BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
O.A. NO. 620/2022

IN THE MATTER OF:

KAUSHAL KISHORE VISHWAKARMA …APPLICANT

VERSUS

STATE OF PUNJAB AND OTHERS …RESPONDENTS

CONVENIENCE COMPILATION ON BEHALF OF RESPONDENT NO. 4 (NFL, BATHINDA) & RESPONDENT NO. 7 (NFL, PANIPAT)

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THROUGH

Juvas Rawal

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Date: 23.05.2025

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
O.A. NO. 620/2022

IN THE MATTER OF:

KAUSHAL KISHORE VISHWAKARMA …APPLICANT

VERSUS

STATE OF PUNJAB AND OTHERS …RESPONDENTS

WRITTEN SUBMISSIONS ON BEHALF OF RESPONDENT NO. 4 (NFL, BATHINDA) & RESPONDENT NO. 7 (NFL, PANIPAT)

GENERATION OF CARBON SLURRY

1. NFL started its commercial production in the year 1979 where it used Fuel Oil ('**FO**') / Low Sulphur Heavy Stock ('**LSHS**') as feedstock for the production of Urea from 1979 till November, 2012. The Plant was based on the partial oxidation of FO by the Shell Gasification process with the help of oxygen and steam at 55 Kg/cm2 at a temperature of 1,350 degrees Celsius. During the partial oxidation of FO, which is an energy-intensive process, carbon is generated due to inevitable thermal cracking. The carbon so generated, called 'Carbon Slurry' (mixture of carbon and water), was removed from the raw gas with the aid of water and collected in a carbon separator.

2. In an endeavor to keep pace with clean technology and with a commitment to sustainable development, the Plants of the Respondents were restructured in November, 2012 after heavy investments. The feedstock was replaced from LSHS to Natural Gas, which not only reduced the specific energy per metric tonnes of urea but also lowered the carbon footprint. Resultantly, no carbon slurry has been generated by the Respondents since the year 2012.

HWM RULES, 2016

3. On 04.04.2016, Government of India notified the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (hereinafter referred to as '**said Rules**') as amended, for the safe and environmentally sound regulation and management of hazardous and other wastes. Under 18.2 of Schedule-I of the Rules, carbon residue (slurry) from production of nitrogenous and complex fertilizers has been categorized as Hazardous Waste. Hence, up until 2016, carbon slurry did not attract the provisions of the said Rules.

4. The carbon residue (slurry) for production of nitrogenous and complex fertilizers has been categorized as Hazardous Waste under 18.2 of Schedule-1 of the said Rules.

It is reiterated that the Respondents have discontinued the generation of carbon slurry as part of their operational practices as aforementioned and the storage and disposal of the slurry generated prior to 2012 is being done in line with the said Rules and other regulations of the Government of India.

5. It may be noted that the Respondents are now dealing with what is essentially a legacy issue. This waste was generated prior to 2012 and has been progressively disposed of by the Respondent in a responsible and environmentally safe manner in compliance with the provisions of applicable law.

STORAGE/MANAGEMENT & DISPOSAL OF CARBON SLURRY

6. Since the Notification of the said Rules, the Respondents have been following the required Rules, Regulations etc. for safe and environmentally sound management of carbon slurry at its unit:
    a) Rules 3(21) defines 'occupier' as *"...a person who has control over the affairs of the factory or the premises and includes in relation to any hazardous and other wastes, the person in possession of the hazardous or other waste*".
    b) Rule 4 of the said Rules lays down the responsibilities of the occupier for management of hazardous and other wastes.
    The Prohibition : This Rule prohibits the Respondents from freely dealing with or disposing off the hazardous material (carbon slurry) and requires that carbon slurry : (i) can only be sent or sold to an authorised actual user or shall be disposed of in an authorised disposal facility; and (ii) can only be transported from an occupier's unit to an authorised actual user or to an authorised disposal facility in accordance with the provisions of the said Rules.
    c) **The Utilisation** : Rule 9 of the said Rules lays down the manner in which the utilisation of hazardous and other wastes is to be done i.e. *the utilisation of hazardous and other wastes as a resource or after pre-processing either for co-processing or for any other use, including within the premises of the generator, shall be carried out only after obtaining authorization from the State Pollution Control Boards in respect of waste on the basis of standard operating procedures or guidelines provided by the Central Pollution Board.*
    d) **The Packaging and Labelling** : Rule 17 of the said Rules lays down the manner in which the packaging and labelling of hazardous and other wastes is to be done i.e. *any occupier handling hazardous or other wastes and operator of the treatment, storage and disposal facility shall ensure that the hazardous and other wastes are packaged in a manner suitable for safe handling, storage and transport as per the guidelines issued by the CPCB from time to time.*

e) **The Transportation** : Rule 18 of the said Rules lays down the manner in which the transportation of hazardous and other wastes is to be done i.e. *the transport of the hazardous and other waste shall be in accordance with the provisions of these rules and the rules made by the Central Government under the Motor Vehicles Act, 1988 and the guidelines issued by the Central Pollution Control Board from time to time in this regard*.
The Respondents always ensure that the carbon slurry is transported / disposed of by the authorised contractor(s) in closed trucks and containers, affixed with labels containing the emergency numbers in case of any spillage of the hazardous material, in accordance with the said Rule.

7. It is pertinent to highlight here that in terms of the said Rules, it limits the ability of the Respondents to freely deal with or dispose of the hazardous material under consideration. Only parties authorised or duly certified under the said Rules can dispose of hazardous wastes and could not be sold to consumers / industries directly. Furthermore, only valid authorised parties registered with the Central Pollution Control Board ('**Respondent No.9**') or the concerned SPCB could participate in the tendering process. The requirements as per the said Rules for a party to apply in a tendering process are: (i) valid consent to operate (Air & Water) from the Respondent No.9 or SPCB. Copy of such consent to operate certificate (CTO) shall be submitted to Metal Scrap Trade Corporation Limited ('**Respondent No.11**') (before participating in e-auction); (ii) valid authorization for storage, utilizing and transportation of carbon slurry as per the said Rules. Such authorization / license shall have a validity of at least 1 (one) year from the date of bidding; and (iii) in case of transportation, the buyer shall obtain 'No Objection Certificate' in the name of the Respondents from the concerned SPCB.

8. In a nutshell, the Respondents can only sell carbon slurry to intermediaries, who are certified by the concerned competent authority and duly licensed. Thus, the Respondents suffer a disability created by law whereby the Respondents cannot freely deal with the product and have to strictly act in terms of the said Rules.

POLLUTERS PAY PRINCIPLE

9. In Environmental Law, the 'Polluters Pay Principle' is enacted to make the party responsible for polluting the environment, to make good the damage caused to the environment. The Apex Court in '***M.C Mehta vs Kamal Nath & Ors.*** **[2000 (6) SCC 213]** defined Polluters-Pay Principle as: *"In the matter of enforcement of fundamental rights under Article 21, under the public law domain, the Court, in exercise of its powers under Article 32 of the Constitution, has awarded damages against those who have been responsible for disturbing the ecological balance wither by running the industries or any other activity which has the effect of causing*

pollution in the environment. The court while awarding damages also enforces the Polluters-Pay Principle which is widely accepted as means of paying for the cost of pollution and control. To put in other words, the wrongdoer, the polluters, is under an obligation to make good the damage caused to the environment."

As illustrated by the Apex Court in the aforementioned judgment, only the polluter, wrongdoer is under an obligation to make good the damage caused to the environment.
Copy of the Judgment titled as "*M.C. Mehta vs Kamal Nath & Ors.*" is marked and annexed herewith as **DOCUMENT – 1**.

10. It is pertinent to mention that the Respondents are the 'occupier' of the carbon slurry and its duties are envisaged under the Rule 4 as aforementioned. The Respondents are in due compliance of the duties as mandated by the said Rules. The carbon slurry lying in the Respondents units respectively are stored in separate designated ponds after taking all necessary precautions and following all the regulations and guidelines issued by the Government of India. The details of the carbon slurry ponds are as follows:

Respondent No.4 Pond	**Size (sq. mts.)**	**Respondent No.7 Pond**	**Size (sq. mts.)**
Pond Number 1	11,252	Part – A Area	33,150
Pond Number 2	12,610	Part – B Area	9,000
Pond Number 3	48,300	**Total size**	**42,150**
Total size	**72,162**		

11. The carbon slurry ponds are brick lined with High-Density Polyethylene ('**HDPE**') which is excellent in its durability, flexibility and im-permeability. HDPE is highly resistant to environmental conditions and is widely used for the manufacture of chemical tanks. To prevent any leaks or spillage from the ponds, the dyke walls are raised by 3 to 5 meters from the carbon slurry storage level, and the average depth of the carbon slurry ponds are approximately 6 meters. Furthermore, the dyke walls around the carbon slurry ponds are surrounded by a lush tree cover.

12. The aforementioned carbon slurry ponds are built at a considerable distance from human settlement to prevent any hazards while loading and unloading. To ensure further safety, fencing has been done by the Respondents around the carbon slurry ponds and security guards with proper gear and training have been posted. As an added caution, a committee has been constituted by the Respondents for regular monitoring of the carbon slurry ponds while carbon slurry is being lifted, to ensure that the said Rules are complied with and no environmental harm or damage is

caused during the process. In addition to this, the Respondent No.7 also installed CCTV cameras around the ponds of their respective unit to aid the monitoring process.

13. Therefore, under the Polluters-Pay Principle it is the wrongdoer under an obligation to make good the damage caused to the environment. But, to the contrary the Respondents have: (i) not polluted the air, water & land; and (ii) ensured that there's no leakage from its ponds. It is crucial to point out that the said Rules lay down the Rules for the Respondents in the order in which it is bound to dispose of the scheduled material. The Polluters-Pay Principle is vis-a-vis a liability created by law and the Respondents who in turn are following the said Rules in order to dispose of the material and are not violating any of the terms of such Rules, cannot be punished with such a liability.

TESTING CONDUCTED: NON HAZARDOUS

14. In addition to the above, directions were issued by the Ministry of Environment, Forest & Climate Change ('**Respondent No.8**') vide Office Memo F.No.23-88/2018-HSM, dated 09.10.2018, for the analysis of representative samples of carbon slurry from carbon ponds of the Respondents respectively as per Schedule II of the said Rules.
15. The Respondent No.4 in compliance with the above directions issued by the Respondent No.8, proceeded with the testing of carbon slurry lying in its ponds from Alpha Test House, New Delhi vide Letter, dated 18.10.2018.
    Copy of the Report of M/s Alpha Test House (ISO 9001-2008 Certified Testing Laboratory), New Delhi, dated 15.11.2018, for the testing of carbon slurry conducted by Respondent No.4 is marked and annexed herewith as **DOCUMENT - 2**.

16. Whereas, the Respondent No.7 in compliance with the above directions issued by the Respondent No.8, proceeded with the testing of carbon slurry lying in its ponds from Alpha Test House, New Delhi vide Letter, dated 01.11.2018. It is pertinent to highlight that Alpha Test House is an ISO (9001-2008) certified Testing Laboratory. As per the report / test analysis, the samples collected from the ponds of the Respondents units indicated that the carbon slurry lying in the ponds is Non-Hazardous as the Hazardous contents are below the detectable limits as per the Schedule II of the said Rules.
    Copy of the Report of M/s Alpha Test House (ISO 9001-2008 Certified Testing Laboratory), New Delhi, dated 15.11.2018, for the testing of carbon slurry conducted by Respondent No. 7 is marked and annexed herewith as **DOCUMENT - 3**.

17. Furthermore, abiding by the directions of Punjab Pollution Control Board ('**Respondent No.2**'), vide Letter No. 816, dated 12.02.2024, the Respondent No.4

conducted an Environment Assessment Study in order to assess whether any environmental damage was taking place for storing carbon slurry in the unit's ponds. The said assessment study was conducted by the Maharaja Ranjit Singh Punjab Technical University ('**MRSPTU**'), Bathinda. It is pertinent to mention that this institute is approved by Respondent No.2. The environment assessment team of MRSPTU collected groundwater samples from in and around the complex of Respondent No.4 and carbon slurry samples from carbon ponds. As per the report / test analysis, all the parameters are well within the prescribed limits of Schedule II of the said Rules. Furthermore, the water quality in the area is safe and meets all relevant environmental standards (BIS, 2012-10500). Detailed report has been already submitted to Respondent No.2 on 04.09.2024.

Copy of the Report / Assessment Study, dated 04.09.2024, conducted by Maharaja Ranjit Singh Punjab Technical University is marked and annexed herewith as **DOCUMENT - 4**.

UNDERTAKINGS BY RESPONDENT NO.5

18. Respondent No.5 - an authorised party under the said Rules, was the party contracted to dispose of the carbon slurry lying in the Respondents units. However, there was gross delay caused by the Respondent No.5, which led to an oral undertaking being given by Respondent No.5 in the captioned matter to this Hon'ble Tribunal, committing to collect, lift, transport, and utilize the entire quantity lying in the ponds of the Respondents within the committed time i.e. 30.09.2024. Vide Letter, dated 22.06.2024, the Respondent No.5 reaffirmed its commitment to lift 100% of the material within the committed time. Till date, Respondent No.5 has not been able to lift the entire quantity from the ponds of the Respondents.

    Copy of the Letter, dated 22.06.2024, sent by the Respondent No.5 reaffirming its commitment to lift 100% of the material, is marked and annexed herewith as **DOCUMENT - 5**.

19. In addition to the above, this Hon'ble Tribunal vide Order, dated 15.10.2024, was pleased to issue directions to the Respondents to take appropriate action and extend requisite facilities at the storage site to the Respondent No.5, with respect to the financial conditions being faced by the Respondent No.5, for ensuring expeditions disposal of carbon slurry. In light of these directions, following steps were taken by the Respondents to financially support the Respondent No.5:

    a) **Respondent No.4:**

        The Respondent No.5, vide email, dated 10.01.2025, requested for refund of unutilised amount lying with the Respondent No.4. After several meetings, deliberations and discussion, and a part of their endeavor to ensure timely lifting of carbon slurry, it was decided that the Respondent No.4 would provide support to the Respondent No.5 for completely lifting the balance material, in line with the directions issued

by this Hon'ble Tribunal on 15.10.2024. During another meeting on 28.02.2025, it was agreed between the representatives of the Respondent No.4 and the Respondent No.5 that the Respondent No.4 will release an amount of Rs.1,60,00,000/- (Rupees One Crore Sixty Lacs Only) to the Respondent No.5 to meet the working capital requirement for lifting the carbon slurry subject to submission of an Undertaking-cum-Indemnity Bond by the Respondent No.5. It was also agreed upon by the Respondent No.5 that they will lift 5000 MT of carbon slurry from the Respondent No.4's ponds by 31.07.2025 and all remaining material by 31.03.2026. The same was reiterated by the Respondent No.5 in its Letter, dated 28.02.2025, to the Respondent No.4.

The Respondent No.4, vide Letter, dated 12.03.2025, informed the Respondent No.5 that they are willing to release the funds subject to the above-mentioned conditions. Thereafter, the Respondent No.4 vide email, dated 19.03.2025, reminded the Respondent No.5, to submit the above-mentioned undertakings. Subsequently, on 26.03.2025, the Respondent No.5 submitted the Undertaking-cum-Indemnity Bond and issued Post-dated cheques for an amount of Rs.1,60,00,000/- (Rupees One Crore Sixty Lacs Only) in favour of Respondent No.4. Upon receiving the above-mentioned Undertaking-cum-Indemnity Bond and Post-dated cheques, the Respondent No.4 on 29.03.2025 released an amount of Rs.1,60,00,000/- (Rupees One Crore Sixty Lacs Only) to the Respondent No5.

Copy of Order, dated 15.10.2024, passed by this Hon'ble Tribunal in the captioned matter is marked and annexed herewith as **DOCUMENT – 6**.

Copy of letter, dated 28.02.2025, sent by the Respondent No.5 to the Respondent No.4 is marked and annexed herewith as **DOCUMENT – 7**.

Copy of letter, dated 12.03.2025, sent by the Respondent No.4 to the Respondent No.5 is marked and annexed herewith as **DOCUMENT – 8**.

Copy of email, dated 19.03.2025, sent by the Respondent No.4 to the Respondent No.5 is marked and annexed herewith as **DOCUMENT – 9**.

Copy of letter, dated 26.03.2025, sent by the Respondent No.5 to the Respondent No.4 is marked and annexed herewith as **DOCUMENT – 10**.

b) Respondent No.7:

The Respondent No.5, vide email, dated 10.01.2025, requested for refund of unutilised amount lying with the Respondent No.7. After several meetings, deliberations and discussion, and a part of their endeavor to ensure timely lifting of carbon slurry, it was decided that the Respondent No.7 would provide support to the Respondent No.5 for completely lifting the balance material, in line with the directions issued by this Hon'ble Tribunal on 15.10.2024. The Respondent No.7 requested the Respondent No.5 to submit their detailed action plan with respect to lifting of carbon slurry. Vide email, dated 10.02.2025 and thereafter on 17.02.2025, the Respondent No.5 sent their proposal to the Respondent No.7, *inter-alia* requesting for (i) refund of the advance deposited along with the interest; (ii) grant of Rs.5,50,00,000/- (Rupees Five Crores Fifty Lacs Only); and (iii) supply of material on free of cost basis. During a meeting held on 01.03.2025, the Respondent No.7 would be willing to extend financial support to the extent of the balance amount deposited by Respondent No.5 with Respondent No.7 subject to: (i) submission of Bank Guarantee of equivalent amount by the Respondent No.5; and (ii) submission of lifting plan for the carbon slurry by the Respondent No.5.

Thereafter, subsequent to various discussions between the Respondent No.5 and Respondent No.7, final proposal was submitted by the Respondent No.5, vide Letter, dated 17.03.2025. In response to the Letter, the Respondent No.7, vide Letter, dated 25.03.2025, acceded to their request as described under - subject to them submitting Undertaking-cum-Indemnity Bond on a non-judicial stamp paper along with Post-Dated Cheques for the above-mentioned amount: (i) release an amount of Rs.1,69,99,542/ (Rupees One Crore Sixty Nine Lacs Ninety Nine Thousand Five Hundred Forty Two Only) i.e. 25% of the balance advance amount deposited with Respondent No.7 to the Respondent No.5, against which the Respondent No.5 shall lift 4208MT of carbon slurry within a period of 5 months from the date of issue of Sale Order/Intimation Letter i.e. 25.03.2025; (ii) supply of power on free of cost basis at one point in battery limit of Respondent No.7; (iii) providing free portable water in battery limit of the Respondent No.7; (iv) providing steam on free of cost basis at battery limit of Respondent No.7; and (v) allow the Respondent No.5 for mobilization/operation and for maintenance of their mobile/skid mounted material handling and water load reducing unit at the site itself, for speedier clearance of actual carbon material at the earliest possible time.

However, the Respondent No.5 submitted, vide email, dated 26.03.2025, that they regret making any commitment to lift the carbon slurry even though Respondent No.7 is ready to give financial support of Rs. 1,69,99,542 (Rupees One Crore Sixty Nine Lacs Ninety Nine Thousand Five Hundred Forty Two Only) along with other support. It is to be noted that since 05.03.2025, no action has been taken by the Respondent No.5.

Copy of letter, dated 17.03.2025, sent by the Respondent No.5 to the Respondent No.7 is marked and annexed herewith as **DOCUMENT – 11**.

Thus, it can be seen that the Respondents have left no stone unturned to ensure safe storage and management of carbon slurry and its efficient disposal. The Respondents are ready and willing to extend all possible and feasible support to the Respondent No.5 to ensure efficient and timely lifting and disposal of carbon slurry from its ponds.

EFFORTS PUT IN BY THE RESPONDENTS TO EXPEDITE THE DISPOSAL OF CARBON SLURRY

SOLE BUYER

20. It is further pointed out that M/s Shubham Sales Company ('**Respondent No.5**') is the only authorised contractor dealing in carbon slurry. The Respondents are left with no other option/choice, but to recourse and depend on Respondent No.5 to lift the entire quantity of carbon slurry lying in the units of the Respondents respectively.

RESPONDENT NO.4

21. The Respondent No.4 vide email, dated 11.09.2024, requested Respondent No.11 to provide an upto date list of registered parties specifically dealing in disposal of carbon slurry. In Reply to this email, Respondent No.11 vide email, dated 17.09.2024, clarified that as per the records Respondent No.5 is the only one dealing in carbon slurry. In addition to this, the Respondent No.4 vide emails, dated 20.09.2024, 25.09.2024, 07.11.2024, 17.12.2024 and 18.12.2024, requested Respondent No.11 again to provide the list of all previous registered buyers/parties who participated for the auctions of disposal of carbon slurry. In response, the Respondent No.11 vide email, dated 24.12.2024, informed the Respondent No.4 that only 3 (three) parties namely – (i) Respondent No.5; (ii) M/s Shivam Chemicals, Panipat; and (iii) M/s Mirzapur Metal Refinery; had earlier participated in the auctions of carbon slurry.

    Copy of email, dated 11.09.2024, sent by the Respondent No.4 to the Respondent No.11 is marked and annexed herewith as **DOCUMENT – 12**.

Copy of email, dated 17.09.2024, sent by the Respondent No.11 to the Respondent No.4 is marked and annexed herewith as **DOCUMENT – 13**.

Copy of reminder emails (dated 20.09.2024, 25.09.2024, 07.11.2024, 17.12.2024 and 18.12.2024) sent by the Respondent No.4 to the Respondent No.11 are marked and annexed herewith as **DOCUMENT – 14 (colly)**.

Copy of email, dated 24.12.2024, sent by the Respondent No.11 to the Respondent No.4 is marked and annexed herewith as **DOCUMENT – 15**.

22. The Respondent No.4 with a proactive approach wrote an email dated, 14.09.2024 to M/s Mirzapur Metal Refinery (as they participated in the initial Tender floated by the Appellant for disposal of carbon slurry), requesting them to confirm whether they are still dealing in disposal of carbon slurry. However, receiving no reply, the Respondent No.4 sent another email dated 19.09.2024 to M/s Mirzapur Metal Refinery, requesting them again to confirm whether they are still dealing in disposal of carbon slurry. During the telephonic conversation between the parties on 19.09.2024 itself, it was clarified by M/s Mirzapur Metal Refinery that they have stopped dealing in disposal of carbon slurry.

    Copy of email, dated 14.09.2024, sent by the Respondent No.4 to M/s Mirzapur Metal Refinery is marked and annexed herewith as **DOCUMENT – 16**.

    Copy of email, dated 19.09.2024, sent by the Respondent No.4 to M/s Mirzapur Metal Refinery is marked and annexed herewith as **DOCUMENT – 17**.

23. In the meanwhile the Respondent No.4 vide email dated, 14.09.2024, also approached M/s Shivam Chemicals, requesting them to confirm whether they are still dealing in disposal of carbon slurry, as they participated in the initial Tender floated by the Respondent No.4. However, this email too went unanswered and the Respondent No.4 sent another email dated 19.09.2024, requesting M/s Shivam Chemicals for its confirmation. In Reply to this email, M/s Shivam Chemicals vide Email dated, 20.09.2024, clarified that while they are still dealing in disposal of carbon slurry, however, their current authorisation certificate is under renewal process. In addition to the Reply by M/s Shivam Chemicals, the Respondent No.4 vide Email dated, 23.09.2024, sent to M/s Shivam Chemicals, requested them to further provide: (i) latest copy of sale order of carbon slurry executed by them; and (ii) date of expiry of the Hazardous Waste Authorization for dealing in carbon slurry. However, this email too went unanswered and the Respondent No.4, further sent emails, dated 25.09.2024, 07.11.2024 and 17.12.2024, to M/s Shivam Chemicals reiterating the list of documents required by them. In response, M/s Shivam Chemicals vide email, dated 02.01.2025, reiterated that their current authorisation certificate is under renewal process. However, the Respondent No.4 vide email, dated 14.01.2025, informed M/s Shivam Chemicals that only after obtaining the Hazardous Waste certificate, they will be considered for disposal of carbon slurry

and subsequently, requested M/s Shivam Chemicals to get the certificate on priority basis.

Copy of email, dated 14.09.2024, sent by the Respondent No.4 to M/s Shivam Chemicals is marked and annexed herewith as **DOCUMENT – 18**.

Copy of email, dated 19.09.2024, sent by the Respondent No.4 to M/s Shivam Chemicals is marked and annexed herewith as **DOCUMENT – 19**.

Copy of email, dated 20.09.2024, sent by M/s Shivam Chemicals to the Respondent No.4 is marked and annexed herewith as **DOCUMENT – 20**.

Copy of email, dated 23.09.2024, sent by the Respondent No.4 to M/s Shivam Chemicals is marked and annexed herewith as **DOCUMENT – 21**.

Copy of reminder emails (dated 25.09.2024, 07.11.2024 and 17.12.2024) sent by the Respondent No.4 to M/s Shivam Chemicals is marked and annexed herewith as **DOCUMENT – 22 (colly)**.

Copy of email, dated 02.01.2025, sent by M/s Shivam Chemicals to the Respondent No.4 is marked and annexed herewith as **DOCUMENT – 23**.

24. In an endeavor to dispose of the carbon slurry at the earliest, the Respondent No.4 wrote an email, dated 20.09.2024, to M/s Gujarat Narmada Valley Fertilizers & Chemicals Limited ('**GNVFCL**'), requesting them to share their methodology / procedure being adopted for feeding carbon in the coal fired boilers as well as the precautions & guidelines being complied by them. In response to the above-mentioned letter, GNVFCL vide email, dated 22.09.2024, suggested few procedures to / steps to be followed by the Respondent No.4 for a successful utilisation of carbon soot to the boilers. It is pertinent to highlight that Gujarat Pollution Control Board has duly granted authorization to GNVFCL for utilisation of carbon in their coal fired boilers.

    Copy of letters exchanged between Respondent No.4 and M/s Gujarat Narmada Valley Fertilizers & Chemicals Limited is marked and annexed herewith as **DOCUMENT – 24 (colly)**.

25. Thereafter, the Respondent No.4 vide Letter, dated, 23.09.2024, requested the Respondent No.2, to provide an upto date list of Licensed Contractors, registered with them, who in turn could assist in expediting the process of lifting the carbon slurry lying in the ponds of the Respondent No.4 within a period of 180 days in a time bound manner. In response, the Respondent No.2 vide Letter, dated 10.01.2025, informed the Respondent No.4 that there is no re-processor of Hazardous Waste of Category 18.2 i.e. carbon slurry in the state of Punjab.

    Copy of letter, dated 23.09.2024, sent by the Respondent No.4 to the Respondent No.2 is marked and annexed herewith as **DOCUMENT 25**.

    Copy of letter, dated 10.01.2025, sent by the Respondent No.2 to the Respondent No.4 is marked and annexed herewith as **DOCUMENT 26**.

RESPONDENT NO.7

26. That in order to dispose of the carbon slurry lying in the ponds of Respondent No.7's unit, in a timely and prompt manner, the Respondent No.7 wrote multiple emails to: (i) M/s CCIL - 13.02.2023, 16.03.2023, 20.05.2023 and 20.09.2024; and (ii) M/s Shaligram Shukla Private Limited - 23.02.2023; requesting them to confirm whether they are authorised by the Pollution Control Board for collection, transportation and utilisation of carbon slurry. However, till date no response has been received.

