLD)	
v.	Flow meter installed at inlet/ outlet of PETP/ETP	Yes / No
vi.	OCEMS Connectivity with CPCB/ UPPCB portal (enclosed picture)	Yes/ No
vii.	Monthly reporting of flow meter data to UPPCB	Yes/ No
viii.	Adequacy assessment through IITs/ NEERI/ CLRI	Yes/ No
Components/ unit		
ix.	<u>Screens</u> Type (Manual/ Mechanical): Numbers and Location of each:	
x.	<u>Holding Tank and/or Equalization Tank</u> Retention time (Hours): Mixing Arrangement (Air/ Mixer/ Both):	
xi.	<u>Chemicals Dosing Tanks</u> Dosing system (manual/ pump): No. & size of Chemical Solution tanks:	
xii.	Mixing/Reaction Tank/ Flocculation tank (Flash Mixing Tank)	
xiii.	<u>Primary Settling Tank</u> Plain settler/ Tube settler/ lamella settler: Retention time (in hours):	

xiv.	Sludge Drying Beds Numbers: Size: Drying Period (days): Quantity of Sludge (Kg/day): Dried sludge Disposal method:	
xv.	Mechanical Sludge dewatering system (Filter press / Centrifuge / belt press) If Filter Press, give details - Nos. of plates and Plate size	
xvi.	Carbon filters Diameter & Height: Cleaning frequency:	
xvii.	Sand Filters Diameter & Height: Cleaning frequency:	
xviii.	RO Plant Capacity (KL/hr): Stages:	
In case of Stand alone tannery, the following information shall be furnished		
xix.	Aeration Tank Capacity: Type & total power of aeration system: MLSS concentration normally maintained (mg/l):	
xx.	Secondary Clarifier Capacity: Retention time (hours): Overflow rate ($m^3/m^2.hr$):	

16	**CHROME LIQUOR MANAGEMENT**		
i.	Where do you dispose the Chrome Liquor?	Separate Drain Combined Drain	
	Whether a member of existing Common CRP	Yes/ No	
ii.	Whether separate drain exist for collection of chrome bearing effluent	Yes/ No	
iii.	Do you have a Chrome Recovery Plant Installed?	Yes/ No	
	If yes, capacity (KL/ day)		
iv.	Method of discharge of chrome liquor Collected by Tanker/ Sent in to In-house CRP/ Sent to CETP CRP/ All of the above		
v.	Quantity (KL/ day)		
vi.	Chrome bearing Effluent Quantity through CRP (KLD)		
vii.	Type of operation	Batch/ Continuous	
viii.	Claimed/ Actual performance efficiency		

	Component / unit of CRP	Nos.	Size (internal) in Meters		
			Length	Width	Water Depth
ix.	Holding Tank/Equalization Tank				
	Retention time (Hours): Air mixing Arrangement:				
x.	Chemicals Dosing Tanks				
	Dosing system (manual/ pump): No. & size of Chemical Solution tanks:				
xi.	Mixing/Reaction Tank				
	Mixing Arrangement (Air/Mixer/Both)				
xii.	Settling Tank				
	Retention time (Hrs)				
xiii.	Mode of disposal of effluent and way to reach Ganga				

17	DETAILS ON HAZARDOUS WASTES AND OTHER SOLID WASTE GENERATION		
i.	**Type of Wastes (Kg/ Month)**	**Quantity generated**	**Storage & Disposal**
	Chrome bearing residues		
	Chemical sludge from ETP/ PETP		
	Fleshing		
	Others (specify)		
	Total **(Kg/Month)**		

ii.	**Status of validity of hazardous waste authorization**			
		Validity	Manifesto	Compliance Yes/ No & comments
	Yes/ No or applied (copy to be enclosed)	a		

iii.	**Method of disposal of Sludge (Multiple response possible)**		
		Yes	No
	Sent to landfill site		
	Reuse in horticulture		
	Sent to fertilizer manufacturer		
	Others (please specify)		

18	STATUS OF LOG BOOKS MAINTENANCE		
		Yes	No
	Fresh Water supply / Extraction		
	ETP / PETP Discharge		
	Chrome Recovery Plant		
	ETP / PETP Sludge		
	Hazardous and other Solid wastes		

19. Action plan for improvement in PETP (Specific points to be mentioned by the industry)