    Copy of emails (dated 13.02.2023, 16.03.2023, 20.05.2023 and 20.09.2024), sent by the Respondent No.7 to M/s CCIL are marked and annexed herewith as **DOCUMENT 27 (colly)**.

    Copy of email, dated 23.02.2023, sent by the Respondent No.7 to M/s Shaligram Shukla Private Limited is marked and annexed herewith as **DOCUMENT 28**.

27. As per the notification from Respondent No.8, disposal of carbon slurry is to be as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and as per the Central Pollution Control Board Guidelines, 2017 (for pre-processing and co-processing of Hazardous and other wastes in cement plant). Under these guidelines, there are a few cement industries that can use carbon slurry in kilns (for processing). Keeping this in mind, the Respondent No.7 vide email dated, 16.03.2023, approached M/s Shree Cement, requesting them to confirm whether carbon is being utilized in their industry or not. In Reply to this email, M/s Shree Cement vide email dated, 16.03.2023, requested the Respondent No.7 to provide sample of: (i) 10 kg carbon slurry for test analysis; and (ii) dry fly ash; and also set up a meeting with the Respondent No.7. In addition to the Reply by M/s Shree Cement, the Respondent No.7 vide email dated, 16.03.2024, requested M/s Shree Cement for setting up a meeting at the Respondent No.7's office on 17.03.2023. However, no response was received.

    Thereafter, the Respondent No.7 vide email dated, 20.05.2023, approached M/s Shree Cement again, requesting them to respond to the email dated 16.03.2023. In Reply to this email, M/s Shree Cement vide email dated, 20.05.2023, duly set up a meeting with the Respondent No.7. In addition to this, a reminder email, dated 14.01.2025, was also sent to M/s Shree Cement, requesting them to confirm whether carbon can be utilised in their industry or not. However, these efforts put in by the Respondent No.7 to get M/s Shree Cement on board, went down the drain.

    Copy of email, dated 16.03.2023, sent by the Respondent No.7 to M/s Shree Cement is marked and annexed herewith as **DOCUMENT – 29**.

    Copy of email, dated 16.03.2023, sent by M/s Shree Cement to the Respondent No.7 is marked and annexed herewith as **DOCUMENT – 30**.

    Copy of emails, dated 20.05.2023, exchanged between M/s Shree Cement and Respondent No.7 are marked and annexed herewith as **DOCUMENT – 31 (colly)**.

Copy of email, dated 14.01.2025, sent by the Respondent No.7 to M/s Shree Cement is marked annexed herewith as **DOCUMENT - 32**.

28. Pursuant thereto, the Respondent No.7 wrote emails, dated 16.03.2023, 20.06.2023 and 14.01.2025; to M/s Ultra Tech Cement, requesting them onfirm whether carbon is being utilized in their industry or not. However, no response hato cs been received till date.
    Copy of emails (dated 16.03.2023, 20.06.2023 and 14.01.2025), sent by the Respondent No.7 to M/s Ultra Tech Cement, are marked and annexed herewith as **DOCUMENT – 33 (colly).**

29. In the meanwhile, on 22.05.2023, the Respondent No.7 with a proactive approach also wrote emails to: (i) M/s ACC Limited; (ii) M/s India Cements; (iii) M/s Zuari Cement Limited; (iv) M/s Sagar Cements Limited; (v) M/s Anjani Portland Cement Limited; and (vi) M/s NCL Industries (cement division); requesting them to confirm whether they are authorised by the Pollution Control Board for utilisation of carbon slurry. It is pertinent to highlight that a reminder email, dated 20.09.2024, was also sent by the Respondent No.7 to the above-mentioned Cement companies. However, till date no response has been received.
    Copy of emails, dated 22.05.2023, sent by the Respondent No.7 to the Cement Industries are marked and annexed herewith as **DOCUMENT – 34 (colly)**.
    Copy of emails, dated 20.09.2024, sent by the Respondent No.7 to the Cement Industries are marked and annexed herewith as **DOCUMENT – 35 (colly)**.

30. Thereafter, the Respondent No.7 wrote emails to: (i) Uttar Pradesh Pollution Control Board - 30.01.2023; (ii) Madhya Pradesh Pollution Control Board - 31.01.2023; and (iii) Gujarat Pollution Control Board - 30.01.2023; requesting the Boards to list out the parties who have been issued the authorisation for collection, transportation and utilisation of carbon slurry. In order to follow up with these above-mentioned Pollution Control Boards, the Respondent No.7, on 16.03.2023, wrote another email requesting the Boards to list out the parties. However, till date no response has been received.
    Copy of email (dated 30.01.2023, 31.01.2023 and 30.01.2023) sent by the Respondent No.7 to Pollution Control Boards are marked and annexed herewith as **DOCUMENT – 36 (colly)**.
    Copy of emails, dated 16.03.2023, sent by the Respondent No.7 to Pollution Control Boards are marked and annexed herewith as **DOCUMENT – 37 (colly)**.

31. The Respondent No.5 vide email, dated 18.04.2024, requested the Respondent No.7 the following: (i) designated area for placement of trucks and billing on all days of the month; (ii) improvement in billing software; (iii) 3 phase electricity supply (to

be noted: Respondent No.5 undertakes to pay the monthly bills for the usage, for running of tubewell); and (iv) allow mechanical screening and packaging machine for separation of carbon from high ash mixed material. In Reply to this email, the Respondent No.7 vide letter, dated 30.04.2024, clarified that: (i) placement of trucks and billing on all days of the month will be allowed, provided that Respondent No.5 intimates the Respondent No.7 one day in advance so that necessary manpower can be arranged; (ii) the billing software is working normally but in case any issue arises, the same will be resolved expeditiously; (iii) 3 phase electricity supply will be provided; (iv) mechanical screening and packaging machine may be allowed (to be noted: this will only be allowed, provided the Respondent No.5 guarantees to lift the entire quantity of carbon slurry by 31.03.2025); and (v) requested Respondent No.5 to deploy more trucks on a daily basis to expedite lifting.

Copy of email, dated 18.04.2024, sent by the Respondent No. 5 to the Respondent No.7 is marked and annexed herewith as **DOCUMENT – 38**.

Copy of letter, dated 30.04.2024, sent by the Respondent No. 7 to the Respondent No.5 is marked and annexed herewith as **DOCUMENT – 39**.

32. Despite these above-mentioned approvals given by the Respondent No.7, there were still discrepancies on part of the Respondent No.5 relating to: (i) deployment of less trucks on a daily basis; (ii) lifting of carbon slurry on a very slow-pace; and (iii) demanding an extension of electric line (to be noted: 3 phase electricity supply has already been provided by the Respondent No.7). These discrepancies were communicated to the Respondent No.5 through various emails.

33. Thereafter, the Respondent No.7 wrote a letter, dated 10.09.2024, requesting Haryana State Pollution Control Board ('**Respondent No.6**'), to provide an upto date list of Licensed Contractors, registered with the Respondent No.6, who in turn could assist in expediting the process of lifting the carbon slurry lying in the ponds of Respondent No.7 within a period of 180 days in a time bound manner. In furtherance to this, the Respondent No.7 wrote another letter dated, 13.09.2024, to Respondent No.6, reiterating the contents of the letter dated, 10.09.2024.

Copy of letter, dated 10.09.2024, sent by the Respondent No.7 to the Respondent No.6 is marked and annexed herewith as **DOCUMENT – 40**.

Copy of letter, dated 13.09.2024, sent by the Respondent No.7 to the Respondent No.6 is marked and annexed herewith as **DOCUMENT – 41**.

34. The Respondent No.7 vide email, dated 17.09.2024, sent to Respondent No.11, requested them to provide the list of all the registered buyers / parties dealing in lifting of carbon slurry. In Reply to this, vide email dated, 17.09.2024, Respondent No.11, clarified that they don't maintain a separate record of buyers / parties as carbon residue / slurry does not fall under Schedule IV of the HWM Rules, 2016 and

the amendments thereafter. In addition to this, they requested the Respondent No.7 to mention the clause no./section no. of the NGT OA which required the Respondent No.11 to provide the list of the buyers of carbon slurry so that they may try to use the backend database of theirs and try to get the requisite information. The Respondent No.7 replied to this email, vide email, dated 18.09.2024, mentioning the clause no./section no. and again requested the Respondent No.11 to provide the list of all the registered buyers / parties dealing in lifting of carbon slurry.

The Respondent No.7 also sent a reminder email, dated 11.01.2025, to the Respondent No.11 reiterating the above-mentioned requirements. In response, the Respondent No.11 vide email, dated 13.01.2025, informed the Respondent No.7 that '*currently there is no registered bidder having valid license for purchase of hazardous waste – registered with MSTCL. As MSTC has not e-auctioned carbon slurry for any of its registered sellers for last 4-5 years and as such bidders may not have renewed the license for carbon slurry on MSTC portal*'.

Copy of emails (dated 17.09.2024, 18.09.2024, 11.01.2025 and 13.01.2025) exchanged between the Respondent No.7 and Respondent No.11 are marked and annexed herewith as **DOCUMENT – 42 (colly)**.

35. In order to find a ray of hope, the Respondent No.7 once again wrote a letter, dated 08.11.2024, to the Respondent No.6, requesting them to provide requisite information and extend requisite assistance to the Respondent No.7 for exploring the possibility of giving additional work orders to some more authorised contractors for lifting carbon slurry at earliest possible.

    Copy of letter, dated 08.11.2024, sent by the Respondent No.7 to the Respondent No.6 is marked and annexed herewith as **DOCUMENT – 43**.

36. It is submitted that there are a lot of intricacies involved in the lifting and disposal of carbon slurry under the said Rules which must be complied with. As stated above in the correspondences, carbon slurry can only be lifted by contractors authorised by the State or Central Pollution Control Board. Furthermore, carbon slurry cannot be directly sold to its end users in the open market and must be lifted with utmost care and precaution.

37. Thus, as can be seen, the Respondents have left no stone unturned to ensure safe storage and management of carbon slurry and its efficient disposal. Carbon slurry, last generated by the Respondents in 2012, is kept in isolated ponds specifically designated for the storage of hazardous waste. Furthermore, the Respondents as mentioned above have taken considerate measures under its belt to ensure a speedy disposal of carbon slurry. It is further reiterated that the Respondents shall take all steps necessary to support any licensed contractor in its endeavour and expedite the disposal of carbon slurry lying in its ponds

DOCTRINE OF IMPOSSIBILITY

38. Moreover, the process of lifting the carbon slurry from the Respondents ponds are heavily regulated under the said Rules, which impose stringent conditions on handling, transportation, and disposal of such hazardous waste. Compliance with these provisions requires adherence to detailed procedural and technical standards, rendering the task even more unfeasible under current conditions. In light of these physical and legal constraints, the situation falls under the doctrine of impossibility, wherein performance of the obligation within a stipulated period of time as prescribed under law has become toilsome due to unforeseen and insurmountable barriers beyond the control of the Respondents.

CONCLUSION

39. The Respondents are currently incurring substantial expenditure, amounting to crores of rupees, to ensure the safe maintenance of the plant and the environmentally responsible storage of carbon slurry. These efforts are being undertaken in a diligent and continuous manner, in strict adherence to applicable environmental and safety standards.

40. The respondents are facing considerable difficulty in engaging alternative intermediaries for the lifting and handling of carbon slurry, primarily due to the fact that, at present, only one individual/entity (Respondent No.5) has been authorised by the Respondent No.2 & Respondent No.6 to undertake such activities. This regulatory limitation has created a bottleneck, severely restricting the Respondents ability to explore or appoint other qualified vendors, despite ongoing efforts to do so in compliance with environmental norms and statutory requirements.

THROUGH

Juvas Rawal

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Date: 23.05.2025

accommodate the Special Court for which even a judicial officer has been appointed who is stated to have taken charge on 7-4-2000. Lakhs of rupees are shown to have been spent for the conduct of a smooth, speedy, fair and impartial trial. The transfer of the case, at this stage, is not only against the interests of the prosecution but also against the interests of the other accused persons, the prosecution witnesses and the convenience of all concerned in the matter. We are satisfied that a fair and speedy trial of the case is possible at Coimbatore and the accused persons including the petitioners need not have any cause for apprehension.

12. In this regard we have also perused the figures furnished to us showing the authorised accommodation and the actual population in the lock-ups in the State of Tamil Nadu. Whereas in Coimbatore Central Prison the authorised accommodation is for 2208 persons and the present lock-up strength is only 1998, in Chennai the position is otherwise; as against authorised accommodation of 1419 persons, 1765 have been and are being accommodated. We cannot lose sight of the statement made on behalf of the respondents that in Coimbatore Central Prison separate cells have been renovated for accommodation of 168 accused persons in the instant case and such a facility is not available elsewhere in any other prison in that State.

13. The present petitions which are totally misconceived are hereby dismissed with a direction to the trial court to expedite the trial and, if possible, hold the same on day-to-day basis so that the cause of justice is achieved without any further delay.

(2000) 6 Supreme Court Cases 213

(BEFORE S. SAGHIR AHMAD AND DORAISWAMY RAJU, JJ.)

M.C. MEHTA .. Petitioner;

Versus

KAMAL NATH AND OTHERS .. Respondents.

Writ Petition (C) No. 182 of 1996†, decided on May 12, 2000

A. **Constitution of India — Arts. 21, 48-A, 51-A(g) and 32, 142 & 226 — Ecology — Polluter-pays principle — In a PIL or writ petition Court can direct the polluter to pay damages not only for restoration of ecological balance but also to pay damages to the victims who have suffered due to the ecological disturbance — But Court cannot impose any pollution fine in absence of any trial and finding of guilt under relevant statutory provisions — Court can in addition award exemplary damages also — Forest land at the bank of River Beas obtained on lease for commercial purpose of motel by a private company — Management of the Company interfering with natural flow of the river by blocking natural relief/spill channel of the river — Supreme Court, therefore, on 13-12-1996 directed the Motel to pay compensation by way of cost for restoration of environment of the area — But since no notice for imposing exemplary damages was issued, such a**

† Under Article 32 of the Constitution of India

notice directed to be issued for considering the question of imposing exemplary damages — However, no fine can be imposed unless the procedure prescribed in the Act is followed, the company is tried and is found guilty and therefore, notice issued by the Court in that regard withdrawn — Supreme Court's order in this regard in its earlier decision dated 13-12-1996 at (1997) 1 SCC 388 modified — Water (Prevention and Control of Pollution) Act, 1974 — Water (Prevention and Control of Pollution) Cess Act, 1977 — Water (Prevention and Control of Pollution) Rules, 1975 — Water (Prevention and Control of Pollution) Cess Rules, 1978 — Air (Prevention and Control of Pollution) Rules, 1982 — Air (Prevention and Control of Pollution) (Union Territories) Rules, 1983 — Environment (Protection) Act, 1986 — Environment (Protection) Rules, 1986 — Hazardous Wastes (Management and Handling) Rules, 1989 — Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 — Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996 — Environment Protection and Pollution Control — Award of damages and exemplary damages for causing pollution and degradation of the environment (Para 6)

B. **Constitution of India — Art. 21 — "Life" — Causing disturbance to ecological balance would be hazardous to "life" within the meaning of Art. 21**

C. **Constitution of India — Art. 142 — Power under, cannot be exercised by Supreme Court where the issue can be settled only through substantive provisions of statute — Where fine can be imposed on the person causing air, water or environmental pollution only after a trial following the procedure prescribed by the relevant statutory provisions and a finding of guilt is made, Supreme Court cannot impose fine on the polluter in exercise of power under Art. 142**

D. **Constitution of India — Art. 32 — Damages/compensation — Power under Art. 32 permits award of damages — Even exemplary damages can be imposed as a deterrent for causing pollution and environment degradation**

Pursuant to orders and directions issued by the Supreme Court in its earlier decision dated Dec. 13, 1996 [reported at (1997) 1 SCC 388], notice was issued requiring the Motel of Span Motel Pvt. Ltd. to show cause on two points: (*i*) why the Motel be not asked to pay compensation to reverse the degraded environment, and (*ii*) why pollution fine, in addition, be not imposed. On behalf of the said Company it was contended in the writ petition that the fine is a component of criminal jurisprudence and cannot be utilised in civil proceedings specially under Article 32 or 226 of the Constitution either by the Supreme Court or the High Court as imposition of fine would be contrary to the provisions contained in Articles 20 and 21. It was contended that fine can be imposed upon a person only if it is provided by a statute and gives jurisdiction to the court to inflict or impose that fine after giving a fair trial to that person but in the absence of any statutory provision, a person cannot be penalised and no fine can be imposed upon him.

Held :

Articles 48-A and 51-A(*g*) have to be considered in the light of Article 21 of the Constitution. Any disturbance of the basic elements of the environment

namely air, water and soil, which are necessary for "life", would be hazardous to "life" within the meaning of Article 21. In the matter of enforcement of rights under Article 21 the Supreme Court, besides enforcing the provisions of the Acts, has also given effect to fundamental rights under Articles 14 and 21 and has held that if those rights are violated by disturbing the environment, it can award damages not only for the restoration of the ecological balance, but also for the victims who have suffered due to that disturbance. In order to protect "life", in order to protect "environment" and in order to protect "air, water and soil" from pollution, the Supreme Court, through its various judgments has given effect to the rights available, to the citizens and persons alike, under Article 21. In the matter of enforcement of fundamental rights under Article 21, under public law domain, the Court, in exercise of its powers under Article 32, has awarded damages against those who have been responsible for disturbing the ecological balance either by running industries or any other activity which has the effect of causing pollution in the environment. The Court while awarding damages also enforces the "POLLUTER-PAYS PRINCIPLE" which is widely accepted as a means of paying for the cost of pollution and its control. To put it in other words, the wrongdoer, the polluter, is under an obligation to make good the damage caused to the environment. It was for this reason that the Supreme Court in its decision dated Dec. 12, 1996 [(1997) 1 SCC 388] had directed the Motel to pay compensation by way of cost for the restoration of the environment of the area. (Paras 8 to 10 and 12)

Indian Council for Enviro Legal Action v. *Union of India*, (1996) 3 SCC 212 : AIR 1996 SC 1446 : (1996) 2 SCR 503 : JT (1996) 2 SC 196; *Vellore Citizens' Welfare Forum* v. *Union of India*, (1996) 5 SCC 647 : AIR 1996 SC 2715 : JT (1996) 7 SC 375, *relied on*

However, it is not possible to hold that the pollution fine can be imposed upon M/s Span Motel without there being any trial and without there being any finding that M/s Span Motel was guilty of the offence under the Act and is, therefore, liable to be punished with imprisonment or with fine. The Supreme Court had directed a notice to be issued to show cause why pollution fine be not imposed. However, this notice had been issued without reference to any provision of the Act. (Para 18)

The contention that the notice should be treated to have been issued in exercise of power under Article 142 of the Constitution cannot be accepted as this article cannot be pressed into aid in a situation where action under it would amount to contravention of the specific provisions of the Act itself. A fine is to be imposed upon the person who is found guilty of having contravened any of the provisions of the Act. He has to be tried for the specific offence and then on being found guilty, he may be punished either by sentencing him to undergo imprisonment for the period contemplated by the Act or with fine or with both. But recourse cannot be taken to Article 142 to inflict upon him this punishment. (Para 19)

Supreme Court Bar Assn. v. *Union of India*, (1998) 4 SCC 409 : AIR 1998 SC 1895; *Vinay Chandra Mishra, Re*, (1995) 2 SCC 584; *M.S. Ahlawat* v. *State of Haryana*, (2000) 1 SCC 278 : 2000 SCC (Cri) 193 : AIR 2000 SC 168, *relied on*

Thus, in addition to the damages which have to be paid by M/s Span Motel, as directed in the main judgment, it cannot be punished with fine unless the entire procedure prescribed under the Act is followed and M/s Span Motel is tried for any of the offences contemplated by the Act and is found guilty. The

notice issued to M/s Span Motel why pollution fine be not imposed upon it is, therefore, withdrawn. (Paras 22 and 23)

M.C. Mehta v. *Kamal Nath*, (1997) 1 SCC 388, *modified*

But the matter does not end here. Pollution is a civil wrong. By its very nature, it is a tort committed against the community as a whole. A person, therefore, who is guilty of causing pollution has to pay damages (compensation) for restoration of the environment and ecology. He has also to pay damages to those who have suffered loss on account of the act of the offender. The powers of the Supreme Court under Article 32 are not restricted and it can award damages in a PIL or a writ petition as has been held in a series of decisions. In addition to damages aforesaid, the person guilty of causing pollution can also be held liable to pay exemplary damages so that it may act as a deterrent for others not to cause pollution in any manner. Unfortunately, notice for exemplary damages was not issued to M/s Span Motel although it ought to have been issued. The considerations for which "fine" can be imposed upon a person guilty of committing an offence are different from those on the basis of which exemplary damages can be awarded. While withdrawing the notice for payment of pollution fine, a fresh notice is directed to be issued to M/s Span Motel to show cause why in addition to damages, exemplary damages be not awarded for having committed the acts set out and detailed in the main judgment. This notice shall be returnable within six weeks. This question shall be heard at the time of quantification of damages under the main judgment. (Paras 23 and 24)

R-M/TZ/22607/C

Suggested Case Finder Search Text (*inter alia*) :

(damages or compensation or fine) (polluter or pollution* or environment* or ecolog*)

Advocates who appeared in this case :

M.C. Mehta, in person and Ms Seema Midha, Advocates, for the Petitioner;

Altaf Ahmed, Additional Solicitor General, N.C. Kochar and G.L. Sanghi, Senior Advocates (Naresh Kr. Sharma, N.S. Vashist, Uday Kumar, Kapil Sharma, Ms Enakshi Kulshrestha, Rajiv Dutta, Vijay Panjwani, Anish Garg, in person for Hotel Hilton, B.V. Balram Das, Devendra Singh, C.P. Pandey, Dr Sushil Balwada and Atul Sinha, Advocates, with them) for the Respondents.

Chronological list of cases cited ***on page(s)***

The Judgment of the Court was delivered by

S. SAGHIR AHMAD, J.— This case, which was finally decided by this Court by its judgment dated 13-12-1996†, has been placed before us for determination of the quantum of pollution fine. It may be stated that the main case was disposed of with the following directions: (SCC p. 415, para 39)

"*1.* The public trust doctrine, as discussed by us in this judgment is a part of the law of the land.

2. The prior approval granted by the Government of India, Ministry of Environment and Forest by the letter dated November 24, 1993 and the lease deed dated April 11, 1994 in favour of the Motel are quashed. The lease granted to the Motel by the said lease deed in respect of 27 bighas and 12 biswas of area, is cancelled and set aside. The Himachal Pradesh Government shall take over the area and restore it to its original natural conditions.

3. The Motel shall pay compensation by way of cost for the restitution of the environment and ecology of the area. The pollution caused by various constructions made by the Motel in the riverbed and the banks of River Beas has to be removed and reversed. We direct NEERI through its Director to inspect the area, if necessary, and give an assessment of the cost which is likely to be incurred for reversing the damage caused by the Motel to the environment and ecology of the area. NEERI may take into consideration the report by the Board in this respect.

4. The Motel through its management shall show cause why pollution fine in addition be not imposed on the Motel.

5. The Motel shall construct a boundary wall at a distance of not more than 4 metres from the cluster of rooms (main building of the Motel) towards the river basin. The boundary wall shall be on the area of the Motel which is covered by the lease dated September 29, 1981. The Motel shall not encroach/cover/utilise any part of the river basin. The boundary wall shall separate the Motel building from the river basin. The river bank and the river basin shall be left open for the public use.

6. The Motel shall not discharge untreated effluents into the river. We direct the Himachal Pradesh Pollution Control Board to inspect the pollution control devices/treatment plants set up by the Motel. If the effluent/waste discharged by the Motel is not conforming to the prescribed standards, action in accordance with law be taken against the Motel.

7. The Himachal Pradesh Pollution Control Board shall not permit the discharge of untreated effluent into River Beas. The Board shall inspect all the hotels/institutions/factories in Kullu-Manali area and in case any of them are discharging untreated effluent/waste into the river, the Board shall take action in accordance with law.

† *M.C. Mehta* v. *Kamal Nath*, (1997) 1 SCC 388

8. The Motel shall show cause on December 18, 1996 why pollution fine and damages be not imposed as directed by us. NEERI shall send its report by December 17, 1996. To be listed on December 18, 1996."

2. Pursuant to the above order, notice was issued requiring the Motel to show cause on two points: (*i*) why the Motel be not asked to pay compensation to reverse the degraded environment, and (*ii*) why pollution fine, in addition, be not imposed.

3. Mr G.L. Sanghi, learned Senior Counsel appearing for M/s Span Motel Private Ltd., has contended that though it is open to the Court, in proceedings under Article 32 of the Constitution, to grant compensation to the victims whose fundamental rights might have been violated or who are the victims of an arbitrary executive action or victims of atrocious behaviour of public authorities in violation of public duties cast upon them, it cannot impose any fine on those who are guilty of that action. He contended that the fine is a component of criminal jurisprudence and cannot be utilised in civil proceedings specially under Article 32 or 226 of the Constitution either by this Court or the High Court as imposition of fine would be contrary to the provisions contained in Articles 20 and 21 of the Constitution. It is contended that fine can be imposed upon a person only if it is provided by a statute and gives jurisdiction to the court to inflict or impose that fine after giving a fair trial to that person but in the absence of any statutory provision, a person cannot be penalised and no fine can be imposed upon him.

4. Mr M.C. Mehta, who has been pursuing this case with his usual vigour and vehemence, has contended that if a person disturbs the ecological balance and tinkers with the natural conditions of rivers, forests, air and water, which are the gifts of nature, he would be guilty of violating not only the fundamental rights, guaranteed under Article 21 of the Constitution, but also be violating the fundamental duties to protect the environment under Article 51-A(*g*) which provides that it shall be the duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to show compassion for living creatures.

5. The planet Earth which is inhabited by human beings and other living creatures, including animals and birds, has been so created as to cater to the basic needs of all the living creatures. Living creatures do not necessarily mean the human beings, the animals, the birds, the fish, the worms, the serpents, the hydras, but also the plants of different varieties, the creepers, the grass and the vast forests. They survive on fresh air, fresh water and the sacred soil. They constitute the essential elements for survival of "life" on this planet. The living creatures, including human beings, lived peacefully all along. But when the human beings started acting inhumanly, the era of distress began which in its wake brought new problems for survival.

6. The industrial revolution brought an awakening among the men inhabiting this Earth that nature, with all its resources was not unlimited and forever renewable. The uncontrolled industrial development generating tonnes of industrial waste disturbed the ecological balance by polluting the

air and water which in turn, had a devastating effect on the wildlife and, therefore, the early efforts to protect the environment related to the protection of wildlife. But then the two world wars, the First World War (1914-1918) and the Second World War (1939 to 1945) during which atomic bombs were exploded resulting in the loss of thousands of lives and burning down of vast expanses of forests, made man realise that if the environmental disturbances were not controlled, his own survival on this planet would become impossible. The United Nations, therefore, held a conference on human environment at Stockholm in 1972. In the wake of the resolutions adopted at that conference, different countries at different stages enacted laws to protect the deteriorating conditions of environment. Here in India, the legislature enacted three Acts, namely, the Water (Prevention & Control of Pollution) Act, 1974; the Air (Prevention & Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986. It also enacted the Water (Prevention & Control of Pollution) Cess Act, 1977. Under these Acts, rules have been framed to give effect to the provisions thereof. They are: the Water (Prevention and Control of Pollution) Rules, 1975; the Water (Prevention & Control of Pollution) Cess Rules, 1978; the Air (Prevention and Control of Pollution) Rules, 1982; the Air (Prevention & Control of Pollution) (Union Territories) Rules, 1983; the Environment (Protection) Rules, 1986; the Hazardous Wastes (Management and Handling) Rules, 1989; the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989; the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996 and hosts of other rules and notifications.

7. In addition to these Acts and Rules, there are, on the statute-book, other Acts dealing, in a way, with the environmental laws, for example, the Indian Forest Act, 1927; the Forest (Conservation) Act, 1980; the Wild Life (Protection) Act, 1972 and the Rules framed under these Acts. Various States in India have also made their environment laws and rules for the protection of the environment.

8. Apart from the above statutes and the rules made thereunder, Article 48-A of the Constitution provides that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country. One of the fundamental duties of every citizen as set out in Article 51-A(*g*) is to protect and improve the natural environment, including forests, lakes, rivers and wildlife and to have compassion for living creatures. These two articles have to be considered in the light of Article 21 of the Constitution which provides that no person shall be deprived of his life and liberty except in accordance with the procedure established by law. Any disturbance of the basic environment elements, namely air, water and soil, which are necessary for "life", would be hazardous to "life" within the meaning of Article 21 of the Constitution.

9. In the matter of enforcement of rights under Article 21 of the Constitution, this Court, besides enforcing the provisions of the Acts referred to above, has also given effect to fundamental rights under Articles 14 and 21 of the Constitution and has held that if those rights are violated by disturbing

the environment, it can award damages not only for the restoration of the ecological balance, but also for the victims who have suffered due to that disturbance. In order to protect "life", in order to protect "environment" and in order to protect "air, water and soil" from pollution, this Court, through its various judgments has given effect to the rights available, to the citizens and persons alike, under Article 21 of the Constitution. The judgment for removal of hazardous and obnoxious industries from the residential areas, the directions for closure of certain hazardous industries, the directions for closure of slaughterhouse and its relocation, the various directions issued for the protection of the Ridge area in Delhi, the directions for setting up effluent treatment plants to the industries located in Delhi, the directions to tanneries etc., are all judgments which seek to protect the environment.

10. In the matter of enforcement of fundamental rights under Article 21, under public law domain, the Court, in exercise of its powers under Article 32 of the Constitution, has awarded damages against those who have been responsible for disturbing the ecological balance either by running the industries or any other activity which has the effect of causing pollution in the environment. The Court while awarding damages also enforces the "POLLUTER-PAYS PRINCIPLE" which is widely accepted as a means of paying for the cost of pollution and control. To put in other words, the wrongdoer, the polluter, is under an obligation to make good the damage caused to the environment.

11. The recognition of the vice of pollution and its impact on future resources was realised during the early part of 1970. The United Nations Economic Commission for Europe, during a panel discussion in 1971, concluded that the total environmental expenditure required for improvement of the environment was overestimated but could be reduced by increased environmental awareness and control. In 1972, the Organisation for Economic Cooperation and Development adopted the "POLLUTER-PAYS PRINCIPLE" as a recommendable method for pollution cost allocation. This principle was also discussed during the 1972 Paris Summit. In 1974, the European Community recommended the application of the principle by its member States so that the costs associated with environmental protection against pollution may be allocated according to uniform principles throughout the Community. In 1989, the Organisation for Economic Cooperation and Development reaffirmed its use and extended its application to include costs of accidental pollution. In 1987, the principle was acknowledged as a binding principle of law as it was incorporated in European Community law through the enactment of the Single European Act, 1987. Article 130r.2 of the 1992 Maastricht Treaty provides that the Community environment policy "shall be based on the principle that the polluter should pay".

12. "POLLUTER-PAYS PRINCIPLE" has also been applied by this Court in various decisions. In *Indian Council for Enviro Legal Action* v. *Union of*

India[1] it was held that once the activity carried on was hazardous or inherently dangerous, the person carrying on that activity was liable to make good the loss caused to any other person by that activity. This principle was also followed in *Vellore Citizens' Welfare Forum* v. *Union of India*[2] which has also been discussed in the present case in the main judgment. It was for this reason that the Motel was directed to pay compensation by way of cost for the restoration of the environment of the area. But it is the further direction why pollution fine, in addition, be not imposed which is the subject-matter of the present discussion.

13. Chapter VII of the Water (Prevention and Control of Pollution) Act, 1974 contains the provisions dealing with penalties and procedure. This chapter consists of Sections 41 to 50. Sub-sections (2) and (3) of Section 41 provide for the punishment and imposition of fine. They are quoted below:

> "41. (2) Whoever fails to comply with any order issued under clause (*c*) of sub-section (1) of Section 32 or any direction issued by a court under sub-section (2) of Section 33 or any direction issued under Section 33-A shall, in respect of each such failure and on conviction, be punishable with imprisonment for a term which shall not be less than one year and six months but which may extend to six years and with fine, and in case the failure continues, with an additional fine which may extend to five thousand rupees for every day during which such failure continues after the conviction for the first such failure.
>
> (3) If the failure referred to in sub-section (2) continues beyond a period of one year after the date of conviction, the offender shall, on conviction, be punishable with imprisonment for a term which shall not be less than two years but which may extend to seven years and with fine."

14. Similarly, Section 42 provides that a person shall be liable to be punished with imprisonment for a term which may extend to three months or with fine which may extend to ten thousand rupees or with both. Sub-section (2) of Section 42 also contemplates imprisonment for a term which may extend to three months or with fine which may extend to ten thousand rupees or with both. Section 43 contemplates penalty for contravention of the provisions of Section 24. Section 44 contemplates penalty for contravention of Section 25 or Section 26. They also contemplate imposition of fine. Section 45 provides that if a person who has been convicted of any offence under Section 24 or Section 25 or Section 26 is again found guilty of an offence involving a contravention of the same provision, he shall, on the second and on every subsequent conviction, be punishable with imprisonment for a term which shall not be less than two years but which may extend to seven years and with fine. Section 45-A provides that whoever contravenes any of the provisions of this Act or fails to comply with any order or direction given under this Act, for which no penalty has been elsewhere provided in this Act, shall be punishable with imprisonment which may extend to three months or with fine which may extend to ten thousand

1 (1996) 3 SCC 212 : AIR 1996 SC 1446 : (1996) 2 SCR 503 : JT (1996) 2 SC 196
2 (1996) 5 SCC 647 : AIR 1996 SC 2715 : JT (1996) 7 SC 375

rupees or with both and in the case of continuing contravention or failure, he may be punished with an additional fine. Section 47 contemplates offences by companies while Section 48 contemplates offences by government departments.

15. Section 15 of the Environment (Protection) Act, 1986 provides for penalty for contravention of the provisions of the Act and the rules, orders and directions made thereunder. Sub-section (1) of Section 15 speaks of imprisonment for a term which may extend to five years or with fine which may extend to one lakh rupees, or with both, and in case the failure or contravention continues, with additional fine which may extend to five thousand rupees for every day during which such failure or contravention continues after the conviction for the first such failure or contravention. Section 16 of the Act contemplates offences by the companies while Section 17 contemplates offences by government departments.

16. Chapter VI of the Air (Prevention and Control of Pollution) Act, 1981 contains the provisions for penalties and procedure. This chapter consists of Sections 37 to 46. Section 37 provides penalties for failure to comply with the provisions of Section 21 or Section 22 or with the directions issued under Section 31-A. It provides that the person shall be punishable with imprisonment for a term which shall not be less than one year and six months but which may extend to six years and with fine, and in case the failure continues, with an additional fine which may extend to five thousand rupees for every day. Sub-section (2) of this section provides that if the failure continues beyond the period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which shall not be less than two years but which may extend to seven years and with fine. Section 38 also provides penalties for certain acts and it provides that for such acts as are referred to in that section, a person shall be punishable with imprisonment for a term which may extend to three months or with fine which may extend to ten thousand rupees or with both. Section 39 contemplates penalty for contravention of certain provisions of the Act and it provides for imprisonment for a term which may extend to three months or with fine which may extend to ten thousand rupees or with both, and in the case of continuing contravention, with an additional fine which may extend to five thousand rupees for every day during which such contravention continues after conviction for the first such contravention. Section 40 speaks of offences by companies while Section 41 speaks of offences by government departments.

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

18. In the instant case, a finding has been recorded that M/s Span Motel had interfered with the natural flow of river and thus disturbed the environment and ecology of the area. It has been held liable to pay damages. The quantum of damages is under the process of being determined. The Court directed a notice to be issued to show cause why pollution fine be not imposed. In view of the above, it is difficult for us to hold that the pollution fine can be imposed upon M/s Span Motel without there being any trial and without there being any finding that M/s Span Motel was guilty of the offence under the Act and is, therefore, liable to be punished with imprisonment or with fine. This notice has been issued without reference to any provision of the Act.

19. The contention that the notice should be treated to have been issued in exercise of power under Article 142 of the Constitution cannot be accepted as this article cannot be pressed into aid in a situation where action under that article would amount to contravention of the specific provisions of the Act itself. A fine is to be imposed upon the person who is found guilty of having contravened any of the provisions of the Act. He has to be tried for the specific offence and then on being found guilty, he may be punished either by sentencing him to undergo imprisonment for the period contemplated by the Act or with fine or with both. But recourse cannot be taken to Article 142 to inflict upon him this punishment.

20. The scope of Article 142 was considered in several decisions and recently in *Supreme Court Bar Assn.* v. *Union of India*[3] by which the decision of this Court in *Vinay Chandra Mishra, Re*[4] was partly overruled, it was held that the plenary powers of this Court under Article 142 of the Constitution are inherent in the Court and are "COMPLEMENTARY" to those powers which are specifically conferred on the Court by various statutes. This power exists as a separate and independent basis of jurisdiction apart from the statutes. The Court further observed that though the powers conferred on the Court by Article 142 are curative in nature, they cannot be construed as powers which authorise the Court to ignore the substantive rights of a litigant. The Court further observed that this power cannot be used to "supplant" substantive law applicable to the case or cause under consideration of the Court. Article 142, even with the width of its amplitude, cannot be used to build a new edifice where none existed earlier, by ignoring express statutory provisions dealing with a subject and thereby achieve something indirectly which cannot be achieved directly.

21. Similarly, in *M.S. Ahlawat* v. *State of Haryana*[5] it was held that under Article 142 of the Constitution, the Supreme Court cannot altogether ignore the substantive provisions of a statute and pass orders concerning an issue which can be settled only through a mechanism prescribed in another statute.

3 (1998) 4 SCC 409 : AIR 1998 SC 1895
4 (1995) 2 SCC 584
5 (2000) 1 SCC 278 : 2000 SCC (Cri) 193 : AIR 2000 SC 168

22. Thus, in addition to the damages which have to be paid by M/s Span Motel, as directed in the main judgment, it cannot be punished with fine unless the entire procedure prescribed under the Act is followed and M/s Span Motel is tried for any of the offences contemplated by the Act and is found guilty.

23. The notice issued to M/s Span Motel why pollution fine be not imposed upon it is, therefore, withdrawn. But the matter does not end here.

24. Pollution is a civil wrong. By its very nature, it is a tort committed against the community as a whole. A person, therefore, who is guilty of causing pollution has to pay damages (compensation) for restoration of the environment and ecology. He has also to pay damages to those who have suffered loss on account of the act of the offender. The powers of this Court under Article 32 are not restricted and it can award damages in a PIL or a writ petition as has been held in a series of decisions. In addition to damages aforesaid, the person guilty of causing pollution can also be held liable to pay exemplary damages so that it may act as a deterrent for others not to cause pollution in any manner. Unfortunately, notice for exemplary damages was not issued to M/s Span Motel although it ought to have been issued. The considerations for which "fine" can be imposed upon a person guilty of committing an offence are different from those on the basis of which exemplary damages can be awarded. While withdrawing the notice for payment of pollution fine, we direct that a fresh notice be issued to M/s Span Motel to show cause why in addition to damages, exemplary damages be not awarded for having committed the acts set out and detailed in the main judgment. This notice shall be returnable within six weeks. This question shall be heard at the time of quantification of damages under the main judgment.

(2000) 6 Supreme Court Cases 224

(BEFORE S. SAGHIR AHMAD AND R.P. SETHI, JJ.)

LILY THOMAS AND OTHERS .. Petitioners;

Versus

UNION OF INDIA AND OTHERS .. Respondents.

Writ Petitions (C) No. 798 of 1995† with No. 1079 of 1989, RP (C) No. 1310 of 1995 in WPs (C) Nos. 509 of 1992, 347 of 1990, 424 of 1992, 503 of 1995, 509 of 1992, 588 and 835 of 1995, decided on May 5, 2000

A. **Hindu Marriage Act, 1955 — Ss. 17, 11, 13, 10 and 5(i) — Penal Code, 1860 — S. 494 — Conversion does not automatically dissolve first marriage — Held, since bigamous marriage is prohibited under HMA, 1955 and is an offence under S. 17, any marriage solemnised by the husband during the subsistence of his Hindu marriage would be void under S. 11, and an offence triable under S. 17 r/w S. 494 IPC, regardless of such**

† Under Article 32 of the Constitution of India

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TEST REPORT

Test Report No. :	**ATL2960102018**	**Sample Received Date :**	23/10/2018
Issued To :	NATIONAL FERTILIZER LIMITED, (A Govt. of India Undertaking) Sibian Road,Batinda-151003 (Punjab)	**Start Date of Analysis :**	23/10/2018
		End Date of Analysis :	15/11/2018
		Report Issued Date :	15/11/2018

Sample Description	:	**Carbon Slurry**
Sample Drawn on	:	22/10/2018
Sample Quantity	:	2 Kg
Location of Sampling point	:	**Pond No.-1**
Type of Sampling	:	Composite
Environmental Condition	:	Normal
Sampling Plan/Procedure	:	ATHB/ENV/04
Sampling done by	:	Mr. Anup Singh & Mr. Abhishek Shukla (Lab Representative)
Remarks (if any)	:	**Letter Ref. No. -NFL/LAB/Carbon Slurry/2018 Dated : 18/10/2018**

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
Class A (Schedule-II) Based on leachable Concentration limits[Toxicity Characteristic Leaching Procedure(TCLP)]					
1.	Arsenic	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
2.	Barium	mg/l	BDL(DL-0.02)	100.0 Max.	ICP-OES
3.	Cadmium	mg/l	BDL(DL-0.004)	1.0 Max.	ICP-OES
4.	Total Chromium	mg/l	BDL(DL-0.02)	5.0 Max.	ICP-OES
5.	Lead	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
6.	Manganese	mg/l	BDL(DL-0.02)	10.0 Max.	ICP-OES
7.	Mercury	mg/l	BDL(DL-0.0008)	0.2 Max.	ICP-OES
8.	Selenium	mg/l	BDL(DL 0.004)	1.0 Max	ICP-OES
9.	Silver	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
10.	Antimony	mg/l	BDL(DL-0.004)	15 Max.	ICP-OES
11.	Beryllium	mg/l	BDL(DL-0.02)	0.75 Max.	ICP-OES
12.	Chromium (VI)	mg/l	BDL(DL-0.02)	5.0 Max.	ICP-OES
13.	Cobalt	mg/l	BDL(DL-0.02)	80.0 Max.	ICP-OES
14.	Copper	mg/l	BDL(DL-0.02)	25.0 Max.	ICP-OES
15.	Molybdenum	mg/l	BDL(DL-0.02)	350 Max.	ICP-OES
16.	Nickel	mg/l	0.022	20.0 Max.	ICP-OES
17.	Zinc	mg/l	BDL(DL-0.02)	250 Max.	ICP-OES
18.	Thallium	mg/l	BDL(DL-0.02)	7.0 Max.	ICP-OES
19.	Vanadium	mg/l	BDL(DL-0.02)	24.0 Max.	ICP-OES
20.	2,4,5-Trichlorophenol	mg/l	0.046	400.0 Max.	GC-MS
21.	Ammonia	mg/l	5.4	50 Max.	APHA 4500 NH_3(C)
22.	Cyanide	mg/l	BDL(DL-0.01)	20 Max.	APHA 4500 CN-(E)
23.	Nitrate (as Nitrate Nitrogen)	mg/l	8.2	1000.0 Max.	IS:3025(P-34)1988 RA 2014

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TEST REPORT

Test Report No. : ATL2960102018	Sample Description : Carbon Slurry

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
24.	Suphide (as H_2S)	mg/l	1.6	5.0 Max.	APHA 4500 S^2 (D)
25.	Fluoride	mg/l	4.2	180.0 Max.	APHA 4500 F (D)
26.	1,1-Dichloroethylene	mg/l	0.026	0.7 Max.	GC-MS
27.	1,2-Dichloroethane	mg/l	0.004	0.5 Max.	GC-MS
28.	1,4-Dichlorobenzene	mg/l	0.001	7.5 Max.	GC-MS
29.	2,4 Dinitrotoluene	mg/l	0.003	0.13 Max.	GC-MS
30.	Benzene	mg/l	0.072	0.5 Max.	GC
31.	Benzo (a) Pyrene	mg/l	BDL(DL-0.00004)	0.001 Max.	GC-MS
32.	Bromodichloromethane	mg/l	BDL(DL-0.00004)	0.6 Max.	GC
33.	Bromoform	mg/l	BDL(DL-0.00004)	10.0 Max.	GC
34.	Carbon Tetrachloride	mg/l	0.033	0.5 Max.	GC
35.	Chloroform	mg/l	BDL(DL-0.00004)	6.0 Max.	GC
36.	Dibromochloromethane	mg/l	BDL(DL-0.00004)	10.0 Max.	GC
37.	Hexachlorobenzene	mg/l	BDL(DL-0.00008)	0.13 Max.	GC-MS
38.	Hexachlorobutadiene	mg/l	BDL(DL-0.00008)	0.5 Max.	GC-MS
39.	Hexachloroethane	mg/l	BDL(DL-0.00008)	3.0 Max.	GC-MS
40.	Methyl ethyl Ketone	mg/l	BDL(DL-0.00008)	200.0 Max.	GC-MS
41.	2,4,6-Trichlorophenol	mg/l	BDL(DL-0.00008)	2.0 Max.	GC-MS
42.	Nitrobenzene	mg/l	BDL(DL-0.00004)	2.0 Max.	GC-MS
43.	Naphthalene	mg/l	0.119	5.0 Max.	GC-MS
44.	Pyridene	mg/l	BDL(DL-0.00004)	5.0 Max.	GC-MS
45.	Tetrachloroethylene	mg/l	0.007	0.7 Max.	GC-MS
46.	Trichloroethylene	mg/l	BDL(DL-0.00004)	0.5 Max.	GC-MS
47.	Vinyl Chloride	mg/l	BDL(DL-0.000045)	0.2 Max.	GC-MS
48.	2,4-Dichlorophenoxyacetic acid	mg/l	BDL(DL-0.00004)	10.0 Max.	HPLC
49.	Alachlor	mg/l	0.005	2.0 Max.	GC-MS
50.	Alpha HCH	mg/l	BDL(DL-0.00001)	0.001 Max.	GC
51.	Beta HCH	mg/l	BDL(DL-0.00001)	0.004 Max.	GC
52.	Delta HCH	mg/l	BDL(DL-0.00001)	0.004 Max.	GC
53.	Butachlor	mg/l	0.012	12.5 Max.	GC-MS
54.	Chlordane	mg/l	0.004	0.03 Max.	GC-MS
55.	Chlorpyriphos	mg/l	0.088	9.0 Max.	GC-MS
56.	Atrazine	mg/l	0.003	0.2 Max.	GC-MS

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TEST REPORT

Test Report No. : ATL2960102018	Sample Description : Carbon Slurry

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
57.	Endosulphan (alpha + Beta + sulphate)	mg/l	0.011	0.04 Max.	GC
58.	Endrin	mg/l	BDL(DL-0.00009)	0.02 Max.	GC
59.	Ethion	mg/l	0.013	0.3 Max.	GC-MS
60.	Heptachlor (& its Epoxide)	mg/l	BDL(DL-0.00001)	0.008 Max.	GC
61.	Isoproturon	mg/l	BDL(DL-0.00002)	0.9 Max.	HPLC
62.	Chlorobenzene	mg/l	BDL(DL-0.00002)	100 Max.	GC-MS
63.	Lindane	mg/l	0.004	0.4 Max.	GC
64.	Malathion	mg/l	0.001	19 Max.	GC
65.	Methoxychlor	mg/l	BDL(DL-0.00009)	10 Max.	GC
66.	Methyl parathion	mg/l	0.004	0.7 Max.	GC
67.	Monocrotophos	mg/l	BDL(DL-0.00008)	0.1 Max.	GC
68.	Phorate	mg/l	0.001	0.2 Max.	GC
69.	Aldrin	mg/l	0.005	0.14 Max.	GC
70.	Dichlorodiphenyltrichloroethane	mg/l	BDL(DL-0.00007)	0.1 Max.	GC-MS
71.	Dieldrin	mg/l	0.004	0.8 Max.	GC
72.	Polychlorinated biphenyls	mg/l	0.004	5.0 Max.	GC-MS
73.	Cresol (ortho+meta+para)	mg/l	BDL(DL-0.00007)	200.0 Max.	GC-MS
74.	Pentachlorophenol	mg/l	BDL(DL-0.00012)	100.0 Max.	GC-MS
75.	2,4,5-TP (Silvex)	mg/l	BDL(DL-0.00015)	1.0 Max.	GC-MS
76.	Toxaphene	mg/l	BDL(DL-0.00017)	0.5 Max.	GC-MS
77.	Kepone	mg/l	BDL(DL-0.00008)	2.1 Max.	GC-MS
78.	Mirex	mg/l	BDL(DL-0.00011)	2.1 Max.	GC-MS
79.	Dioxin (2,3,7,8-TCDD)	mg/l	BDL(DL-0.00028)	0.001 Max.	GC-MS
Class -B (Schedule - II) Based on Total Threshold Limit Concentration (TTLC)					
1.	**Total Petroleum Hydrocarbons**				
a.	n-Pantane (C5)	mg/kg	BDL(DL-0.00004)	--	GC
b.	n- Hexane (C6)	mg/kg	BDL(DL-0.00004)	--	GC
c.	Toluene (C7)	mg/kg	BDL(DL-0.00004)	--	GC
d.	Ethylbenzene (C8)	mg/kg	BDL(DL-0.00004)	--	GC
e.	Xylene (C8)	mg/kg	BDL(DL-0.00004)	--	GC
Class -C (Schedule - II) Based on Hazardous Characteristics					
1.	Flammability	--	Non-Flammable	--	ATH-Bahadurgarh/SOP/C/34
2.	Corrosivity	--	Non-Corrosive	--	ATH-Bahadurgarh/SOP/C/35
3.	Reactivity or explosive	--	Non-Reactive or Non-explosive	--	ATH-Bahadurgarh/SOP/C/36
4.	Toxicity	--	Non-Toxic	--	IS:6582-2001

Note:- BDL-Below Detection Limit, DL-Detection Limit

Remarks: The above Carbon Slurry sample is not in Hazardous category as per the notification of MoEF &CC schedule II of Hazardous Waste Rule-2016.

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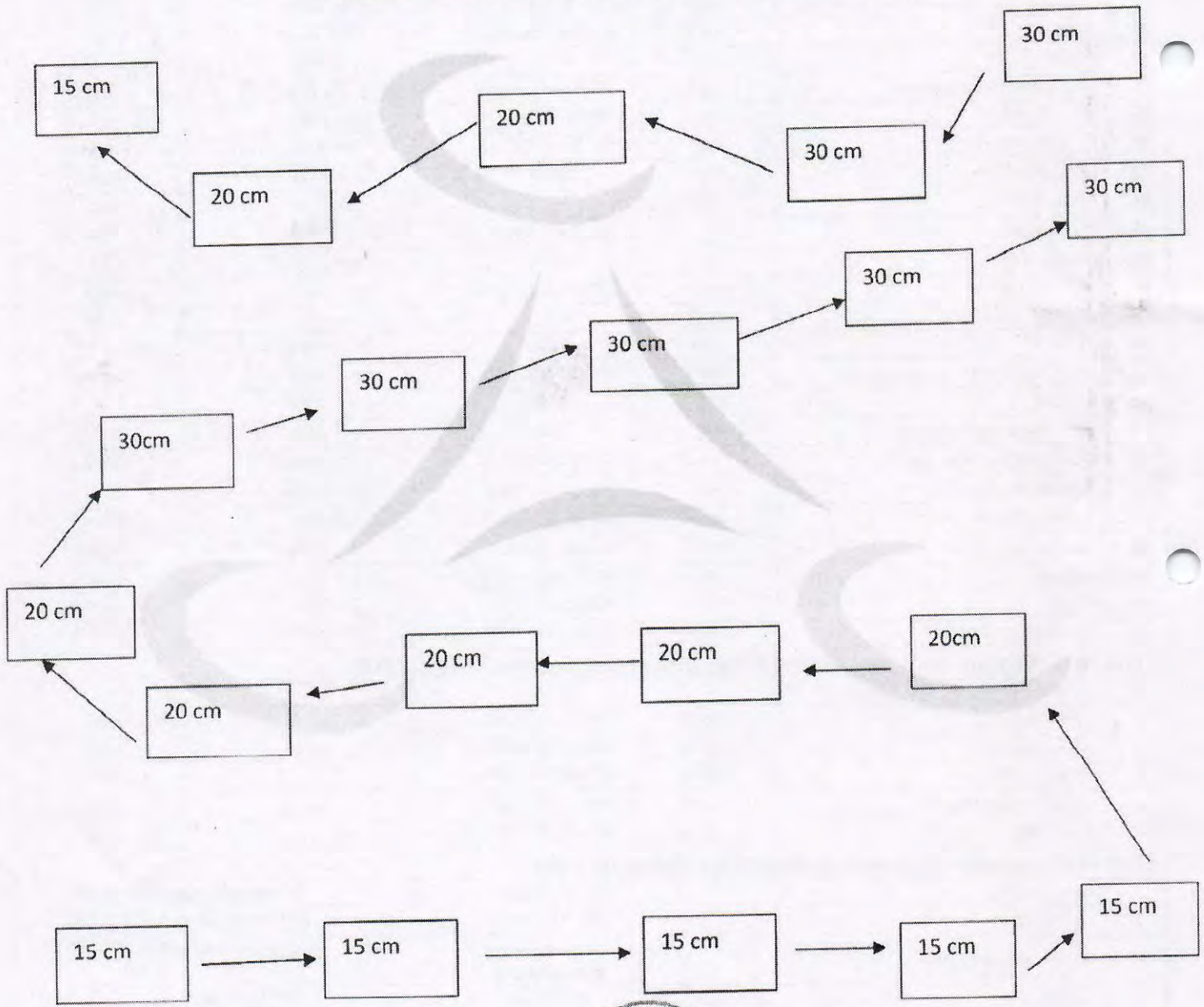
TEST REPORT

Test Report No. : ATL2960102018	Sample Description : Carbon Slurry

Depth Layout of Sampling Plan



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TEST REPORT

Test Report No. : ATL2960102018	Sample Description : Carbon Slurry

Photographs

End of Report

Authorized Signatory
(Instrumentation)

ALPHA TEST HOUSE * BAHADURGARH *

Authorized Signatory
(Chemical)

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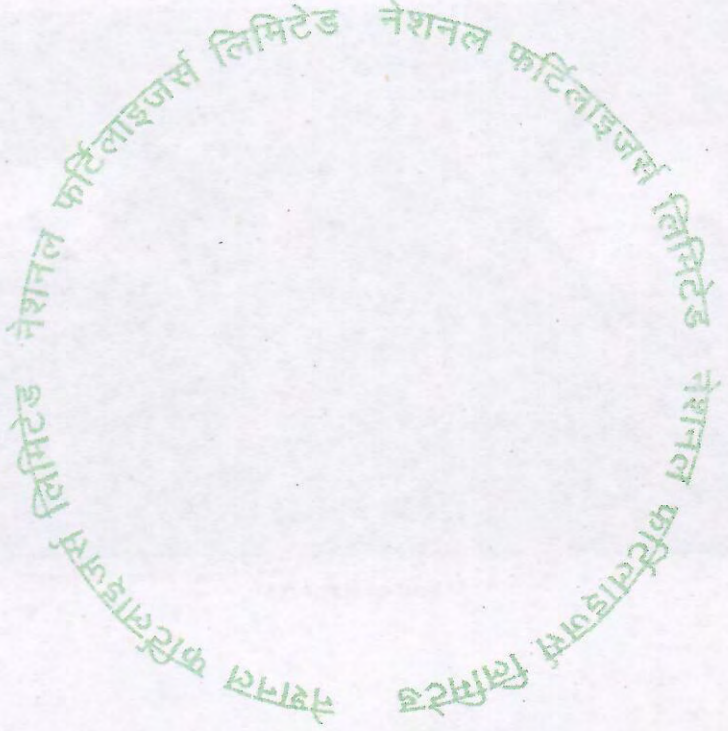

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TEST REPORT

Test Report No. :	**ATL2960112018**	**Sample Received Date :**	23/10/2018
Issued To :	NATIONAL FERTILIZER LIMITED, (A Govt. of India Undertaking) Sibian Road,Batinda-151003 (Punjab)	**Start Date of Analysis :**	23/10/2018
		End Date of Analysis :	15/11/2018
		Report Issued Date :	15/11/2018

Sample Description	:	**Carbon Slurry**
Sample Drawn on	:	22/10/2018
Sample Quantity	:	2 Kg
Location of Sampling point	:	**Pond No.- 2**
Type of Sampling	:	Composite
Environmental Condition	:	Normal
Sampling Plan/Procedure	:	ATHB/ENV/04
Sampling done by	:	Mr. Anup Singh & Mr. Abhishek Shukla (Lab Representative)
Remarks (if any)	:	**Letter Ref. No. -NFL/LAB/Carbon Slurry/2018 Dated : 18/10/2018**

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
Class A (Schedule-II) Based on leachable Concentration limits[Toxicity Characteristic Leaching Procedure(TCLP)]					
1.	Arsenic	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
2.	Barium	mg/l	BDL(DL-0.02)	100.0 Max.	ICP-OES
3.	Cadmium	mg/l	BDL(DL-0.004)	1.0 Max.	ICP-OES
4.	Total Chromium	mg/l	BDL(DL-0.02)	5.0 Max.	ICP-OES
5.	Lead	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
6.	Manganese	mg/l	BDL(DL-0.02)	10.0 Max.	ICP-OES
7.	Mercury	mg/l	BDL(DL-0.0008)	0.2 Max.	ICP-OES
8.	Selenium	mg/l	BDL(DL-0.004)	1.0 Max.	ICP-OES
9.	Silver	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
10	Antimony	mg/l	BDL(DL-0.004)	15 Max.	ICP-OES
11.	Beryllium	mg/l	BDL(DL-0.02)	0.75 Max.	ICP-OES
12.	Chromium (VI)	mg/l	BDL(DL-0.02)	5.0 Max.	ICP-OES
13.	Cobalt	mg/l	BDL(DL-0.02)	80.0 Max.	ICP-OES
14.	Copper	mg/l	BDL(DL-0.02)	25.0 Max.	ICP-OES
15.	Molybdenum	mg/l	BDL(DL-0.02)	350 Max.	ICP-OES
16.	Nickel	mg/l	0.024	20.0 Max.	ICP-OES
17.	Zinc	mg/l	BDL(DL-0.02)	250 Max.	ICP-OES
18.	Thallium	mg/l	BDL(DL-0.02)	7.0 Max.	ICP-OES
19	Vanadium	mg/l	BDL(DL-0.02)	24.0 Max.	ICP-OES
20.	2,4,5-Trichlorophenol	mg/l	0.031	400.0 Max.	GC-MS
21.	Ammonia	mg/l	2.4	50 Max.	APHA 4500 NH_3(C)
22	Cyanide	mg/l	BDL(DL-0.01)	20 Max.	APHA 4500 CN-(E)
23.	Nitrate (as Nitrate Nitrogen)	mg/l	4.1	1000.0 Max	IS:3025(P-34)1988 RA 2014

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TEST REPORT

Test Report No. : ATL2960112018	Sample Description : Carbon Slurry

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
24.	Suphide (as H_2S)	mg/l	2.4	5.0 Max.	APHA 4500 S^2 (D)
25.	Fluoride	mg/l	3.9	180.0 Max.	APHA 4500 F (D)
26.	1,1-Dichloroethylene	mg/l	0.019	0.7 Max.	GC-MS
27.	1,2-Dichloroethane	mg/l	0.004	0.5 Max.	GC-MS
28.	1,4-Dichlorobenzene	mg/l	0.002	7.5 Max.	GC-MS
29.	2,4-Dinitrotoluene	mg/l	0.003	0.13 Max.	GC-MS
30.	Benzene	mg/l	0.004	0.5 Max.	GC
31.	Benzo (a) Pyrene	mg/l	BDL(DL-0.00004)	0.001 Max.	GC-MS
32.	Bromodichloromethane	mg/l	BDL(DL-0.00004)	0.6 Max.	GC
33.	Bromoform	mg/l	BDL(DL-0.00004)	10.0 Max.	GC
34.	Carbon Tetrachloride	mg/l	0.005	0.5 Max.	GC
35.	Chloroform	mg/l	BDL(DL-0.00004)	6.0 Max.	GC
36.	Dibromochloromethane	mg/l	BDL(DL-0.00004)	10.0 Max.	GC
37.	Hexachlorobenzene	mg/l	BDL(DL-0.00008)	0.13 Max.	GC-MS
38.	Hexachlorobutadiene	mg/l	BDL(DL-0.00008)	0.5 Max.	GC-MS
39.	Hexachloroethane	mg/l	BDL(DL-0.00008)	3.0 Max.	GC-MS
40.	Methyl ethyl Ketone	mg/l	BDL(DL-0.00008)	200.0 Max.	GC-MS
41.	2,4,6-Trichlorophenol	mg/l	BDL(DL-0.00008)	2.0 Max.	GC-MS
42.	Nitrobenzene	mg/l	BDL(DL-0.00004)	2.0 Max.	GC-MS
43.	Naphthalene	mg/l	0.042	5.0 Max.	GC-MS
44.	Pyridene	mg/l	BDL(DL-0.00004)	5.0 Max.	GC-MS
45.	Tetrachloroethylene	mg/l	0.009	0.7 Max.	GC-MS
46.	Trichloroethylene	mg/l	BDL(DL-0.00004)	0.5 Max.	GC-MS
47.	Vinyl Chloride	mg/l	BDL(DL-0.000045)	0.2 Max.	GC-MS
48.	2,4-Dichlorophenoxyacetic acid	mg/l	BDL(DL-0.00004)	10.0 Max.	HPLC
49.	Alachlor	mg/l	0.005	2.0 Max.	GC-MS
50.	Alpha HCH	mg/l	BDL(DL-0.00001)	0.001 Max.	GC
51.	Beta HCH	mg/l	BDL(DL-0.00001)	0.004 Max.	GC
52.	Delta HCH	mg/l	BDL(DL-0.00001)	0.004 Max.	GC
53.	Butachlor	mg/l	0.006	12.5 Max.	GC-MS
54.	Chlordane	mg/l	0.005	0.03 Max.	GC-MS
55.	Chlorpyriphos	mg/l	0.142	9.0 Max.	GC-MS
56.	Atrazine	mg/l	0.002	0.2 Max.	GC-MS

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TEST REPORT

Test Report No. : ATL2960112018 | **Sample Description : Carbon Slurry**

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
57.	Endosulphan (alpha + beta + sulphate)	mg/l	0.01	0.04 Max.	GC
58.	Endrin	mg/l	BDL(DL-0.00009)	0.02 Max.	GC
59.	Ethion	mg/l	0.009	0.3 Max.	GC-MS
60.	Heptachlor (& its Epoxide)	mg/l	BDL(DL-0.00001)	0.008 Max.	GC
61.	Isoproturon	mg/l	BDL(DL-0.00002)	0.9 Max.	HPLC
62.	Chlorobenzene	mg/l	BDL(DL-0.00002)	100 Max.	GC-MS
63.	Lindane	mg/l	0.003	0.4 Max.	GC
64.	Malathion	mg/l	0.002	19 Max.	GC
65.	Methoxychlor	mg/l	BDL(DL-0.00009)	10 Max.	GC
66.	Methyl parathion	mg/l	0.005	0.7 Max.	GC
67.	Monocrotophos	mg/l	BDL(DL-0.00008)	0.1 Max.	GC
68.	Phorate	mg/l	0.013	0.2 Max.	GC
69.	Aldrin	mg/l	BDL(DL-0.00001)	0.14 Max.	GC
70.	Dichlorodiphenyltrichloroethane	mg/l	BDL(DL-0.00007)	0.1 Max.	GC-MS
71.	Dieldrin	mg/l	0.003	0.8 Max.	GC
72.	Polychlorinated biphenyls	mg/l	0.005	5.0 Max.	GC-MS
73.	Cresol (ortho+meta+para)	mg/l	BDL(DL-0.00007)	200.0 Max.	GC-MS
74.	Pentachlorophenol	mg/l	BDL(DL-0.00012)	100.0 Max.	GC-MS
75.	2,4,5-TP (Silvex)	mg/l	BDL(DL-0.00015)	1.0 Max.	GC-MS
76.	Toxaphene	mg/l	BDL(DL-0.00017)	0.5 Max.	GC-MS
77.	Kepone	mg/l	BDL(DL-0.00008)	2.1 Max.	GC-MS
78.	Mirex	mg/l	BDL(DL-0.00011)	2.1 Max.	GC-MS
79.	Dioxin (2,3,7,8-TCDD)	mg/l	BDL(DL-0.00028)	0.001 Max.	GC-MS
Class -B (Schedule - II) Based on Total Threshold Limit Concentration (TTLC)					
1.	**Total Petroleum Hydrocarbons**				
a.	n-Pantane (C5)	mg/kg	BDL(DL-0.00004)	--	GC
b.	n- Hexane (C6)	mg/kg	BDL(DL-0.00004)	--	GC
c.	Toluene (C7)	mg/kg	BDL(DL-0.00004)	--	GC
d.	Ethylbenzene (C8)	mg/kg	BDL(DL-0.00004)	--	GC
e.	Xylene (C8)	mg/kg	BDL(DL-0.00004)	--	GC
Class -C (Schedule - II) Based on Hazardous Characteristics					
1.	Flammability	--	Non-Flammable	--	ATH-Bahadurgarh/SOP/C/34
2.	Corrosivity	--	Non-Corrosive	--	ATH-Bahadurgarh/SOP/C/35
3.	Reactivity or explosive	--	Non-Reactive or Non-explosive	--	ATH-Bahadurgarh/SOP/C/36
4.	Toxicity	--	Non-Toxic	--	IS:6582-2001

Note:- BDL-Below Detection Limit, DL-Detection Limit

Remarks: The above Carbon Slurry sample is not in Hazardous category as per the notification of MoEF &CC schedule II of Hazardous Waste Rule-2016.

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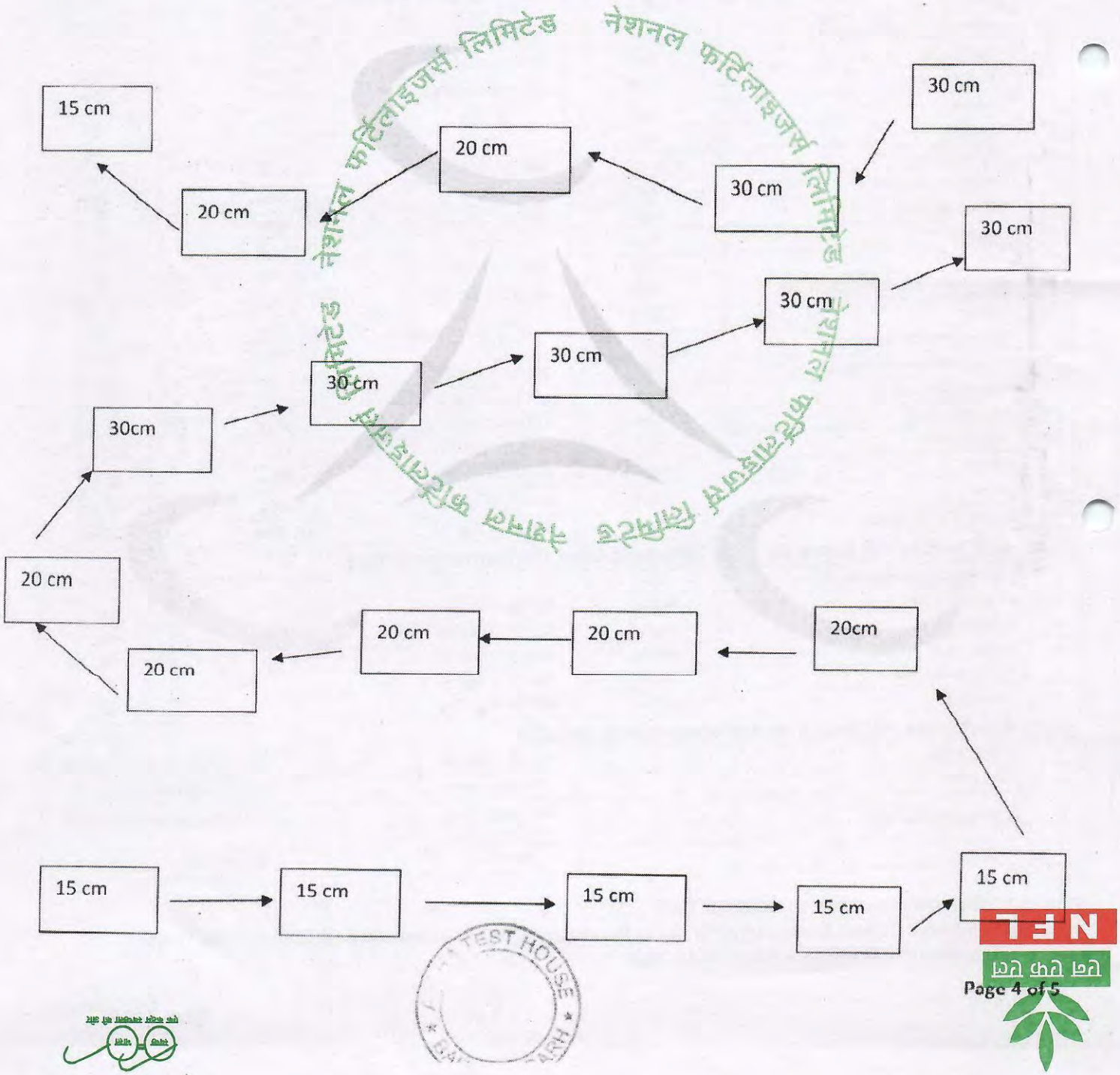
TEST REPORT

Test Report No. : ATL2960112018	Sample Description : Carbon Slurry

Depth Layout of Sampling Plan



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TEST REPORT

Test Report No. : ATL2960112018	**Sample Description** : **Carbon Slurry**

Photographs

****End of Report****

Authorized Signatory
(Instrumentation)

ALPHA TEST HOUSE * BAHADURGARH *

Authorized Signatory
(Chemical)

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TEST REPORT

Test Report No. :	**ATL2960122018**	**Sample Received Date :**	23/10/2018
Issued To :	NATIONAL FERTILIZER LIMITED, (A Govt. of India Undertaking) Sibian Road,Batinda-151003 (Punjab)	**Start Date of Analysis :**	23/10/2018
		End Date of Analysis :	15/11/2018
		Report Issued Date :	15/11/2018

Sample Description	:	**Carbon Slurry**
Sample Drawn on	:	21/10/2018
Sample Quantity	:	2 Kg
Location of Sampling point	:	**Pond No. - 6A**
Type of Sampling	:	Composite
Environmental Condition	:	Normal
Sampling Plan/Procedure	:	ATHB/ENV/04
Sampling done by	:	Mr. Anup Singh & Mr. Abhishek Shukla (Lab Representative)
Remarks (if any)	:	**Letter Ref. No. -NFL/LAB/Carbon Slurry/2018 Dated : 18/10/2018**

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
Class A (Schedule-II) Based on leachable Concentration limits[Toxicity Characteristic Leaching Procedure(TCLP)]					
1.	Arsenic	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
2.	Barium	mg/l	BDL(DL-0.02)	100.0 Max.	ICP-OES
3.	Cadmium	mg/l	BDL(DL-0.004)	1.0 Max.	ICP-OES
4.	Total Chromium	mg/l	BDL(DL-0.02)	5.0 Max.	ICP-OES
5.	Lead	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
6.	Manganese	mg/l	BDL(DL-0.02)	10.0 Max.	ICP-OES
7.	Mercury	mg/l	BDL(DL-0.0008)	0.2 Max.	ICP-OES
8.	Selenium	mg/l	BDL(DL-0.004)	1.0 Max.	ICP-OES
9.	Silver	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
10.	Antimony	mg/l	BDL(DL-0.004)	15 Max.	ICP-OES
11.	Beryllium	mg/l	BDL(DL-0.02)	0.75 Max.	ICP-OES
12.	Chromium (VI)	mg/l	BDL(DL-0.02)	5.0 Max.	ICP-OES
13.	Cobalt	mg/l	BDL(DL-0.02)	80.0 Max.	ICP-OES
14.	Copper	mg/l	BDL(DL-0.02)	25.0 Max.	ICP-OES
15.	Molybdenum	mg/l	BDL(DL-0.02)	350 Max.	ICP-OES
16.	Nickel	mg/l	0.012	20.0 Max.	ICP-OES
17.	Zinc	mg/l	BDL(DL-0.02)	250 Max.	ICP-OES
18.	Thallium	mg/l	BDL(DL-0.02)	7.0 Max.	ICP-OES
19.	Vanadium	mg/l	BDL(DL-0.02)	24.0 Max.	ICP-OES
20.	2,4,5-Trichlorophenol	mg/l	0.023	400.0 Max.	GC-MS
21.	Ammonia	mg/l	3.9	50 Max.	APHA 4500 NH_3(C)
22.	Cyanide	mg/l	BDL(DL-0.01)	20 Max.	APHA 4500 CN-(E)
23.	Nitrate (as Nitrate Nitrogen)	mg/l	5.7	1000.0 Max.	IS:3025(P-34)1988 RA 2014

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TEST REPORT

Test Report No. : ATL2960122018	Sample Description : Carbon Slurry

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
24.	Suphide (as H_2S)	mg/l	1.1	5.0 Max.	APHA 4500 S^{2-} (D)
25.	Fluoride	mg/l	4.8	180.0 Max.	APHA 4500 F (D)
26.	1,1-Dichloroethylene	mg/l	0.017	0.7 Max.	GC-MS
27.	1,2-Dichloroethane	mg/l	0.003	0.5 Max.	GC-MS
28.	1,4-Dichlorobenzene	mg/l	0.002	7.5 Max.	GC-MS
29.	2,4-Dinitrotoluene	mg/l	0.005	0.13 Max.	GC-MS
30.	Benzene	mg/l	0.006	0.5 Max.	GC
31.	Benzo (a) Pyrene	mg/l	BDL(DL-0.00004)	0.001 Max.	GC-MS
32.	Bromodichloromethane	mg/l	BDL(DL-0.00004)	0.6 Max.	GC
33.	Bromoform	mg/l	BDL(DL-0.00004)	10.0 Max.	GC
34.	Carbon Tetrachloride	mg/l	0.006	0.5 Max.	GC
35.	Chloroform	mg/l	BDL(DL-0.00004)	6.0 Max.	GC
36.	Dibromochloromethane	mg/l	BDL(DL-0.00004)	10.0 Max.	GC
37.	Hexachlorobenzene	mg/l	BDL(DL-0.00008)	0.13 Max.	GC-MS
38.	Hexachlorobutadiene	mg/l	BDL(DL-0.00008)	0.5 Max.	GC-MS
39.	Hexachloroethane	mg/l	BDL(DL-0.00008)	3.0 Max.	GC-MS
40.	Methyl ethyl Ketone	mg/l	BDL(DL-0.00008)	200.0 Max.	GC-MS
41.	2,4,6-Trichlorophenol	mg/l	BDL(DL-0.00008)	2.0 Max.	GC-MS
42.	Nitrobenzene	mg/l	BDL(DL-0.00004)	2.0 Max.	GC-MS
43.	Naphthalene	mg/l	0.194	5.0 Max.	GC-MS
44.	Pyridene	mg/l	BDL(DL-0.00004)	5.0 Max.	GC-MS
45.	Tetrachloroethylene	mg/l	0.001	0.7 Max.	GC-MS
46.	Trichloroethylene	mg/l	BDL(DL-0.00004)	0.5 Max.	GC-MS
47.	Vinyl Chloride	mg/l	BDL(DL-0.000045)	0.2 Max.	GC-MS
48.	2,4-Dichlorophenoxyacetic acid	mg/l	BDL(DL-0.00004)	10.0 Max.	HPLC
49.	Alachlor	mg/l	0.006	2.0 Max.	GC-MS
50.	Alpha HCH	mg/l	BDL(DL-0.00001)	0.001 Max.	GC
51.	Beta HCH	mg/l	BDL(DL-0.00001)	0.004 Max.	GC
52.	Delta HCH	mg/l	BDL(DL-0.00001)	0.004 Max.	GC
53.	Butachlor	mg/l	0.013	12.5 Max.	GC-MS
54.	Chlordane	mg/l	0.005	0.03 Max.	GC-MS
55.	Chlorpyriphos	mg/l	0.263	9.0 Max.	GC-MS
56.	Atrazine	mg/l	0.004	0.2 Max.	GC-MS

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+91 1276-268444
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TEST REPORT

Test Report No. : ATL2960122018	Sample Description : Carbon Slurry

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
57.	Endosulphan (alpha + beta + sulphate)	mg/l	0.012	0.04 Max.	GC
58.	Endrin	mg/l	BDL(DL-0.00009)	0.02 Max.	GC
59.	Ethion	mg/l	0.006	0.3 Max.	GC-MS
60.	Heptachlor (& its Epoxide)	mg/l	BDL(DL-0.00001)	0.008 Max.	GC
61.	Isoproturon	mg/l	BDL(DL-0.00002)	0.9 Max.	HPLC
62.	Chlorobenzene	mg/l	BDL(DL-0.00002)	100 Max.	GC-MS
63.	Lindane	mg/l	0.004	0.4 Max.	GC
64.	Malathion	mg/l	0.018	19 Max.	GC
65.	Methoxychlor	mg/l	BDL(DL-0.00009)	10 Max.	GC
66.	Methyl parathion	mg/l	0.004	0.7 Max.	GC
67.	Monocrotophos	mg/l	BDL(DL-0.00008)	0.1 Max.	GC
68.	Phorate	mg/l	0.001	0.2 Max.	GC
69.	Aldrin	mg/l	0.01	0.14 Max.	GC
70.	Dichlorodiphenyltrichloroethane	mg/l	BDL(DL-0.00007)	0.1 Max.	GC-MS
71.	Dieldrin	mg/l	0.004	0.8 Max.	GC
72.	Polychlorinated biphenyls	mg/l	0.004	5.0 Max.	GC-MS
73.	Cresol (ortho+meta+para)	mg/l	BDL(DL-0.00007)	200.0 Max.	GC-MS
74.	Pentachlorophenol	mg/l	BDL(DL-0.00012)	100.0 Max.	GC-MS
75.	2,4,5-TP (Silvex)	mg/l	BDL(DL-0.00015)	1.0 Max.	GC-MS
76.	Toxaphene	mg/l	BDL(DL-0.00017)	0.5 Max.	GC-MS
77.	Kepone	mg/l	BDL(DL-0.00008)	2.1 Max.	GC-MS
78.	Mirex	mg/l	BDL(DL-0.00011)	2.1 Max.	GC-MS
79.	Dioxin (2,3,7,8-TCDD)	mg/l	BDL(DL-0.00028)	0.001 Max.	GC-MS

Class -B (Schedule - II) Based on Total Threshold Limit Concentration (TTLC)

1.	**Total Petroleum Hydrocarbons**				
a.	n-Pantane (C5)	mg/kg	BDL(DL-0.00004)	--	GC
b.	n- Hexane (C6)	mg/kg	BDL(DL-0.00004)	--	GC
c.	Toluene (C7)	mg/kg	BDL(DL-0.00004)	--	GC
d.	Ethylbenzene (C8)	mg/kg	BDL(DL-0.00004)	--	GC
e.	Xylene (C8)	mg/kg	BDL(DL-0.00004)	--	GC

Class -C (Schedule - II) Based on Hazardous Characteristics

1.	Flammability	--	Non-Flammable	--	ATH-Bahadurgarh/SOP/C/34
2.	Corrosivity	--	Non-Corrosive	--	ATH-Bahadurgarh/SOP/C/35
3.	Reactivity or explosive	--	Non-Reactive or Non-explosive	--	ATH-Bahadurgarh/SOP/C/36
4.	Toxicity	--	Non-Toxic	--	IS:6582-2001

Note:- BDL-Below Detection Limit, DL-Detection Limit

Remarks: The above Carbon Slurry sample is not in Hazardous category as per the notification of MoEF &CC schedule II of Hazardous Waste Rule-2016.

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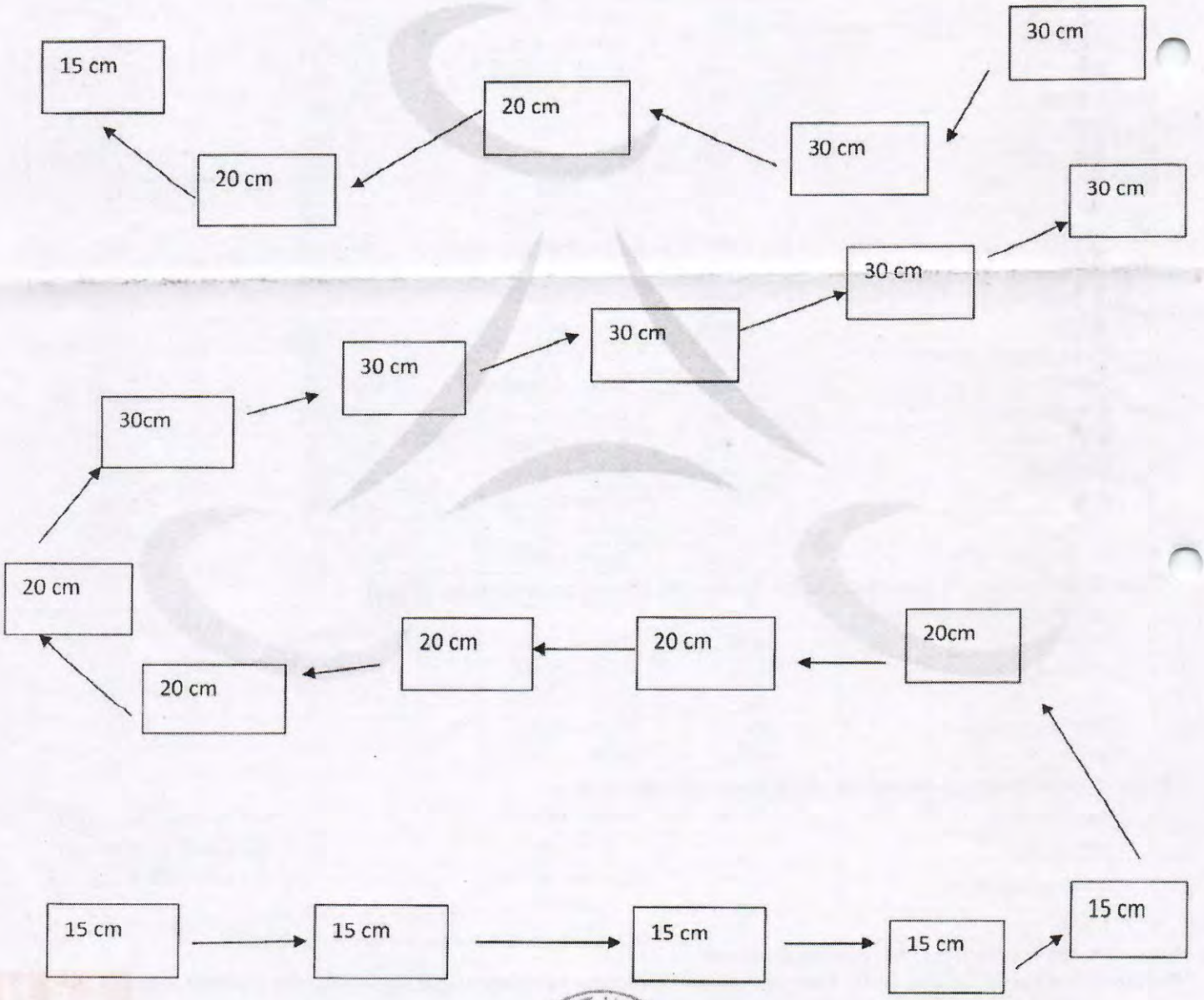
TEST REPORT

Test Report No. : ATL2960122018	Sample Description : Carbon Slurry

Depth Layout of Sampling Plan



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TEST REPORT

Test Report No. : ATL2960122018	Sample Description : Carbon Slurry

Photographs

End of Report

Authorized Signatory
(Instrumentation)

ALPHA TEST HOUSE * BAHADURGARH *

Authorized Signatory
(Chemical)

796076

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NFL

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एक कदम स्वच्छता की ओर

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TEST REPORT

Test Report No. :	**ATL3070022018**	**Sample Received Date :**	03/11/2018
Issued To :	NATIONAL FERTILIZER LIMITED, (A Govt. of India Undertaking) Gohana Road,Panipat-132106(HARYANA)	**Start Date of Analysis :**	03/11/2018
		End Date of Analysis :	15/11/2018
		Report Issued Date :	15/11/2018

Sample Description	:	**Carbon Slurry**
Sample Drawn on	:	03/11/2018
Sample Quantity	:	2 Kg
Location of Sampling point	:	**Pond No.-1**
Type of Sampling	:	Composite
Environmental Condition	:	Normal
Sampling Plan/Procedure	:	ATHB/ENV/04
Sampling done by	:	Mr. Anup Singh & Mr. Abhishek Shukla (Lab Representative)
Remarks (if any)	:	**Letter Ref. No. -NFL/PT/LAB/49-B II** **Dated : 01/11/2018**

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
Class A (Schedule-II) Based on leachable Concentration limits[Toxicity Characteristic Leaching Procedure(TCLP)]					
1.	Arsenic	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
2.	Barium	mg/l	BDL(DL-0.02)	100.0 Max.	ICP-OES
3.	Cadmium	mg/l	BDL(DL-0.004)	1.0 Max.	ICP-OES
4.	Total Chromium	mg/l	BDL(DL-0.02)	5.0 Max.	ICP-OES
5.	Lead	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
6.	Manganese	mg/l	BDL(DL-0.02)	10.0 Max.	ICP-OES
7.	Mercury	mg/l	BDL(DL-0.0008)	0.2 Max.	ICP-OES
8.	Selenium	mg/l	BDL(DL-0.004)	1.0 Max.	ICP-OES
9.	Silver	mg/l	BDL(DL-0.004)	5.0 Max.	ICP-OES
10.	Antimony	mg/l	BDL(DL-0.004)	15 Max.	ICP-OES
11.	Beryllium	mg/l	BDL(DL-0.02)	0.75 Max.	ICP-OES
12.	Chromium (VI)	mg/l	BDL(DL-0.02)	5.0 Max.	ICP-OES
13.	Cobalt	mg/l	BDL(DL-0.02)	80.0 Max.	ICP-OES
14.	Copper	mg/l	BDL(DL-0.02)	25.0 Max.	ICP-OES
15.	Molybdenum	mg/l	BDL(DL-0.02)	350 Max.	ICP-OES
16.	Nickel	mg/l	0.015	20.0 Max.	ICP-OES
17.	Zinc	mg/l	BDL(DL-0.02)	250 Max.	ICP-OES
18.	Thallium	mg/l	BDL(DL-0.02)	7.0 Max.	ICP-OES
19.	Vanadium	mg/l	BDL(DL-0.02)	24.0 Max.	ICP-OES
20.	2,4,5-Trichlorophenol	mg/l	0.002	400.0 Max.	GC-MS
21.	Ammonia	mg/l	1.5	50 Max.	APHA 4500 NH_3(C)
22.	Cyanide	mg/l	BDL(DL-0.01)	20 Max.	APHA 4500 CN-(E)
23.	Nitrate (as Nitrate Nitrogen)	mg/l	2.4	1000.0 Max.	IS:3025(P-34)1988 RA 2014

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TEST REPORT

Test Report No. : ATL3070022018	Sample Description : Carbon Slurry

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
24.	Suphide (as H_2S)	mg/l	2	5.0 Max.	APHA 4500 S^2 (D)
25.	Fluoride	mg/l	6.4	180.0 Max.	APHA 4500 F (D)
26.	1,1-Dichloroethylene	mg/l	0.002	0.7 Max.	GC-MS
27.	1,2-Dichloroethane	mg/l	0.004	0.5 Max.	GC-MS
28.	1,4-Dichlorobenzene	mg/l	0.002	7.5 Max.	GC-MS
29.	2,4-Dinitrotoluene	mg/l	0.006	0.13 Max.	GC-MS
30.	Benzene	mg/l	0.002	0.5 Max.	GC
31.	Benzo (a) Pyrene	mg/l	BDL(DL-0.00004)	0.001 Max.	GC-MS
32.	Bromodichloromethane	mg/l	BDL(DL-0.00004)	0.6 Max.	GC
33.	Bromoform	mg/l	BDL(DL-0.00004)	10.0 Max.	GC
34.	Carbon Tetrachloride	mg/l	0.003	0.5 Max.	GC
35.	Chloroform	mg/l	BDL(DL-0.00004)	6.0 Max.	GC
36.	Dibromochloromethane	mg/l	BDL(DL-0.00004)	10.0 Max.	GC
37.	Hexachlorobenzene	mg/l	BDL(DL-0.00008)	0.13 Max.	GC-MS
38.	Hexachlorobutadiene	mg/l	BDL(DL-0.00008)	0.5 Max.	GC-MS
39.	Hexachloroethane	mg/l	BDL(DL-0.00008)	3.0 Max.	GC-MS
40.	Methyl ethyl Ketone	mg/l	BDL(DL-0.00008)	200.0 Max.	GC-MS
41.	2,4,6-Trichlorophenol	mg/l	BDL(DL-0.00008)	2.0 Max.	GC-MS
42.	Nitrobenzene	mg/l	BDL(DL-0.00004)	2.0 Max.	GC-MS
43.	Naphthalene	mg/l	0.031	5.0 Max.	GC-MS
44.	Pyridene	mg/l	BDL(DL-0.00004)	5.0 Max.	GC-MS
45.	Tetrachloroethylene	mg/l	0.004	0.7 Max.	GC-MS
46.	Trichloroethylene	mg/l	BDL(DL-0.00009)	0.5 Max.	GC-MS
47.	Vinyl Chloride	mg/l	BDL(DL-0.000045)	0.2 Max.	GC-MS
48.	2,4-Dichlorophenoxyacetic acid	mg/l	BDL(DL-0.00004)	10.0 Max.	HPLC
49.	Alachlor	mg/l	0.005	2.0 Max.	GC-MS
50.	Alpha HCH	mg/l	BDL(DL-0.00001)	0.001 Max.	GC
51.	Beta HCH	mg/l	BDL(DL-0.00001)	0.004 Max.	GC
52.	Delta HCH	mg/l	BDL(DL-0.00001)	0.004 Max.	GC
53.	Butachlor	mg/l	0.008	12.5 Max.	GC-MS
54.	Chlordane	mg/l	0.004	0.03 Max.	GC-MS
55.	Chlorpyriphos	mg/l	0.129	9.0 Max.	GC-MS
56.	Atrazine	mg/l	0.002	0.2 Max.	GC-MS

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TEST REPORT

Test Report No. : ATL3070022018	Sample Description : Carbon Slurry

Sr. No.	Test Parameters	Units of Measurements	Results	Requirement as per Schedule-II of HWM Rules-2016	Method Reference
57.	Endosulphan (alpha + beta + sulphate)	mg/l	0.009	0.04 Max.	GC
58.	Endrin	mg/l	BDL(DL-0.00009)	0.02 Max.	GC
59.	Ethion	mg/l	0.01	0.3 Max.	GC-MS
60.	Heptachlor (& its Epoxide)	mg/l	BDL(DL-0.00001)	0.008 Max.	GC
61.	Isoproturon	mg/l	BDL(DL-0.00002)	0.9 Max.	HPLC
62.	Chlorobenzene	mg/l	BDL(DL-0.00002)	100 Max.	GC-MS
63.	Lindane	mg/l	0.003	0.4 Max.	GC
64.	Malathion	mg/l	0.002	19 Max.	GC
65.	Methoxychlor	mg/l	BDL(DL-0.00009)	10 Max.	GC
66.	Methyl parathion	mg/l	0.003	0.7 Max.	GC
67.	Monocrotophos	mg/l	BDL(DL-0.00008)	0.1 Max.	GC
68.	Phorate	mg/l	BDL(DL-0.00004)	0.2 Max.	GC
69.	Aldrin	mg/l	0.004	0.14 Max.	GC
70.	Dichlorodiphenyltrichloroethane	mg/l	BDL(DL-0.00007)	0.1 Max.	GC-MS
71.	Dieldrin	mg/l	0.003	0.8 Max.	GC
72.	Polychlorinated biphenyls	mg/l	0.004	5.0 Max.	GC-MS
73.	Cresol (ortho+meta+para)	mg/l	BDL(DL-0.00007)	200.0 Max.	GC-MS
74.	Pentachlorophenol	mg/l	BDL(DL-0.00012)	100.0 Max.	GC-MS
75.	2,4,5-TP (Silvex)	mg/l	BDL(DL-0.00015)	1.0 Max.	GC-MS
76.	Toxaphene	mg/l	BDL(DL-0.00017)	0.5 Max.	GC-MS
77.	Kepone	mg/l	BDL(DL-0.00008)	2.1 Max.	GC-MS
78.	Mirex	mg/l	BDL(DL-0.00011)	2.1 Max.	GC-MS
79.	Dioxin (2,3,7,8-TCDD)	mg/l	BDL(DL-0.00028)	0.001 Max.	GC-MS
Class -B (Schedule - II) Based on Total Threshold Limit Concentration (TTLC)					
1.	**Total Petroleum Hydrocarbons**				
a.	n-Pantane (C5)	mg/kg	BDL(DL-0.00004)	--	GC
b.	n- Hexane (C6)	mg/kg	BDL(DL-0.00004)	--	GC
c.	Toluene (C7)	mg/kg	BDL(DL-0.00004)	--	GC
d.	Ethylbenzene (C8)	mg/kg	BDL(DL-0.00004)	--	GC
e.	Xylene (C8)	mg/kg	BDL(DL-0.00004)	--	GC
Class -C (Schedule - II) Based on Hazardous Characteristics					
1.	Flammability	--	Non-Flammable	--	ATH-Bahadurgarh/SOP/C/34
2.	Corrosivity	--	Non-Corrosive	--	ATH-Bahadurgarh/SOP/C/35
3.	Reactivity or explosive	--	Non-Reactive or Non-explosive	--	ATH-Bahadurgarh/SOP/C/36
4.	Toxicity	--	Non-Toxic	--	IS:6582-2001

Note:- BDL-Below Detection Limit, DL-Detection Limit

Remarks: The above Carbon Slurry sample is not in Hazardous category as per the notification of MoEF &CC schedule II of Hazardous Waste Rule-2016.

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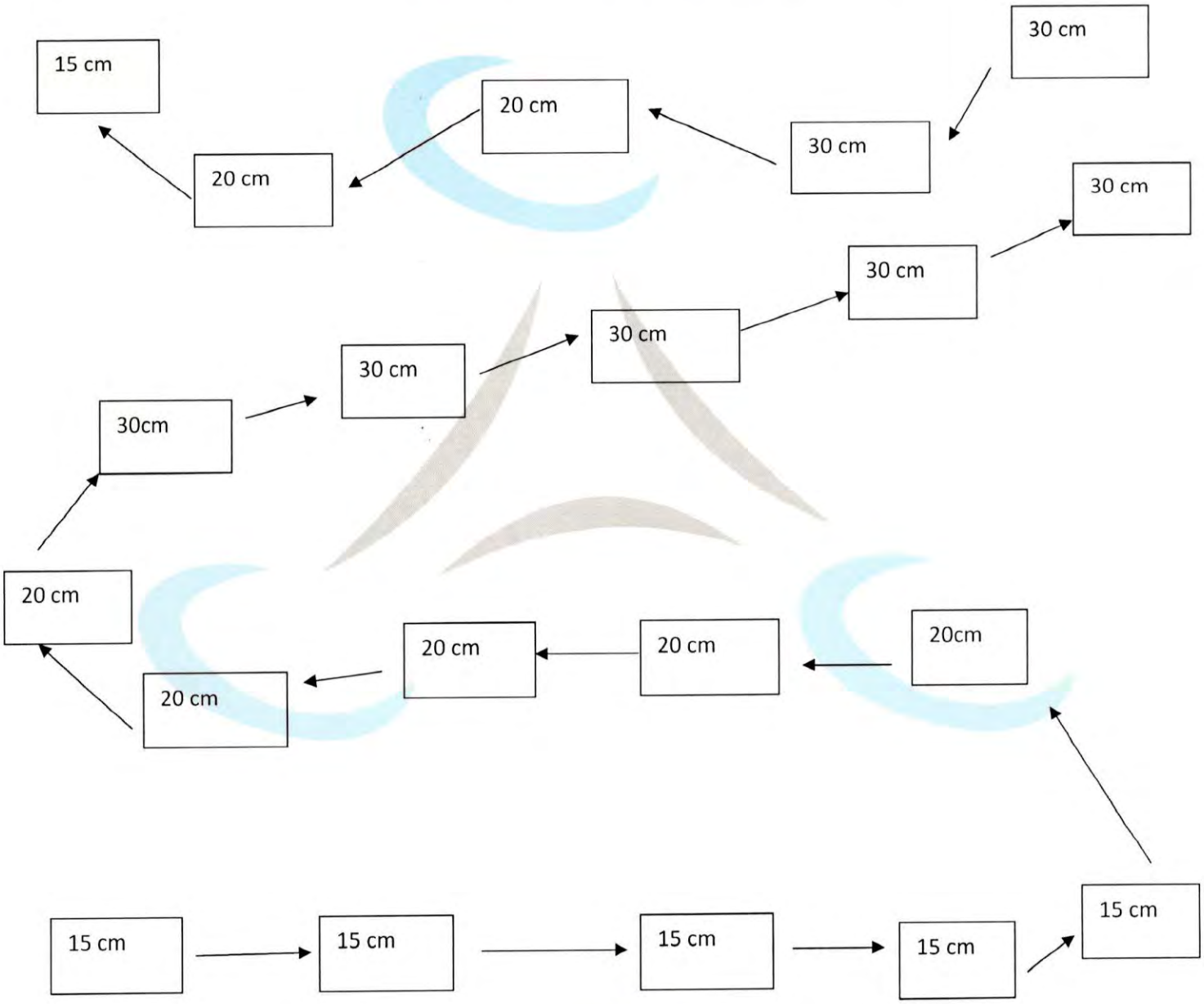
TEST REPORT

Test Report No. : ATL30700222018	Sample Description : Carbon Slurry

Depth Layout of Sampling Plan



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TEST REPORT

Test Report No. : ATL30700222018	Sample Description : Carbon Slurry

Photographs

End of Report

Authorized Signatory
(Instrumentation)

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Authorized Signatory
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Central University of Punjab
(Established vide Act No. 25(2009) of Parliament)
V.P.O. Ghudda, Dist. Bathinda 151401

TO ASSESS THE IMPACT OF CARBON MATERIAL STORED IN PONDS OF NATIONAL FERTILIZERS LIMITED, BATHINDA, ON GROUNDWATER QUALITY OF THE AREA

Ref. no. DC/CUP/ENV/03 **Date:** 04/09/2024

NATIONAL FERTILIZERS LIMITED
(A Navratna Company)

GLORIOUS YEARS

PREPARED BY -

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Empanelled as Chartered Institute by Punjab Pollution Control Board, Patiala

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EXECUTIVE SUMMARY

Vide letter No. 3858 dated 27.12.2023 of Punjab Pollution Control Board, directions were given to National Fertilizers Limited, Bathinda to engage Technical Institute of good repute or Charted institute approved by the Board to carry out the study- Regarding environmental damage (if any) caused due to the storage of carbon slurry of category 18.2 of schedule-I of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for such a long period. And, if any Environmental damage has been caused in the area due to storage of carbon slurry. In view of assess the damage following objectives were formulated and studied.

1. To analyse the various contaminants as per category 18.2 under Schedule-I of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, in the carbon slurry (now present as dry carbon material).
2. To study the leaching behaviour of the contaminants present (if any) in the dry carbon material using Toxicity Characteristic Leaching Procedure (TCLP).
3. To analyse groundwater samples from *Piezometers* around the carbon slurry storage ponds for contaminants/pollutants present beyond permissible limits in TCLP extract.
4. To analyse groundwater samples in and around NFL, Bathinda, for contaminants/pollutants present beyond permissible limits in TCLP extract.
5. To assess the extent of environmental damage caused by the prolonged storage of carbon slurry of category 18.2 under Schedule-I of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

In order to achieve the above objectives, standard methodology of sample collection and analysis was used. A total of 6 samples from the 3 carbon ponds (2 from each pond) were collected and analysed. The purpose of carbon sample analysis was to know the possible contaminants present in is as it is the ultimate source which can contribute contaminants to groundwater through leaching. Hence the carbon material present at the site was tested as per category 18.2 of rules. **It is pertinent to mention here that "The Hazardous and other wastes (Management and Transboundary Movement) rules, 2016" provides no permissible limits for any of contaminants for the carbon material/slurry. The limits provided are for the leachable**

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concentration limits in HWM (2016). Hence, Toxicity Characteristic Leaching Procedure was carried to find the leaching potential of the components/contaminants (if any) present in carbon material. Toxicity Characteristic Leaching Procedure (TCLP), was carried out for all the six carbon samples at varying pH to determine the leachability potential of the contaminants/ pollutants. Further to assess the damage groundwater, samples from 9 piezometer and 8 locations around the NFL were collected as detailed in methodology chapter and analysed as per category 18.2 of HWM, 2016, rules.

The analysis of the 6 carbon samples showed that all the metals and organic contaminants were below detection limit (BDL) except chromium (range: 3.5 – 5.9 mg/Kg), lead (range: 1.8 – 3.1 mg/Kg), cobalt (range: 23 – 35 mg/Kg), copper (range: 31 – 38 mg/Kg), nickel (range: 318 – 571 mg/Kg), and zinc (range: 12 – 24 mg/Kg). Hence, only these 6 metals were considered further for the toxicity leachate test. The analysis after toxicity leachate test showed that the leachability of chromium, lead, cobalt and zinc was below detection limit (BDL) while the leachability of Nickel and Copper ranged from 7.2 to 18.5 mg/L and BDL to 8.8 mg/L respectively which was well below the permissible limit (Nickel: 20 mg/L; and Copper: 25 mg/L; HWM, 2016). The toxicity leachate tests showed that presently either there is no leachability and/or within permissible limits of the various toxic metals. Further, to check the concentration of the various contaminants in the groundwater, samples from piezometers were analysed. The water samples from piezometers showed toxicants either the BDL or within permissible limits as prescribed by BIS (2012), as detailed in Table 10.

Similarly, the analysis results of groundwater samples collected from nearby areas of NFL, Bathinda, also showed that most of the metals and organic pollutants were BDL except chromium, lead, copper, nickel, zinc and iron however their concentration was within the permissible limits as prescribed by BIS (2012). So, it can be concluded that presently the water quality of the area in respect of contaminants/toxicants in respect of category 18.2 of the HWM rules, 2016, is within the permissible limits for both leaching potential as well as the drinking water quality as per BIS, 2012. Since the limits are within permissible limits hence further damage assessment study is not required. However, it is advised to remove carbon from the ponds as soon as possible. The overall study indicates that the industry's efforts in managing and monitoring environmental impact have been effective to date.

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CHAPTER - 1

INTRODUCTION

1. Introduction

1.1. About NFL

National Fertilizers Limited (NFL) is a central public undertaking and the largest government-owned Urea fertilizer producer in India. It is a fertilizer industry, with the Government of India owning a majority stake. Incorporated in 1974, NFL comes under the administrative control of the Ministry of Chemical and Fertilizer with headquarters in Noida, Uttar Pradesh. NFL is the second-largest producer of the key fertilizer Urea in India. NFL has five gas-based ammonia-urea plants viz Nangal and Bathinda in Punjab, Panipat in Haryana, and two at Vijaipur (Madhya Pradesh). NFL initially operated two plants in Bathinda and Panipat In 1978, the ownership and operations of the Nangal plant of FCI were transferred to NFL. The Govt. of India, in 1984, entrusted the company to execute the country's first inland gas-based fertilizer project of 726,000 tonnes urea capacity in District Guna of Madhya Pradesh, and commercial production started on 1 July 1988. The company built and commissioned its Vijaipur plant in the Guna District of Madhya Pradesh capacity was doubled to 1.45 million tonnes in 1997. In 2024, the NFL was granted Navratna status with additional autonomy due to its profitable operations. NFL is engaged in the manufacturing and marketing. Neem-coated urea, bio-fertilizers (solid and liquid), and other allied industrial products like ammonia, nitric acid, ammonium nitrate, sodium nitrate, etc.

The value-added Neem coated urea developed by NFL and widely recognized for its effectiveness is being produced at its three units at Panipat, Bathinda, and Vijaipur. NFL is the first company in India to be permitted by the Government of India to produce and market Neem-coated urea. The brand name of the company is popularly known in the market as 'KISAN'. The company has also started production of certified seeds under its Seeds Multiplication Program for sale under its brand name Kisan Beej.

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Table 1: Production capacity of urea of different plants of NFL

Plant	Total instilled capacity (lakh M Tonn)/ annum
Vijai pur plant (1&2)	17.28
Bathinda unit	**5.115**
Panipat Unit	4.785
Nangal Unit	4.785
Total	32.31

1.2. About NFL Plant at Bathinda

National Fertilizers Limited (NFL) is one of India's premier public sector enterprises, playing a crucial role in the nation's agricultural sector by producing and marketing fertilizers. The Bathinda Unit, located in the fertile region of Punjab, is a key production facility of NFL and has been a significant contributor to both the local economy and the broader agricultural output of the country. The Bathinda unit of NFL was commissioned in 1979 and is one of the oldest and most important plants in the NFL network. Strategically located in Punjab, one of India's leading agricultural states, the Bathinda unit plays a vital role in meeting the region's high demand for fertilizers, particularly urea, which is essential for the cultivation of staple crops like wheat and rice. The Bathinda plant was initially based on fuel oil as a feedstock but was later converted to a natural gas-based plant, reflecting NFL's commitment to environmental sustainability and energy efficiency. This conversion not only reduced the plant's carbon footprint but also enhanced the efficiency and reliability of the production process.

The unit employs advanced technology for urea production, including energy-efficient equipment and processes that minimize waste and emissions. The plant's operational capacity is approximately 511500 MT of urea annually, which is distributed across Punjab and neighbouring states. Moreover, the Bathinda unit is equipped with facilities for producing neem-coated urea, which is a government-mandated product designed to reduce nitrogen losses, enhance nutrient efficiency, and minimize the environmental impact of urea application in agriculture. This innovation has significantly contributed to the sustainable agricultural practices in the region.

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The Bathinda unit is not only an industrial landmark but also a socio-economic hub in the region. It provides direct and indirect employment to thousands of people, contributing to the economic development of Bathinda and surrounding areas. NFL's corporate social responsibility (CSR) initiatives further extend its impact, focusing on healthcare, education, sanitation, and rural development. These initiatives have fostered a positive relationship between the company and the local communities.

1.3. Geography of NFL Bathinda

NFL Bathinda is situated in the southwestern part of Punjab which is a semi-arid region with the

- Summer temperature ranging from 30 to 48°C.
- Winter temperature ranging from 0 to 25°C
- Mean average annual rainfall of 408 mm

As per average annual rainfall the area falls under semi-arid region.

- NFL Bathinda fertilizer plant India is located at Sibian Road, Bathinda, Punjab-151003. Location coordinates, Latitude =30.25, Longitude=74.917.
- The total area covered by NFL is 671.04 acre out of which the plant area is 457.46 acre, the NFL township area is 195.70 acre, and the CISF colony area is 17.88 acre.
- The northwestern side of the NFL main plant is covered by Sivian Village, the Northeastern side by Adarsh Nagar and Gill Patti Village, the southern side is covered by the Guru Nanak Dev Thermal Power plant.
- In the southeastern part of the main plant of NFL Bathinda, three lakes named Lake 1, lake 2, and Lake 3 are situated nearly 1.5km, 2km, and 2.5km away from the main plant.
- NFL Bathinda has three carbon slurry ponds namely carbon slurry ponds 1, 2 and 6A respectively which are 500m, 550m, and 600m from the main plant simultaneously with a total area of 0.07sq km.
- The area has two types of soils, the arid brown soils and sierozem soils. The arid brown soils are calcareous in nature, these soils are imperfectly to moderately drained.

The detailed location map of NFL, Bathinda and its adjoining areas is shown in the Figure 1.

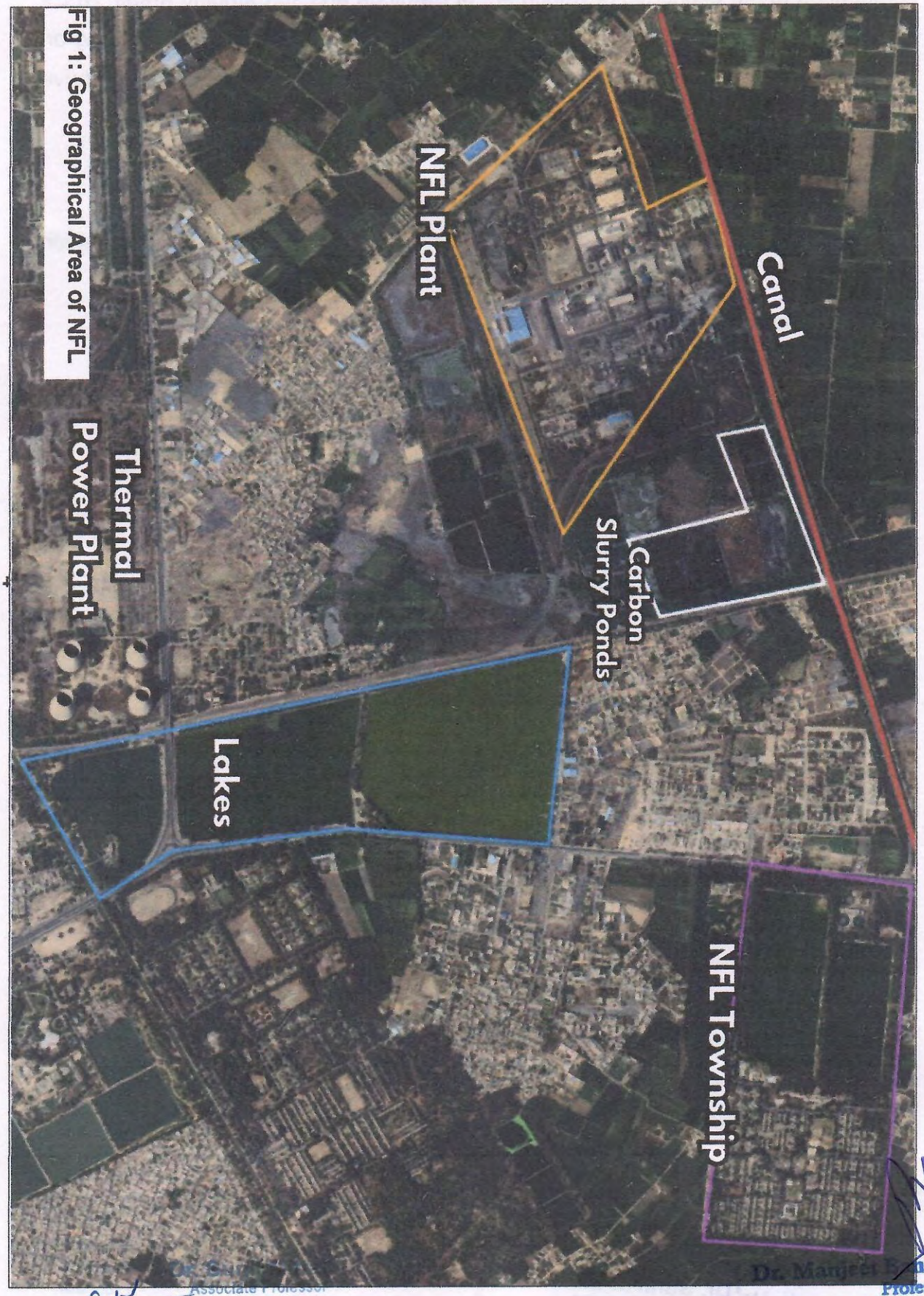

Fig 1: Geographical Area of NFL

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CHAPTER - 2

Background of present study

2.1. Background of Present Study

Hearing of M/S NFL, Bathinda for violation of Hazardous and other wastes (management and transboundary movement) rules, 2016 by Punjab Pollution Control Board

It was brought out that the industry was granted authorization under the provisions of the HOWM Rules, 2016 on 03.10.2023 (valid up to 31.03.2024) for generation, collection, storage & disposal of hazardous waste including category 18.2 @ 39600 TPA, subject to one of the specific conditions that the industry shall ensure lifting of at-least 6400 MT of hazardous waste of cat. 18.2 i.e. carbon slurry by 31.03.2023 and shall completely lift the stored hazardous waste of cat. 18.2 i.e. carbon slurry @ 38257.11 MT by 30.09.2026.

The site of the industry was visited by the officer of the Board on 25.10.2023 and it was observed that the lifting of hazardous waste of category 18.2 has not yet started from its premises. The industry failed to ensure the compliance of the special condition imposed in the authorization granted to it under the HOWM Rules, 2016.

The industry was issued show cause notice for revocation of authorization granted to it under the Hazardous and Other Wastes (Management and trans-boundary Movements) Rules, 2016 along with an opportunity of personal hearing before the Chairman of the Board on 20.11.2023, which was attended by the DGM of the industry who stated that no Carbon slurry has been generated by the industry since 2013 and sale order for lifting of Carbon slurry (category 15.2) of 39600 MT has been issued to M/s Shubham Sales (authorized recycler) on 08.11.2023 and lifting of the said hazardous waste shall begin shortly it is pertinent to mention here that the case bearing OA no. 620/2022 titled as Kaushik Kumar v/s State of Punjab & others" is pending before the Hon'ble National Green Tribunal, New Delhi matter is regarding storage and disposal of hazardous waste of category 18.2 (carbon slurry) in violation to the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. The matter was listed for hearing on 24.11.2023 & the Hon'ble Tribunal in its order has mentioned that leftover carbon slurry (category 18.2) amounting to approx. 53100 MT is stored in NFL, Bathinda for a very long period of time and has sought response of MoEF& CC and CPCB regarding Issuance of guidelines and monitoring mechanism for monitoring storage and disposal

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of such hazardous waste of carbon slurry by similar industry throughout India to be essential for just and proper adjudication of environmental questions involved in the case.

CPCB vide its letter no. CM-13011/189/2023-LAW-HO-CPCB-HO-7336 dated 13.12.2023 has requested the industry to provide following information:

1. Status of carbon slurry (hazardous waste) generated by the unit per annum.

2. Mode of disposal being carried out by the unit. Evidence of disposal of carbon slurry i.e. copy of hazardous waste disposal manifest-form-10 be provided.

3. In case, no carbon slurry is generated by the unit, it may be informed since which year carbon slurry is not being generated.

4. Quantity of carbon slurry (hazardous waste) that is yet to be disposed of by the unit may be informed.

The industry has stored huge quantity approx. 53100 MT of hazardous waste i.e. carbon slurry (category 18.2 of schedule of HOWM Rules, 2016) in its premises since long and has failed to get it lifted to an authorized recycler till date in violation to the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

In view of above, notice u/s 5 of Environment (Protection) Act, 1986 for violation of the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 has been issued to in industry along with an opportunity of personal hearing before the Hon'ble Chairman of the Board on 27.12.2023.

During hearing, the DGM of the industry submitted written reply to the notice issued to it, which has been taken on record. She further stated that:

1. Commercial production at the Unit of NFL was declared on 01.10.1979. The NFL Unit was using Fuel Oil ("FO") / Low Sulphur Heavy Stock ("LSHS") as feedstock for production of Ammonia from 1979 up until 2013. In an endeavour to keep in pace with clean technology, NFL was restructured in November, 2012. The feedstock was replaced from LSHS to Natural Gas. As a result, there has been no generation of

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carbon slurry at the NFL Unit since 2012 and the leftover carbon slurry was stored in the designated carbon slurry ponds after following all the rules, regulations, guidelines and taking all necessary precautions.

2. After the notification of the Hazardous Waste (Management and Transboundary Movement) Rules 2016 on 04.04.2016, carbon residues production of nitrogenous and complex fertilizers was categorized as "hazardous waste" under Category 18.2 of Schedule 1 of the said Rules.

3. From 2016 to 2019, NFL appointed Metal Scrap Trade Corporation Limited - a public sector undertaking under the Ministry of Steel, Government of India (here in after referred to as "MSTC for the disposal of carbon slurry through tendering process Carbo Chemical Industries was selected by MSTC as the H1 Bidder. The quantity of 9,305,94 MT of carbon slurry was lifted by Carbo Chemical Industries vide Sale Order No 288, dated 06.03.2017

4. From 2019 onwards, MSTC issued notice inviting tender (NIT) on behalf of NFL on 11.11.2019, 30.12.2019 & 09.01.2020 for lifting of 39600 MT of carbon slurry. However, the H1 bidder was quoting extremely low prices against the reserved price as such the e-auction was re-conduced on 09.12.2020, but again the highest bid received was much lower than the reserved price, resulting in negotiations and revised bid was approved on 09.04.2021, wherein M/s Shubham Sales Corporation Ltd., Rohtak was finalized for lifting of the carbon slurry. Sale order was issued as per which M/s Shubham Sales were bound to complete the lifting by 16.04.2023, however the said firm could not complete the lifting in the stipulated timeline and also failed to deposit due instalments to NFL.

5. Fresh proposal was received from Shubham sales; new sale order was thereafter executed and accordingly M/s Shubham Sales was allowed to lift the carbon slurry (category 18.2). Sale Order no. NFB: ST/D/2022-23/393 dated 21.06.2022 for lifting of the entire quantity (39600 MT) of Carbon slurry was issued to M/s Shubham Sales, Rohtak, wherein the firm is bound to lift the entire quantity by 30.09.2024. The job of lifting is in progress and as on 25th December 2023, 38080 MT Carbon Slurry is lying in the Ponds.

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Order to NFL by PPCB

After hearing the representatives of the industry and the officers of the Board, the Chairman of the Board decided that: -

1. The industry shall also ensure to dispose of its entire hazardous waste of category 18.2 at the earliest possible shortest time by exploring all means available in compliance to the hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and shall submit monthly report in the matter to the Regional Office, Bathinda of the Board.
2. The industry shall install 2 no. piezometers in upward direction of the existing carbon slurry ponds (as measurement of the background level of pollutants in groundwater) and minimum 4 no. piezometers around the carbon slurry ponds in consultation with the Environmental Engineer, Regional Office, Bathinda to monitor the groundwater of the area.
3. The industry shall engage Technical Institute of good repute or Charted institute approved by the Board to carry out the study: -

i. Regarding environmental damage (if any) caused due to the storage of carbon slurry of category 18.2 of schedule-I of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for such a long period.

ii. And, if any Environmental damage has been caused in the area, then the remedial measures for the compensation of environmental damage (if any) as well as utilization of the ponds which when are emptied after the complete lifting of carbon slurry.

iii. The report on the matter shall be submitted to the Board, within 15 days and the industry shall bear the entire cost of the study/report in the matter.

4. Environmental Engineer Regional Office, Bathinda shall visit the industry after every 15 days period and shall check the compliance of HOWM Rules, 2016 and verify the compliance of the decisions of the hearing as above and shall submit his progress report on weekly basis to Zonal Office Bathinda.
5. It is made clear to the industry that in case, industry found violating the provisions of HOWM Rules, 2016 as well as the decisions of above hearing, further action against the industry shall be taken under the provision of HOWM Rules, 2016 without any further notice.

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In view of the orders, the NFL engaged Empanelled Charted Engineer Institute, Maharaja Ranjit Singh Punjab Technical University, Bathinda to assess the

i. environmental damage (if any) caused due to the storage of carbon slurry of category 18.2 of schedule-I of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for such a long period.

ii. And, if any Environmental damage has been caused in the area, then the remedial measures for the compensation of environmental damage (if any) as well as utilization of the ponds which when are emptied after the complete lifting of carbon slurry.

The study on behalf of Empanelled Charted Engineer Institute, Maharaja Ranjit Singh Punjab Technical University, Bathinda has been jointly carried by Prof. Manjeet Bansal, Dept. of Civil Engineering, Maharaja Ranjit Singh Punjab Technical University, Bathinda and Dr. Sunil Mittal, Department of Environment Science and Technology, Central University of Punjab, V.P.O. Ghudda, district Bathinda.

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CHAPTER - 3

Objectives of the report

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3.1. Objectives of the report

In order to comply the following orders of the Punjab Pollution Control Board,

- To assess the extent of environmental damage caused by the prolonged storage of carbon slurry of category 18.2 under Schedule-I of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- Conduct comprehensive Groundwater (from piezometers and wells) quality tests in and around the NFL area. Evaluate the levels of contaminants such as heavy metals and organic pollutants to understand the environmental impact.

the study was made broadly with following objectives:

1. To analyse the various contaminants as per category 18.2 under Schedule-I of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, in the **carbon slurry** (now present as dry carbon material).
2. To study the leaching behaviour of the contaminants present (if any) in the dry carbon material using Toxicity Characteristic Leaching Procedure (TCLP).
3. To analyse groundwater samples from *Piezometers* around the carbon slurry storage ponds for contaminants/pollutants present beyond permissible limits in TCLP extract.
4. To analyse groundwater samples in and around NFL, Bathinda, for contaminants/pollutants present beyond permissible limits in TCLP extract.
5. To assess the extent of environmental damage caused by the prolonged storage of carbon slurry of category 18.2 under Schedule-I of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

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CHAPTER - 4

Methodology

4.1. Methodology

- The Consent to Operate Certificate Number under Water Act, 1974 for NFL Bathinda is CTOW/Varied/BTI/2023/20481197 is having Carbon slurry falls under hazardous waste category 18.2 of Schedule – 1, List of Hazardous Wastes.
- Keeping this in view the tests are done for the carbon slurry samples in regards to hazardous waste (management and transboundary movement) rules, 2016 at Chandigarh Pollution Testing Laboratory, Mohali (An NABL accredited laboratory).
- Since the primary waste is carbon slurry (now in dried form) from which the metals can leach to soil and water, thus we analyzed carbon samples for presence of various contaminants as per the hazardous waste category.
- Carbon is the only source that can cause leaching and lead to contaminated groundwater Class A (Schedule – II) Based on leachable concentration limits (Toxicity Characteristic Leaching Procedure - TCLP), the analysis was done.
- Samples of groundwater were collected from the 9 piezometers present around the carbon ponds and some samples were collected from outside the NFL plant.
- The sampling and analysis were done by Chandigarh pollution testing laboratory in our presence.
- To cross check the relevance of the results provided by the Chandigarh pollution testing laboratory we have analyzed some of the sample in our own laboratories and also compared these with available literature.
- Standard sampling and analysis methods were used.

4.1.1. Carbon slurry Sampling

The carbon slurry ponds are situated near the NFL plant, which was named 1, 2, and 6A. The samples were collected in Ziplock bags. The sampling was done in a pond twice for each pond, each point lying in the opposite corners of the carbon slurry ponds. Ashovel was used to dig a hole in the carbon slurry ponds till 7 to 10 cm and then the carbon slurry samples were collected in the polybags and they were taken to the laboratory. The images of sampling and carbon pond condition can be seen in Figure 2 and 3. Details of the carbon slurry sampling along with dates of sampling, location etc. are enlisted in Table 2.

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4.1.1.1. Physical Appearance of Carbon Slurry Ponds

It has been observed that the condition of carbon slurry ponds is satisfactory. These are lined by HDPE Liner, layer of Brick floor followed by compacted clay layer.

Fig 2: Sampling of Carbon Slurry

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Fig 3: Carbon Slurry Ponds inside NFL

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Table 2: Samples details for Carbon Slurry Samples

S. No	Sample ID	Sample ID	Date of Sampling	Latitude	Longitude
1	Carbon Slurry Pond 1	Sample 1	27/04/2024	30.254221°N	74.920365°E
		Sample 2	27/04/2024	30.254520°N	74.919648°E
2	Carbon Slurry Pond 2	Sample 1	27/04/2024	30.254985°N	74.921593°E
		Sample 2	27/04/2024	30.254270°N	74.920897°E
3	Carbon Slurry Pond 6A	Sample 1	27/04/2024	30.253053°N	74.923558°E
		Sample 2	27/04/2024	30.251677°N	74.923755°E

4.1.1.2. Carbon Slurry Quality Assessment

From the three carbon slurry ponds, six samples were collected, two from each. Those six samples were dried in oven at 101°C for one hour. Then oven dried samples were digested using reverse aqua regia technique (HNO_3: HCl that is 6:2). Using a syringe filter of 0.42 µm, the digested samples were filtered out. The filtrate was made up to 10 ml using 1% HNO_3 and the samples were analyzed in AAS/MP-AES. Different instruments and Techniques used for analysis of Carbon slurry are as follows in Table 3:

Table 3: Methods and Techniques used for analysis of different elements or compounds in Carbon slurry Samples

S. No.	TEST PARAMETER	Method/Technique	Instrument Detection Limit (PPb)
Class A (Schedule – II) Based on leachable concentration limits (Toxicity Characteristic Leaching Procedure - TCLP)			
1	Arsenic	AAS/MPAES	<10
2	Barium	AAS/MPAES	<10
3	Cadmium	AAS/MPAES	<10
4	Total Chromium	AAS/MPAES	<10
5	Lead	AAS/MPAES	<10
6	Manganese	AAS/MPAES	<10
7	Mercury	AAS/MPAES	<10
8	Selenium	AAS/MPAES	<10
9	Silver	AAS/MPAES	<10
10	Antimony	AAS/MPAES	<10
11	Beryllium	AAS/MPAES	<10
12	Chromium (VI)	AAS/MPAES	<10
13	Cobalt	AAS/MPAES	<10
14	Copper	AAS/MPAES	<10

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15	Molybdenum	AAS/MPAES	<10
16	Nickel	AAS/MPAES	<10
17	Zinc	AAS/MPAES	<10
18	Thallium	AAS/MPAES	<10
19	Vanadium	AAS/MPAES	<10
20	2,4,5-Trichlorophenol	AAS/MPAES	<10
21	Ammonia	APHA 4500 NH3(C)/TKN	<10
22	Cyanide	APHA 4500 CN-(E)	<10
23	Nitrate (as Nitrate Nitrogen)	IS:3025 (P-34) 1988 RA 1014	<10
24	Sulphide (as H_2S)	APHA 4500 S^2 (D)	<10
25	Fluoride	APHA 4500 F (D)	<10
26	1,1-Dichloroethylene	GC-MS	5
27	1,2-Dichloroethane	GC-MS	5
28	1,4-Dichlorobenzene	GC-MS	5
29	2,4-Dinitrotoluene	GC MS	5
30	Benzene	GC	5
31	Benzo (a) Pyrene	GC MS	5
32	Bromodichloromethane	GC-MS	5
33	Bromoform	GC-MS	5
34	Carbon Tetrachloride	GC-MS	5
35	Chloroform	GC-MS	5
36	Dibromochloromethane	GC-MS	5
37	Hexachlorobenzene	GC-MS	5
38	Hexachlorobutadiene	GC-MS	5
39	Hexachloroethane	GC-MS	5
40	Methyl ethyl Ketone	GC-MS	5
41	2,4,6-Trichlorophenol	GC MS	5
42	Nitrobenzene	GC-MS	5
43	Naphthalene	GC-MS	5
44	Pyridene	GC-MS	5
45	Tetrachloroethylene	GC-MS	5
46	Trichloroethylene	GC-MS	5
47	Vinyl Chloride	GC-MS	5
48	Alachlor	GC-MS	5
49	Alpha HCH	GC-MS	5
50	Beta HCH	GC-MS	5
51	Delta HCH	GC-MS	5
52	Butachlor	6L-MS	5
53	Chlordane	GC-MS	5
54	Chlorpyriphos	GC-MS	5
55	Atrazine	GC-MS	5
56	Endosulphan (alpha+beta+sulphate)	GC-MS	5

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57	Endrin	GC-MS	5
58	Ethion	GC-MS	5
59	Heptachlor (& its Epoxide)	GC	5
60	Isoproturon	HPLC	5
61	Chlorobenzene	GC-MS	5
62	Lindane	GC-MS	5
63	Malathion	GC-MS	5
64	Methoxychlor	GC-MS	5
65	Methyl parathion	GC-MS	5
66	Monocrotophos	GC-MS	5
67	Phorate	GC-MS	5
68	Aldrin	GC-MS	5
69	Dichlorodiphenyltrichloroethane	GC-MS	5
70	Dieldrin	GC-MS	5
71	Polychlorinated biphenyls	GC-MS	5
72	Cresol (ortho+meta+para)	GC-MS	5
73	Pentachlorophenol	GC-MS	5
74	2,4,5-TP (Silvex)	GC-MS	5
75	Toxaphene	GC-MS	5
76	Kepone	GC-MS	5
77	Mirex	GC-MS	5
78	Dioxin (2,3,7,8-TCDD)	GC-MS	5

Class - B (Schedule - II) Based Total Threshold Limit Concentration (TTLC)		
1	Total Petroleum Hydrocarbon	
a.	n-Pentane (C5)	GC-MS
b.	n-Hexane (C6)	GC-MS
c.	Toluene (C7)	GC-MS
d.	Ethylbenzene (C8)	GC-MS
e.	Xylene (C8)	GC-MS

Class – C (Schedule - II) Based on Hazardous Characteristics	
1	Flammability
2	Corrosivity
3	Reactivity or Explosive
4	Toxicity

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4.1.2. Toxicity Characteristic Leaching Procedure (TCLP)

This method, based on USEPA Method 1311-Toxicity Characteristics Leaching Procedure (TCLP), is applicable to the determination of the mobility of metals and semi-volatile organic compounds in solids. If a total analysis of a solid demonstrates that an analyte of interest is not detected or is present in such low concentrations that regulatory leachate limits cannot be exceeded, then it is unnecessary to carry out this leaching test. The leaching procedure consists of Crushing/grinding of sample (to be passed through a 9.5-mm sieve) followed by extraction of the leachate at different pH in TCLP extractor and finally analysis of the sample for all parameters as applicable for specific category.

In present case, the carbon sample was extracted (20:1 liquid to solid ratio) by shaking it end over end for 18 ± 2 hours at a controlled temperature. The extract also known as the leachate is then filtered and analyzed for the analyte of interest following the standard method as detailed in Table 3.

4.1.3. Groundwater sampling and analysis

A total of 16 samples were collected of groundwater in the pre-monsoon period in the month of April 2024. The groundwater samples were taken from the piezometer, hand pump, and bore well with a depth range from 45 ft to 200 ft. Approximately 50% of the groundwater sample was taken from piezometers and 50% from the hand pump and bore well of the vicinity of NFL as shown in Figure 4 and 6. The distance of carbon ponds from piezometers and sampling points can be seen in Figure 5 and 7. Water samples were collected after water flushing for 3–5 min. The samples were collected in PET bottles (1L), pre-cleaned with 10% (v/v) nitric acid (HNO_3) for 24 h, and further rinsed with deionized water. The samples collected for trace elemental analysis were acidified with conc. HNO_3 (pH<2) to avoid adsorption on the walls of the sampling bottle. All samples were shifted to the laboratory and stored at 4 °C until used for further analysis.

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Table 4: Detail of sampling from the Piezometers

S. No	Sample ID	Date of Sampling	Latitude	Longitude
1	Piezometer 1 (Inside)	06/04/2024	30.252208	74.91369
2	Piezometer 2 (Inside)	06/04/2024	30.252217	74.914952
3	Piezometer 3 (Inside)	06/04/2024	30.252168	74.915026
4	Piezometer 4 (Inside)	06/04/2024	30.246267	74.915945
5	Piezometer 5 (Inside)	06/04/2024	30.240033	74.921626
6	Piezometer-1 (Outside)	06/04/2024	30.240026	74.921818
7	Piezometer 2 (Outside)	06/04/2024	30.248475	74.913752
8	Piezometer 3 (Outside)	06/04/2024	30.245124	74.913048
9	Piezometer 4 (Outside)	06/04/2024	30.258345	74.931253

Table 5: Detail of *sampling from the* NFL surroundings

S.No	Sample ID	Date of Sampling	Latitude	Longitude
1	Petrol Pump	27/04/2024	30.2575	74.9344
2	Railway Gate, Siviyan Gill Patti	27/04/2024	30.2609	74.9235
3	Siviyan Village House	27/04/2024	30.2621	74.907
4	Bathinda-Siviyan Road	27/04/2024	30.2533	74.904
5	Kothe Bhore Wale, Siviyan	27/04/2024	30.2459	74.8968
6	Near Thermal Plant Bathinda Road	27/04/2024	30.2368	74.9236
7	Rehab Center	27/04/2024	30.2415	74.9342
8	Thermal Power Plant (Boundary)	27/04/2024	30.2362	74.9076

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Fig 4: Groundwater Sampling from Piezometers in NFL

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Fig 5: Distance of Sampling Points from Piezometers

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Fig 6: Groundwater Sampling from area around NFL

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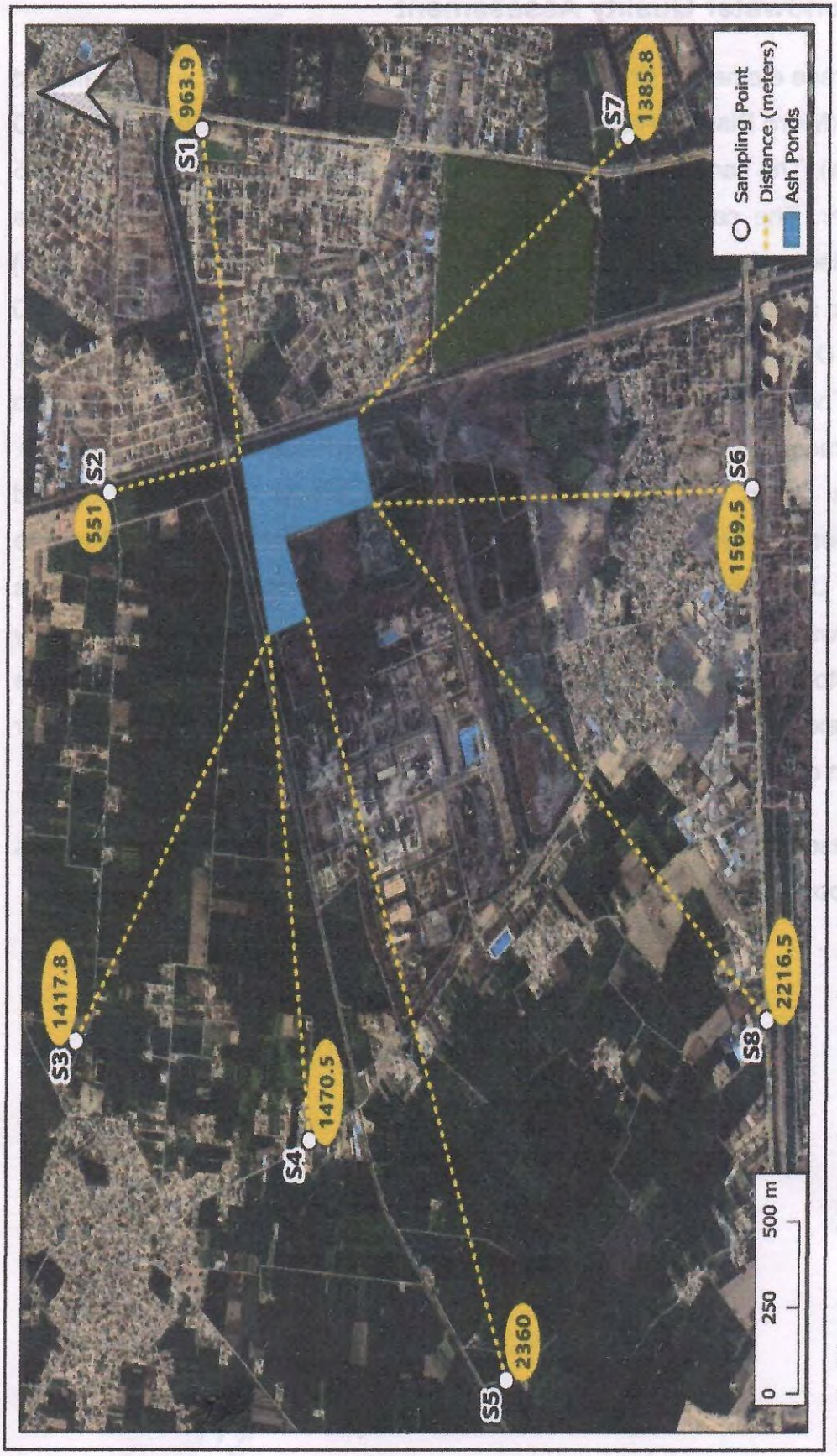

Fig 7: Distance of Sampling points from Carbon Slurry Ponds

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4.1.3.1. Groundwater Quality Assessment

Heavy metals/trace elements (Cr, Fe, Cu, Zn, As, Se, Cd, Pb, and U) were quantified using MP-AES (Micro Plasma Atomic Emission Spectrophotometer) analysis by STD (Standard Mode). The samples were filtered before analysis of MP-AES using a 0.45 µm syringe filter. The calibration curve was prepared by successive dilution of a reference standard solution (ICP multi-element standard; Lobachemie UN NO-3264) in 2% (v/v) nitric acid. Further, the concentration of U was cross-checked using LED (Light-Emitting Diode) fluorometer LF-2a (Quantalase Enterprises Private Limited, Indore, India). The LED-based uranium analyzer is a compact analytical instrument to measure U in trace and ultra-trace levels (µg/L) in an aqueous environment sample. The method is based on the luminescence of the uranyl ion in solution and fluorescence measurement technique. The measurement principle is based on the fluorescence of U complexes in the aqueous sample. The excitation of U complexes from a suitable wavelength (405 nm) emits green fluorescence, which is measured by a sensitive Photomultiplier tube (PMT). The fluorescence yield is proportional to the intensity of the excitation source and the concentration of U in the sample. The upper limit of detection of U is 1 mg/L, and the lower limit of detection is 0.2.

The methods used for the analysis of Groundwater quality are same as analysis methods of carbon slurry given in the Table 3.

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CHAPTER - 5

Results and discussion

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In the present case, the origion of the problem is carbon slurry (now in dried form) stored in the ponds. As per **Hazardous and other wastes (Management and Transboundary Movement) rules, 2016, it has been categorized under category 18.2 of rules**. Hence, it was very essential to study the process of carbon formation and history of this to understand the sources of contaminants that may be available in the stored carbon. Below is a brief of the carbon formation process and history of production at NFL, Bathinda.

1. National Fertilizers Limited (NFL) in Bathinda commenced its commercial production in 1979, utilizing Fuel Oil (FO) and Low Sulphur Heavy Stock (LSHS) as feedstock for urea production until November 2012. The plant operated using the Shell Gasification process, which involved the partial oxidation of Fuel Oil with oxygen and steam at a pressure of 55 kg/cm² and a temperature of 1350 ℃. This process, although efficient, was energy-intensive and led to the inevitable thermal cracking of the Fuel Oil, generating carbon as a byproduct.
2. To manage this by product, the raw gas underwent a water treatment to remove the carbon, which was then collected in a Carbon Separator as a carbon slurry— a mixture of carbon and water. According to the plant's design, approximately 80% of this carbon was recycled back into the process as carbon oil via the carbon recovery unit. The remaining carbon slurry was directed to carbon slurry ponds for disposal.
3. Initially, this carbon slurry was marketed as an industrial product. Various industries, including ink and paint manufacturers and companies involved in re-treading tires, purchased the carbon slurry through third-party distributors. This approach not only helped NFL manage waste but also provided a useful raw material for other industrial processes.
4. Introduction of Natural Gas as a feedstock after 2012 - In an effort to enhance environmental sustainability and transition to cleaner fuels, the Bathinda Unit underwent a significant revamp in March 2013. Since then, Natural Gas (NG) has been used as the feedstock for urea production. This shift has led to a notable reduction in specific energy consumption for urea production and a significantly lower carbon footprint.
5. Before this change, the plant used Fuel Oil, which resulted in the generation of carbon slurry as a byproduct. However, since the switch to Natural Gas, the

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generation of carbon slurry has ceased entirely. The last batch of carbon slurry was produced in November 2012, and the existing stocks of this material have remained in the ponds since then. As of today, no new carbon slurry is being generated at the Bathinda Unit. This transition has marked a significant step towards more environmentally friendly production processes and a commitment to reducing the plant's impact on the environment.

6. By understanding this process, it can be concluded that there may be little possibility of the presence of organic biodegradables present in the carbon as the oil was burnt at very high temperature of 1350 °C. The only possibility is presence of inorganics which may be present in oil used or the metals like iron, nickel, copper, Zinc etc., which may come from the wear and tear (rusting) of the pipelines carrying this slurry.
7. **The Hazardous and other wastes (Management and Transboundary Movement) rules, 2016 provides no permissible limits for carbon slurry. However, it was tested because it is the ultimate source from where the contaminant can leach. Hence the carbon material present at the site was tested as per category 18.2 of rules.** Further, Toxicity Characteristic Leaching Procedure was carried to find the leaching potential of the components/contaminants (if any) present in carbon material.

5.1. Heavy metals and other harmful compounds in carbon samples

Two samples were taken from each of the three Carbon slurry Ponds. The sample were analyzed to examine the concentration of possible element based on which the sample is further analyzed for TCLP test. The results for Carbon slurry samples were acquired using high-end instruments like Microwave Plasma Atomic Emission Spectrometry (MP-AES), and Atomic Absorption Spectrometry (AAS). The elemental analysis of carbon slurry samples has been done, and the results are shown in Table 6. All the metals in carbon slurry were found BDL except total chromium (range: 3.5 – 5.9 mg/kg; world background value in soil: 59.9 mg/kg), lead (range: 1.8 – 3.1 mg/kg; world background value in soil: 27 mg/kg), cobalt (range: 23 – 33 mg/kg; world background value in soil: 14 mg/kg), and copper (range: 31 – 38 mg/kg; world background value in soil: 38.9 mg/kg), nickel (range: 318 – 571 mg/kg; world background value in soil: 29 mg/kg), and zinc (range: 12 – 24 mg/kg; world

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background value in soil: 70 mg/kg). All the metals present in the carbon slurry were below the soil world background value except the cobalt, nickel and zinc. Nitrate (range: 6.3 – 11 mg/kg), sulphide (range: 0.9 – 1.9 mg/kg), and fluoride (range: 1.7 – 5.5 mg/kg). And all the organic and other harmful compounds were found BDL. The original result was attached in the last of this document as annexure 1.

There was a need for Class A (Schedule – II) Based on leachable concentration limits (Toxicity Characteristic Leaching Procedure - TCLP) of Nickel and Copper in carbon slurry Samples. The results of the TCLP test are shown in Tables 7, 8, and 9.

Table 6: Heavy Metals and other compounds in Carbon slurry Samples from NFL

S. No.	TEST PARAMETER	UNIT	CARBON SLURRY POND 1		CARBON SLURRY POND 2		CARBON SLURRY POND 6A	
			Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
1	Arsenic	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
2	Barium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
3	Cadmium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
4	Total Chromium	mg/kg	5.9	5.1	4.8	5.0	3.52	4
5	Lead	mg/kg	2.4	3.1	2.3	2.7	1.8	2.1
6	Manganese	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
7	Mercury	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
8	Selenium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
9	Silver	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
10	Antimony	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
11	Beryllium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
12	Chromium (VI)	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
13	Cobalt	mg/kg	33	35	23	26	28	24
14	Copper	mg/kg	31	33.4	38	35.9	34	31.3
15	Molybdenum	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
16	Nickel	mg/kg	564	571	318	325	410	418
17	Zinc	mg/kg	24	21	16	18	12	14
18	Thallium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
19	Vanadium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
20	2,4,5-Trichlorophenol	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL

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21	Ammonia	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
22	Cyanide	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL
23	Nitrate (as Nitrate Nitrogen)	mg/kg	11	8.5	9.2	6.3	10.2	6.6
24	Sulphide (as H_2S)	mg/kg	1.6	1.9	1.2	1.4	0.9	1.7
25	Fluoride	mg/kg	2.2	5.5	5.3	2.4	1.7	2.0
26	1,1-Dichloroethylene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
27	1,2-Dichloroethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
28	1,4-Dichlorobenzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
29	2,4-Dinitrotoluene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
30	Benzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
31	Benzo (a) Pyrene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
32	Bromodichloromethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
33	Bromoform	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
34	Carbon Tetrachloride	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
35	Chloroform	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
36	Dibromochloromethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
37	Hexachlorobenzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
38	Hexachlorobutadiene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
39	Hexachloroethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
40	Methyl ethyl Ketone	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
41	2,4,6-Trichlorophenol	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
42	Nitrobenzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
43	Naphthalene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
44	Pyridene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
45	Tetrachloroethylene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
46	Trichloroethylene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
47	Vinyl Chloride	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
48	2,4-Dichlorophenoxyacetic acid	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
49	Alachlor	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
50	Alpha HCH	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
51	Beta HCH	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
52	Delta HCH	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL

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53	Butachlor	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
54	Chlordane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
55	Chlorpyriphos	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
56	Atrazine	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
57	Endosulphan (alpha+beta+sulphate)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
58	Endrin	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
59	Ethion	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
60	Heptachlor (& its Epoxide)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
61	Isoproturon	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
62	Chlorobenzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
63	Lindane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
64	Malathion	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
65	Methoxychlor	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
66	Methyl parathion	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
67	Monocrotophos	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
68	Phorate	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
69	Aldrin	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
70	Dichlorodiphenyltrichloroethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
71	Dieldrin	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
72	Polychlorinated biphenyls	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
73	Cresol (ortho+meta+para)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
74	Pentachlorophenol	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
75	2,4,5-TP (Silvex)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
76	Toxaphene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
77	Kepone	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
78	Mirex	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL
79	Dioxin (2,3,7,8-TCDD)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL

Class - B (Schedule - II) Based Total Threshold Limit Concentration (TTLC)

	Total Petroleum Hydrocarbon			
Test Parameter	Carbon Slurry Pond 1	Carbon Slurry Pond 2	Carbon Slurry Pond 6A	Methods

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		Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	
a.	n-Pentane (C5)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS
b.	n-Hexane (C6)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS
c.	Toluene (C7)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS
d.	Ethylbenzene (C8)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS
e.	Xylene (C8)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS

Class – C (Schedule - II) Based on Hazardous Characteristics		
1	Flammability	**Non-Flammable**
2	Corrosivity	**Non-Corrosive**
3	Reactivity or Explosive	**Non-Reactive and Non-Explosive**
4	Toxicity	**Non-Toxic**

5.2. Result of TCLP test of carbon samples

Following Class A (Schedule – II) Based on leachable concentration limits (Toxicity Characteristic Leaching Procedure - TCLP) - the particular samples were collected from the carbon slurry pond of NFL Bathinda from the elemental analysis, we can clearly see that the concentration of nickel and copper is significant in the ash samples. Thus, the TCLP test was required; the results found are shown in the tables below.

Table 7: Leachate test for carbon slurry samples from Carbon slurry Pond 1

pH	Metal	Result of Leachability concentration (mg/L)	Threshold concentration as per HWM rules (mg/L)	Inference
5.5	Nickel	16.2	20	
1.9	Nickel	18.5	20	
5.5	Copper	5.2	25	
1.9	Copper	8.8	25	
5.5	Chromium	BDL	5	Actual is less than the threshold value
1.9	Chromium	BDL	5	
5.5	Cobalt	BDL	80	
1.9	Cobalt	BDL	80	
5.5	Zinc	BDL	250	
1.9	Zinc	BDL	250	
5.5	Cadmium	BDL	1	
1.9	Cadmium	BDL	1	

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Table 8: Leachate test for carbon slurry samples from Carbon slurry Pond 2

pH	Metal	Result of Leachability concentration (mg/L)	Threshold concentration as per HWM rules (mg/L)	Inference
5.5	Nickel	12.7	20	Actual is less than the threshold value
1.9	Nickel	15.9	20	
5.5	Copper	3.6	25	
1.9	Copper	5.2	25	
5.5	Chromium	BDL	5	
1.9	Chromium	BDL	5	
5.5	Cobalt	BDL	80	
1.9	Cobalt	BDL	80	
5.5	Zinc	BDL	250	
1.9	Zinc	BDL	250	
5.5	Cadmium	BDL	1	
1.9	Cadmium	BDL	1	

Table 9: Leachate test for carbon slurry samples from Carbon slurry Pond 6A

pH	Metal	Result of Leachability concentration (mg/L)	Threshold concentration as per HWM rules (mg/L)	Inference
5.5	Nickel	7.2	20	Actual is less than the threshold value
1.9	Nickel	12.5	20	
5.5	Copper	BDL	25	
1.9	Copper	BDL	25	
5.5	Chromium	BDL	5	
1.9	Chromium	BDL	5	
5.5	Cobalt	BDL	80	
1.9	Cobalt	BDL	80	

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5.5	Zinc	BDL	250	
1.9	Zinc	BDL	250	
5.5	Cadmium	BDL	1	
1.9	Cadmium	BDL	1	

Key Findings of TCLP test for Carbon Slurry Samples

- A TCLP test has been conducted for the leachability of the heavy metal from the carbon slurry pond, and the leaching ability of Nickel is in substantial amounts for pH 5.5 and 1.9 is 16.2 and 18.5 for carbon pond 1, 12.7 and 15.9 for carbon pond 2 and 7.2 and 12.5 for carbon pond 6A these values are under the threshold concentration i.e., 20 mg/L for both acidic (1.9 pH) and nearby neutral (5.5 pH) conditions.
- TCLP for copper is also significantly lower, ranging from 8.8 to 3.5 than the threshold limits, i.e., 25 mg/L.
- In all the carbon slurry ponds, leachability is under the threshold concentration for nickel and copper in both the acidic and neutral conditions.

5.3. Groundwater quality of the piezometers present inside and outside of NFL Bathinda

Piezometers are planted in different locations of the NFL, out of which five were inside, and four were outside of the NFL. American Public Health Association (APHA) guidelines for water testing were used for different groundwater metal and compound analysis procedures (e.g., ammonia and cyanide). The results acquired are shown in Table 10. The pH of groundwater in the piezometers of in and around NFL was ranged from 7.5 to 8.3 that showed the water is slightly alkaline in nature. Total dissolved solids were ranged from 233 to 296 mg/L. According to the BIS, 2012, groundwater with TDS <500 mg/L and pH (6.5 to 8.5) are drinkable Table 10. In this study all the samples pH and TDS found under the limit set by BIS, 2012. Bicarbonate and chloride were ranged from 52 to 60 mg/L (drinking water permissible limit: 200 mg/L: BIS, 2012) and 0.6 to 25.6 mg/L (respectively drinking water permissible limit: 250 mg/L: BIS, 2012). All the heavy metal concentration was observed BDL except the cadmium (range: 0.23 to 1.31 µg/L), chromium (range: 0.2 to 7.8 µg/L), lead (range: 5 to 9.7 µg/L), and cobalt (range: 0.7 to 9.8 µg/L). Results of organic pollutants were also found BDL in all the samples Table 10. Original report from laboratory was attached in last of this report as annexure 2. It can be concluded that groundwater in and around NFL was not contaminated due to carbon slurry.

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Table 10: Groundwater quality of different piezometers inside and outside of the NFL

S.No.	Test Parameters	Units	PZ 1(IN)	PZ 2(IN)	PZ 3(IN)	PZ 4(IN)	PZ 5(IN)	PZ 1 OUT	PZ 2 OUT	PZ 3 OUT	PZ 4 OUT	Permissible limit (BIS, 2012)
1	pH	-	7.8	8	8.2	8.3	8.1	8	8.1	8.05	7.5	6.5-8.5
2	EC	µS/cm	417	333	340	340	336	341	327	338	372	-
3	TDS	mg/L	296	228	241	241	239	241	233	240	265	500
4	Salinity	mg/L	168	128	137	169	136	136	135	137	150	-
S.No	**Test Parameters**	**Units**	**PZ 1(IN)**	**PZ 2(IN)**	**PZ 3(IN)**	**PZ 4(IN)**	**PZ 5(IN)**	**PZ 1 OUT**	**PZ 2 OUT**	**PZ 3 OUT**	**PZ 4 OUT**	**Permissible limit (BIS, 2012)**
1	Arsenic	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01mg/L
2	Barium	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	No Relaxation
3	Cadmium	µg/L	0.23	0.245	1.31	1.12	0.3	0.45	0.8	0.5	0.6	3 µg/L
4	Total chromium	µg/L	0.8	0.6	0.22	0.47	7.87	1.14	0.6	0.3	0.56	50 µg/L
5	Lead	µg/L	5	6	5.9	4.8	8	8	9.7	7.2	7.3	10 µg/L
6	Manganese	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/L
7	Mercury	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.001mg/L
8	Selenium	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01mg/L
9	Silver	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mgL
10	Antimony	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
11	Beryllium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
12	Chromium (VI)	mg/L	-	-	-	-	-	-	-	-	-	0.05mg/L
13	Cobalt	µg/L	0.79	0.72	2.981	9.88	0.88	1.4	1.6	1.3	1.4	-

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14	Copper	µg/L	15.2	17.2	15.8	21.4	29.4	25.7	27.2	23.9	28.7	50 µg/L
15	Molybdenum	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.07mg/L
16	Nickel	µg/L	0.99	0.95	0.82	0.48	1.588	0.943	0.95	1.8	0.6	20 µg/L
17	Zinc	µg/L	35.5	29.5	24.9	24	45.6	32.72	28	35	43.22	5000 µg/L
18	Thallium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
19	Vanadium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
20	2,4,5-Trichlorophenol	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
21	Ammonia	mg/L	BDL	BDL	BDL	4.95	BDL	BDL	BDL	BDL	BDL	No Relaxation
22	Cyanide	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05mg/L
23	Nitrate (as Nitrate Nitrogen)	mg/L	8.6	7.6	8.82	6.3	7.44	4.6	5.06	2.11	3.64	45 mg/L
24	Sulphide (as H_2S)	mg/L	45.7	47.7	49.02	43.72	45.81	44.37	46.16	10.89	48.93	200 mg/L
25	Fluoride	mg/L	0.61	0.98	1.07	0.29	0.74	1.3	1.45	0.82	0.99	1 mg/L
26	1,1-Dichloroethylene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
27	1,2-Dichloroethane	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
28	1,4-Dichlorobenzene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
29	2,4-Dinitrotoluene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
30	Benzene	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
31	Benzo (a) Pyrene	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
32	Bromodichloromethane	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
33	Bromoform	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mgL
34	Carbon Tetrachloride	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
35	Chloroform	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2mg/l

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36	Dibromochloromethane	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/L
37	Hexachlorobenzene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
38	Hexachlorobutadiene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
39	Hexachloroethane	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
40	Methyl ethyl Ketone	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
41	2,4,6-Trichlorophenol	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
42	Nitrobenzene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
43	Naphthalene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
44	Pyridene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
45	Tetrachloroethylene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
46	Trichloroethylene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
47	Vinyl Chloride	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
48	2,4-Dichlorophenoxyacetic acid	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	30µg/l
49	Alachlor	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	20µg/l
50	Alpha HCH	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01µg/l
51	Beta HCH	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.04µg/l
52	Delta HCH	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.04µg/l
53	Butachlor	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	125µg/l
54	Chlordane	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
55	Chlorpyriphos	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	30µg/l
56	Atrazine	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l

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57	Endosulphan (alpha+beta+sulphate)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.4µg/l
58	Endrin	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
59	Ethion	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3µg/l
60	Heptachlor (& its Epoxide)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
61	Isoproturon	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9µg/l
62	Chlorobenzene	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
63	Lindane	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l
64	Malathion	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	190µg/l
65	Methoxychlor	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
66	Methyl parathion	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.3µg/l
67	Monocrotophos	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1µg/l
68	Phorate	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l
69	Aldrin	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03µg/l
70	Dichlorodiphenyltrichloroethane	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
71	Dieldrin	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03µg/l
72	Polychlorinated biphenyls	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0005mg/L
73	Cresol (ortho+meta+para)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
74	Pentachlorophenol	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
75	2,4,5-TP (Silvex)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-

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76	Toxaphene	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
77	Kepone	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
78	Mirex	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
79	Dioxin (2,3,7,8-TCDD)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
80	Iron (Fe)	µg/L	75	71	69.89	49.6	72	237	96.6	94	55	300 µg/L
81	Bicarbonate	mg/L	52	50	55	52.5	52.5	55	55	55	60	-
82	Chloride	mg/L	25.62	21.62	22.05	15.71	23.65	0.669	20.6	3.66	22.48	250 mg/L

BDL – Below Detection Limit

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5.4. Groundwater quality nearby villages of NFL, Bathinda

The groundwater from the surrounding NFL was sampled, and seven random samples were taken from different areas in all four directions. The results were compared with the drinking water limits provided by the Bureau of Indian Standards (2012). The results are presented in Table 11.

The pH of groundwater around NFL was ranged from 7.2 to 8.4 that showed the water is slightly alkaline in nature Table 11. Bicarbonate and chloride were ranged from 95 to 485 mg/L and 24 to 194 mg/L respectively Table 11. All the heavy metal concentration was observed BDL except the chromium (range: BDL to 8.6 µg/L), lead (range: 1 to 8.6 µg/L), copper (range: 1.6 to 17.4 µg/L), nickel (range: 0.6 to 1.3 µg/L), zinc (range: BDL to 13.1 µg/L) and iron (range: 1.5 to 77 µg/L) Table 11. Results of organic pollutants were also found BDL in all the samples. It can be concluded that groundwater in and around NFL was not contaminated due to carbon slurry. Original result was attached as annexure 3 in last of this report.

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Table 11: Groundwater Quality in the nearby villages of NFL

S.No.	Test Parameters	Units	Petrol pump (S1)	Railway gate (Sibiyan Gill Patti) (S2)	Siviyan village house (S3)	Bathinda Siviyan Road(S4)	Kothe Bhore Wale Siviyan (S5)	Rehab centre (S6)	Near Thermal Plant Road (S7)	Permissible limit (BIS, 2012)
1	Arsenic	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01mg/L
2	Barium	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	No Relaxation
3	Cadmium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 µg/L
4	Total Chromium	µg/L	1.1	0.32	0.69	BDL	4.9	8.6	BDL	50 µg/L
5	Lead	µg/L	1.2	1.15	1.82	8	1.2	8.6	1	10 µg/L
6	Manganese	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/L
7	Mercury	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.001 mg/L
8	Selenium	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01mg/L
9	Silver	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mgL
10	Antimony	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
11	Beryllium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
12	Chromium (VI)	mg/L	-	-	-	-	-	-	-	0.05mg/L
13	Cobalt	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
14	Copper	µg/L	1.61	6.7	2.4	29	2.3	17.4	4.6	50 µg/L
15	Molybdenum	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.07mg/L
16	Nickel	µg/L	0.6	1.03	0.78	1.1	0.6	1.3	1.1	20 µg/L
17	Zinc	µg/L	0.6	BDL	BDL	155	8.8	13.16	3.7	5000 µg/L
18	Thallium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-

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19	Vanadium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
20	2,4,5-Trichlorophenol	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
21	Ammonia	mg/L	0.00058	0.00084	0.00029	0.00037	0.00012	0.0006	BDL	0.001mg/L
22	Cyanide	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05mg/L
23	Nitrate (as Nitrate Nitrogen)	mg/L	28	13.4	1.9	0.4	-	0.35	2.04	45 mg/L
24	Sulphide (as H_2S)	mg/L	69.8	123.1	48.2	53.6	80.76	59.5	41.07	200 mg/L
25	Fluoride	mg/L	0.46	1.07	1.03	0.19	0.84	0.62	0.39	1 mg/L
26	1,1-Dichloroethylene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
27	1,2-Dichloroethane	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
28	1,4-Dichlorobenzene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
29	2,4-Dinitrotoluene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
30	Benzene	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
31	Benzo (a) Pyrene	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
32	Bromodichloromethane	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
33	Bromoform	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mgL
34	Carbon Tetrachloride	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
35	Chloroform	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2mg/l
36	Dibromochloromethane	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/L
37	Hexachlorobenzene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
38	Hexachlorobutadiene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
39	Hexachloroethane	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
40	Methyl ethyl Ketone	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
41	2,4,6-Trichlorophenol	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-

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42	Nitrobenzene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
43	Naphthalene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
44	Pyridene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
45	Tetrachloroethylene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
46	Trichloroethylene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
47	Vinyl Chloride	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
48	2,4-Dichlorophenoxyacetic acid	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	30µg/l
49	Alachlor	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	20µg/l
50	Alpha HCH	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01µg/l
51	Beta HCH	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.04µg/l
52	Delta HCH	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.04µg/l
53	Butachlor	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	125µg/l
54	Chlordane	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
55	Chlorpyriphos	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	30µg/l
56	Atrazine	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l
57	Endosulphan (alpha+beta+sulphate)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.4µg/l
58	Endrin	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
59	Ethion	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3µg/l
60	Heptachlor (& its Epoxide)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
61	Isoproturon	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9µg/l
62	Chlorobenzene	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
63	Lindane	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l

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Central University of Punjab
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V.P.O. Ghudda, Dist. Bathinda 151401

64	Malathion	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	190µg/l
65	Methoxychlor	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
66	Methyl parathion	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.3µg/l
67	Monocrotophos	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1µg/l
68	Phorate	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l
69	Aldrin	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03µg/l
70	Dichlorodiphenyltrichloroethane	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
71	Dieldrin	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03µg/l
72	Polychlorinated biphenyls	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0005mg/L
73	Cresol (ortho+meta+para)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
74	Pentachlorophenol	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
75	2,4,5-TP (Silvex)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
76	Toxaphene	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
77	Kepone	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
78	Mirex	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
79	Dioxin (2,3,7,8-TCDD)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
80	Iron	µg/L	1.5	2.1	1.9	35	2.4	77	8	300 µg/L
81	Bicarbonate	mg/L	410	200	95	425	470	260	485	-
82	Chloride	mg/L	152	57	24	148	179	74	194	250 mg/L

BDL – Below Detection Limit

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CHAPTER - 6

Conclusions

Maharaja Ranjit Singh Punjab Technical University
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6. Conclusions

As the report suggests, the overall leachability of all the elements mentioned in Class A (Schedule – II) TCLP in all carbon slurry ponds is within permissible limits under both acidic and neutral conditions. These findings confirm that the heavy metals in the carbon slurry pose no immediate risk of leaching into the environment, maintaining the safety and integrity of groundwater quality. The Class -C (Schedule - II) Based on the Hazardous Characteristics analysis of the carbon slurry from the NFL, critical findings regarding its properties have been revealed. The carbon slurry has been classified as non-reactive, non-explosive, non-corrosive, and non-toxic. These characteristics indicate that, under current conditions, the carbon slurry poses no immediate threat of hazardous reactions, explosions, corrosive damage, or toxicity to the environment and public health. The findings for groundwater quality of both piezometers and groundwater from areas around the NFL indicate that the water quality in the area is safe and meets all relevant environmental standards (BIS, 2012 - 10500).

In conclusion, the environmental assessment of the NFL reveals that the concentrations of elements in both carbon slurry and groundwater are currently within permissible limits. However, it is advised to remove carbon from the ponds as soon as possible. The overall study indicates that the industry's efforts in managing and monitoring environmental impact have been effective to date.

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Annexure – 1

TEST CERTIFICATE

Format No. CPTL/F7.8-1(W)

REPORT No. CPTL/2024/04/01, 02 & 03 (CS) **REPORTING DATE: 16-04-2024**

NAME OF INDUSTRY: **M/s. NATIONAL FERTILIZERS LIMITED,**
(A Govt. of India Undertaking)
BATHINDA UNIT: SIBIAN ROAD,
BATHINDA, PUNJAB-151003.

SAMPLE PARTICULARS

Date of Sample Collection	05.04.2024
Sample Received in Lab	06.04.2024
Type of Sample	Ash
Sampling Plan Ref. No.	NA
Sampling Method	NA
Environmental conditions	Normal
Point of Sample Collection	**1.Carbon Slurry POND 1 (Sample-1 & 2)** **2.Carbon Slurry POND 2 (Sample-1 & 2)** **3. Carbon Slurry POND (Sample-1 & 2)**
Quantity & Packaging	500 gm in poly bag
Sample Identification No.	CPTL/2024/04/01, 02 & 03 (ASH)
Analysis Duration	06.04.2024 to 16.04.2024
Sample Collected By	Navjot Singh & Team
Visual Observation	Black in color.

(Chemist In-Charge)
Date: 16/04/2024

Sital Singh (CEO)
Date: 16/04/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

END OF REPORT

Heavy Metals and other compounds in Carbon slurry Samples from NFL

S. No.	TEST PARAMETER	UNIT	CARBON SLURRY POND 1		CARBON SLURRY POND 2		CARBON SLURRY POND 6A		Test Method
			Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	APHA 24th edition
1	Arsenic	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
2	Barium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
3	Cadmium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
4	Total Chromium	mg/kg	5.9	5.1	4.8	5.0	3.52	4	APHA 24th edition
5	Lead	mg/kg	2.4	3.1	2.3	2.7	1.8	2.1	APHA 24th edition
6	Manganese	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
7	Mercury	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
8	Selenium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
9	Silver	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
10	Antimony	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
11	Beryllium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
12	Chromium (VI)	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
13	Cobalt	mg/kg	33	35	23	26	28	24	APHA 24th edition
14	Copper	mg/kg	31	33.4	38	35.9	34	31.3	APHA 24th edition
15	Molybdenum	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
16	Nickel	mg/kg	564	571	318	325	410	418	APHA 24th edition
17	Zinc	mg/kg	24	21	16	18	12	14	APHA 24th edition
18	Thallium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
19	Vanadium	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
20	2,4,5-Trichlorophenol	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
21	Ammonia	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
22	Cyanide	mg/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
23	Nitrate (as Nitrate Nitrogen)	mg/kg	11	8.5	9.2	6.3	10.2	6.6	APHA 24th edition
24	Sulphide (as H_2S)	mg/kg	1.6	1.9	1.2	1.4	0.9	1.7	APHA 24th edition
25	Fluoride	mg/kg	2.2	5.5	5.3	2.4	1.7	2.0	APHA 24th edition
26	1,1-Dichloroethylene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
27	1,2-Dichloroethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
28	1,4-Dichlorobenzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
29	2,4-Dinitrotoluene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
30	Benzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
31	Benzo (a) Pyrene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
32	Bromodichloromethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition

33	Bromoform	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
34	Carbon Tetrachloride	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
35	Chloroform	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
36	Dibromochloromethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
37	Hexachlorobenzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
38	Hexachlorobutadiene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
39	Hexachloroethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
40	Methyl ethyl Ketone	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
41	2,4,6-Trichlorophenol	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
42	Nitrobenzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
43	Naphthalene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
44	Pyridene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
45	Tetrachloroethylene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
46	Trichloroethylene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
47	Vinyl Chloride	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
48	2,4-Dichlorophenoxyacetic acid	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
49	Alachlor	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
50	Alpha HCH	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
51	Beta HCH	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
52	Delta HCH	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
53	Butachlor	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
54	Chlordane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
55	Chlorpyriphos	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
56	Atrazine	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
57	Endosulphan (alpha+beta+sulphate)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
58	Endrin	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
59	Ethion	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
60	Heptachlor (& its Epoxide)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
61	Isoproturon	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
62	Chlorobenzene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
63	Lindane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
64	Malathion	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
65	Methoxychlor	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition

66	Methyl parathion	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
67	Monocrotophos	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
68	Phorate	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
69	Aldrin	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
70	Dichlorodiphenyltrichloroethane	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
71	Dieldrin	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
72	Polychlorinated biphenyls	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
73	Cresol (ortho+meta+para)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
74	Pentachlorophenol	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
75	2,4,5-TP (Silvex)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
76	Toxaphene	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
77	Kepone	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
78	Mirex	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition
79	Dioxin (2,3,7,8-TCDD)	ng/kg	BDL	BDL	BDL	BDL	BDL	BDL	APHA 24th edition

BDL- Below Detection Limit

Class - B (Schedule - II) Based Total Threshold Limit Concentration (TTLC)

	Test Parameter	Carbon Slurry Pond 1		Carbon Slurry Pond 2		Carbon Slurry Pond 6A		Methods
		Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	
a.	n-Pentane (C5)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS
b.	n-Hexane (C6)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS
c.	Toluene (C7)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS
d.	Ethylbenzene (C8)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS
e.	Xylene (C8)	BDL	BDL	BDL	BDL	BDL	BDL	GC-MS

Class – C (Schedule - II) Based on Hazardous Characteristics

1	Flammability	**Non-Flammable**
2	Corrosivity	**Non-Corrosive**
3	Reactivity or Explosive	**Non-Reactive and Non-Explosive**
4	Toxicity	**Non-Toxic**

BDL -Below Detection Limit

CPCB Plot No. E-133, Indl. Area, Phase-I MOHALI

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Annexure – 2

TEST CERTIFICATE

Format No. CPTLF7.8-6(W)

REPORT No. CPTL/2024/04/01, 02, 03, 04, 05, 06, 07, 08 & 09(W) **REPORTING DATE: 16-04-2024**

NAME OF INDUSTRY: **M/s. NATIONAL FERTILIZERS LIMITED,**
(A Govt. of India Undertaking)
BATHINDA UNIT: SIBIAN ROAD,
BATHINDA, PUNJAB-151003.

SAMPLE PARTICULARS

Date of Sample Collection	05.04.2024
Sample Received in Lab	06.04.2024
Type of Sample	Ground Water (Grab)-Piezometers
Sampling Plan Ref. No.	CPTLF7.3-1
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	**1.PZ-1 (IN)** **2.PZ-2 (IN)** **3.PZ-3 (IN)** **4.PZ-4 (IN)** **5.PZ-5 (IN)** **6.PZ-1 (Out)** **7.PZ-2 (Out)** **8.PZ-3 (Out)** **9.PZ-4 (Out)**
Quantity & Packaging	5.0 liters in Plastic bottle
Sample Identification No.	CPTL/2024/04/01, 02, 03, 04, 05, 06, 07, 08 & 09(W)
Analysis Duration	06.04.2024 to 16.04.2024
Sample Collected By	Navjot Singh & Team
Visual Observation	Clear and colorless.

(Chemist/In-Charge)
Date: 16/04/2024

Sital Singh (CEO)
Date: 16-4-2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

END OF REPORT

Groundwater quality of different piezometers inside and outside of the NFL

S.No.	Test Parameters	Units	PZ 1(IN)	PZ 2(IN)	PZ 3(IN)	PZ 4(IN)	PZ 5(IN)	PZ 1 OUT	PZ 2 OUT	PZ 3 OUT	PZ 4 OUT	Permissible limit (BIS, 2012)	Test Method
1	pH	-	7.8	8	8.2	8.3	8.1	8	8.1	8.05	7.5	6.5-8.5	IS: 3025 (P-11): 2022
2	EC	µS/cm	417	333	340	340	336	341	327	338	372	-	IS:3025 (P-14): 2013 (RA-2019)
3	TDS	mg/L	296	228	241	241	239	241	233	240	265	500	IS:3025 (P-16): 1999 (RA-2019)
4	Salinity	mg/l	168	128	137	169	136	136	135	137	150	-	APHA 24th edition

S.No	Test Parameters	Units	PZ 1(IN)	PZ 2(IN)	PZ 3(IN)	PZ 4(IN)	PZ 5(IN)	PZ 1 OUT	PZ 2 OUT	PZ 3 OUT	PZ 4 OUT	Permissible limit (BIS, 2012)	Test Method
1	Arsenic	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01mg/L	IS 3025 (P-37):1988
2	Barium	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	No Relaxation	IS:15302:2003
3	Cadmium	µg/L	0.23	0.245	1.31	1.12	0.3	0.45	0.8	0.5	0.6	3 µg/L	IS 3025 (P-41): 1992
4	Total chromium	µg/l	0.8	0.6	0.22	0.47	7.87	1.14	0.6	0.3	0.56	50 µg/L	IS 3025 (P-52) : 2003
5	Lead	µg/L	5	6	5.9	4.8	8	8	9.7	7.2	7.3	10 µg/L	IS 3025 (P-47): 1994
6	Manganese	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/L	IS 3025 (P-53): 2006
7	Mercury	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.001mg/L	IS 3025 (P-48):1994
8	Selenium	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01mg/L	IS 3025 (P-56) : 2003
9	Silver	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mgl	IS:13428:Annexure-J:2005
10	Antimony	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	IS:15303:2003
11	Beryllium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
12	Chromium (VI)	mg/l	-	-	-	-	-	-	-	-	-	0.05mg/L	IS:3025 (P-52):2003
13	Cobalt	µg/l	0.79	0.72	2.981	9.88	0.88	1.4	1.6	1.3	1.4	-	APHA 24th edition
14	Copper	µg/L	15.2	17.2	15.8	21.4	29.4	25.7	27.2	23.9	28.7	50 µg/L	IS 3025 (P-42): 1992
15	Molybdenum	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.07mg/l	IS 3025 (P-2): 2004

16	Nickel	µg/L	0.99	0.95	0.82	0.48	1.588	0.943	0.95	1.8	0.6	20 µg/L	IS 3025 (P-54): 2003
17	Zinc	µg/L	35.5	29.5	24.9	24	45.6	32.72	28	35	43.22	5000 µg/L	IS 3025 (P-49): 1994
18	Thallium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
19	Vanadium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
20	2,4,5-Trichlorophenol	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
21	Ammonia	mg/L	BDL	BDL	BDL	BDL	4.95	BDL	BDL	BDL	BDL	BDL	No Relaxation	IS 3025 (P-34) : 1988
22	Cyanide	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05mg/L	IS 3025 (P-27) 1986
23	Nitrate (as Nitrate Nitrogen)	mg/L	8.6	7.6	8.82	6.3	7.44	4.6	5.06	2.11	3.64	45 mg/L	IS 3025 (P-34) : 1988
24	Sulphide (as H2S)	mg/L	45.7	47.7	49.02	43.72	45.81	44.37	46.16	10.89	48.93	200 mg/L	APHA 24th edition
25	Fluoride	mg/L	0.61	0.98	1.07	0.29	0.74	1.3	1.45	0.82	0.99	1 mg/L	IS 3025 (P-60) : 2008
26	1,1-Dichloroethylene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
27	1,2-Dichloroethane	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
28	1,4-Dichlorobenzene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
29	2,4-Dinitrotoluene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
30	Benzene	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
31	Benzo (a) Pyrene	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
32	Bromodichloromethane	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
33	Bromoform	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/L	APHA 24th edition
34	Carbon Tetrachloride	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
35	Chloroform	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2mg/L	APHA 24th edition
36	Dibromochloromethane	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/L	APHA 24th edition
37	Hexachlorobenzene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
38	Hexachlorobutadiene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition

39	Hexachloroethane	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
40	Methyl ethyl Ketone	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
41	2,4,6-Trichlorophenol	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
42	Nitrobenzene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
43	Naphthalene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
44	Pyridene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
45	Tetrachloroethylene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
46	Trichloroethylene	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
47	Vinyl Chloride	ng/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
48	2,4-Dichlorophenoxyacetic acid	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	30µg/l	APHA 24th edition
49	Alachlor	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	20µg/l	APHA 24th edition
50	Alpha HCH	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01µg/l	USEPA Method 508:1995
51	Beta HCH	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.04µg/l	USEPA Method 508:1995
52	Delta HCH	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.04µg/l	USEPA Method 508:1995
53	Butachlor	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	125µg/l	USEPA Method 508:1995
54	Chlordane	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
55	Chlorpyriphos	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	30µg/l	APHA 24th edition
56	Atrazine	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l	APHA 24th edition
57	Endosulphan (alpha+beta+sulphate)	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.4µg/l	USEPA Method 508:1995
58	Endrin	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
59	Ethion	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3µg/l	APHA 24th edition
60	Heptachlor (& its Epoxide)	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition

61	Isoproturon	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9µg/l	APHA 24th edition
62	Chlorobenzene	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
63	Lindane	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l	APHA 24th edition
64	Malathion	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	190µg/l	APHA 24th edition
65	Methoxychlor	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
66	Methyl parathion	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.3µg/l	APHA 24th edition
67	Monocrotophos	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1µg/l	APHA 24th edition
68	Phorate	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l	APHA 24th edition
69	Aldrin	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03µg/l	APHA 24th edition
70	Dichlorodiphenyltrichloro ethane	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
71	Dieldrin	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03µg/l	APHA 24th edition
72	Polychlorinated biphenyls	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0005mg/l	APHA 24th edition
73	Cresol (ortho+meta+para)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
74	Pentachlorophenol	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
75	2,4,5-TP (Silvex)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
76	Toxaphene	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
77	Kepone	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
78	Mirex	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
79	Dioxin (2,3,7,8-TCDD)	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
80	Iron (Fe)	µg/L	75	71	69.89	49.6	72	237	96.6	94	55	300 µg/L	APHA 24th edition
81	Bicarbonate	mg/L	52	50	55	52.5	52.5	55	55	55	60	-	IS 3025 (P-23): 1986
82	Chloride	mg/l	25.62	21.62	22.05	15.71	23.65	0.669	20.6	3.66	22.48	250 mg/L	IS 3025 (P-23): 1986

BDL - Below Detection Limit

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

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Annexure-3

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/2024/04/S1,S2, S3, S4, S5, S6, & S7(W) **REPORTING DATE: 07-05-2024**

NAME OF INDUSTRY: **M/s. NATIONAL FERTILIZERS LIMITED,**
(A Govt. of India Undertaking)
BATHINDA UNIT: SIBIAN ROAD,
BATHINDA, PUNJAB-151003.

SAMPLE PARTICULARS

Date of Sample Collection	27.04.2024
Sample Received in Lab	27.04.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	**S1-Petrol Pump** **S2- Railway gate (Sibiyan Gill Patti)** **S3-Siviyan village house** **S4- Bathinda Siviyan Road** **S5- Kothe Bhore Wale Siviyan** **S6- Rehab centre** **S7- Near Thermal Plant Road**
Quantity & Packaging	5.0 liters in Plastic bottle
Sample Identification No.	CPTL/2024/04/09, 10, 11 & 12(W)
Analysis Duration	27.04.2024 to 07.05.2024
Sample Collected By	Navjot Singh & Team
Visual Observation	Clear and colorless.

(Chemist In-Charge)
Date: 7/05/2024

Sital Singh (CEO)
Date: 07/05/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

END OF REPORT

Groundwater Quality in the nearby villages of NFL

S.No.	Test Parameters	Units	Petrol pump (S1)	Railway gate (Sibiyan Gill Patti) (S2)	Siviyan village house (S3)	Bathinda Siviyan Road(S4)	Kothe Bhore Wale Siviyan (S5)	Rehab centre (S6)	Near Thermal Plant Road (S7)	Permissible limit (BIS, 2012)	Test Method
1	Arsenic	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01mg/l	IS 3025 (P-37): 1988
2	Barium	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	No Relaxation	IS:15302:2003
3	Cadmium	µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 µg/L	IS 3025 (P-41): 1992
4	Total Chromium	µg/L	1.1	0.32	0.69	BDL	4.9	8.6	BDL	50 µg/l	IS 3025 (P-52) : 2003
5	Lead	µg/L	1.2	1.15	1.82	8	1.2	8.6	1	10 µg/L	IS 3025 (P-47): 1994
6	Manganese	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/l	IS 3025 (P-53) : 2006
7	Mercury	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.001 mg/L	IS 3025 (P-48):1994
8	Selenium	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01mg/L	IS 3025 (P-56) : 2003
9	Silver	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/L	IS:13428 Annexure-J:2005
10	Antimony	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	IS:15303:2003
11	Beryllium	ug/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
12	Chromium (VI)	mg/L	-	-	-	-	-	-	-	0.05mg/L	IS:3025 (P-52):2003
13	Cobalt	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
14	Copper	µg/L	1.61	6.7	2.4	29	2.3	17.4	4.6	50 µg/L	IS 3025 (P-42): 1992
15	Molybdenum	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.07mg/l	IS:3025 (P-2): 2004
16	Nickel	µg/L	0.6	1.03	0.78	1.1	0.6	1.3	1.1	20 µg/L	IS 3025 (P-54): 2003
17	Zinc	µg/L	0.6	BDL	BDL	155	8.8	13.16	3.7	5000 µg/L	IS 3025 (P-49): 1994
18	Thallium	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
19	Vanadium	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition

20	2,4,5-Trichlorophenol	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
21	Ammonia	mg/l	0.00058	0.00084	0.00029	0.00037	0.00012	0.0006	BDL	0.001mg/l	IS 3025 (P-34) : 1988
22	Cyanide	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05mg/L	IS 3025 (P-27):1986
23	Nitrate (as Nitrate Nitrogen)	mg/L	28	13.4	1.9	0.4	-	0.35	2.04	45 mg/L	IS 3025 (P-34) : 1988
24	Sulphide (as H2S)	mg/l	69.8	123.1	48.2	53.6	80.76	59.5	41.07	200 mg/l	APHA 24th edition
25	Fluoride	mg/L	0.46	1.07	1.03	0.19	0.84	0.62	0.39	1 mg/L	IS 3025 (P-60) : 2008
26	1,1-Dichloroethylene	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
27	1,2-Dichloroethane	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
28	1,4-Dichlorobenzene	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
29	2,4-Dinitrotoluene	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
30	Benzene	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
31	Benzo (a) Pyrene	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
32	Bromodichloromethane	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
33	Bromoform	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mgl	APHA 24th edition
34	Carbon Tetrachloride	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
35	Chloroform	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2mg/l	APHA 24th edition
36	Dibromochloromethane	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1mg/l	APHA 24th edition
37	Hexachlorobenzene	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
38	Hexachlorobutadiene	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
39	Hexachloroethane	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
40	Methyl ethyl Ketone	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
41	2,4,6-Trichlorophenol	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
42	Nitrobenzene	ng/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition

43	Naphthalene	ng/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
44	Pyridene	ng/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
45	Tetrachloroethylene	ng/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
46	Trichloroethylene	ng/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
47	Vinyl Chloride	ng/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
48	2,4-Dichlorophenoxyacetic acid	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	30µg/l	APHA 24th edition
49	Alachlor	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	20µg/l	APHA 24th edition
50	Alpha HCH	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01µg/l	USEPA Method 508.1995
51	Beta HCH	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.04µg/l	USEPA Method 508.1995
52	Delta HCH	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.04µg/l	USEPA Method 508.1995
53	Butachlor	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	125µg/l	USEPA Method 508.1995
54	Chlordane	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
55	Chlorpyriphos	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	30µg/l	APHA 24th edition
56	Atrazine	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l	APHA 24th edition
57	Endosulphan (alpha+beta+sulphate)	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.4µg/l	USEPA Method 508.1995
58	Endrin	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
59	Ethion	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3µg/l	APHA 24th edition
60	Heptachlor (& its Epoxide)	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
61	Isoproturon	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9µg/l	APHA 24th edition
62	Chlorobenzene	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
63	Lindane	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l	APHA 24th edition
64	Malathion	µg/l.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	190µg/l	APHA 24th edition

65	Methoxychlor	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
66	Methyl parathion	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.3µg/l	APHA 24th edition
67	Monocrotophos	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1µg/l	APHA 24th edition
68	Phorate	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2µg/l	APHA 24th edition
69	Aldrin	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03µg/l	APHA 24th edition
70	Dichlorodiphenyltrichloroethane	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
71	Dieldrin	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03µg/l	APHA 24th edition
72	Polychlorinated biphenyls	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0005mg/L	APHA 24th edition
73	Cresol (ortho+meta+para)	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
74	Pentachlorophenol	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
75	2,4,5-TP (Silvex)	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
76	Toxaphene	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
77	Kepone	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
78	Mirex	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
79	Dioxin (2,3,7,8 TCDD)	µg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-	APHA 24th edition
80	Iron	µg/l	1.5	2.1	1.9	35	2.4	77	8	300 µg/l	APHA 24th edition
81	Bicarbonate	mg/l	410	200	95	425	470	260	485	-	IS 3025 (P-23): 1986
82	Chloride	mg/l	152	57	24	148	179	74	194	250 mg/l	IS 3025 (P-23): 1986

BDL – Below Detection Limit

SHUBHAM SALES COMPANY
ARYA BHAWAN, OLD ANAJ MANDI,
ROHTAK-124001

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E-mail : shubhamsalescom@gmail.com

22.06.2024

To,

The Chief Manager Materials,

National Fertilizers Limited,

Sivian Road Bathinda.

Subject: Undertaking with respect to your Sale Order No. 393, Dt. 21.06.2024, for disposal of carbon material from designated 3 ponds at NFL Bathinda inclusive of Ash etc.

Dear Sir,

We hereby confirm as under:

That, we will lift 100% material, i.e, undersize as well as oversize material resulting from the segregation process.

That, once screened/ segregated, we will lift all the material whether it is ash, Soil with organic residue or carbon material in one go.

Thais is for your information and necessary action please.

Thanking You,

Truly Yours,

Nupinder Singh Sivia

Partner

Item No.2 (Court No. 2)

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI.

(Through Physical Hearing with Hybrid VC Option)

Original Application No.620/2022

Kaushal Kishore Vishwakarma ...Applicant

Versus

State of Punjab & Ors. ...Respondents

Date of hearing:- 15.10.2024.

CORAM: HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER.
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER.

Applicant: None

Respondents: Mr. Aman Chaudhary Advocate for respondent no. 2- PPCB.

Mr. Vivek Kohli, Senior Advocate with Mr. Juvas Rawal and Ms. Bhavya Bhatia, Advocates for respondents No. 4, 7 and 10.

Mr. Ankit Siwach Advocate for respondent No. 5 - M/s. Shubham Sales with Mr. Nupinder Singh Sivia, Partner

Mr. Rahul Khurana, Advocate for respondent no. 6-HSPCB(through VC) Mr. Vikrant Panchanda, Advocate for respondent no. 9-CPCB (Through VC)

Ms. Nidhi Jaswal, Advocate for respondent no. 8-MoEF (through VC). None for respondents no. 1 and 3

Application is registered based on a letter petition received by Post.

ORDER

1. Vide order dated 28.08.2024 Metal Scrap Trade Corporation Limited (MSTCL) was impleaded as respondent no. 11.

2. It appears that this aspect was not noticed by the Registry as the memo of parties was not amended and notice was not issued to the respondent no. 11.

3. The Registry is directed to make appropriate amendment in the memo of parties and issue notice to the newly added respondent no. 11 requiring it to file its reply/response within one month.

4. Additional replies have been filed by respondents no. 2, 4, 6 and 7 via email dated 14.10.2024.

5. Learned Counsel for respondent no. 5 and learned Counsel for respondent no. 9 have submitted that they have filed their replies.

6. However, the replies filed by respondents no. 5 and 9 have not been placed on record as the same are stated to have been filed after 3:00 P.M. on the last working day.

7. The Registry is directed to look into this aspect and trace and place the replies of respondents no. 5 and 9 on record.

8. Learned Counsel for respondent no. 8 seeks time to file its reply/response.

9. Reply/response by respondents no. 8 be filed within one month.

10. The Chief General Managers of respondents no. 4 and 7 are directed to file affidavits giving the action plan for disposal of carbon slurry by exploring methodologies for expeditious disposal of the same and Member Secretaries of PPCB and HSPCB respectively are directed to file affidavits regarding remedial action taken including steps taken for recovery of environmental compensation.

11. Learned Counsel for respondents no. 4 and 7 have submitted that respondents no. 4 and 7 can dispose of carbon slurry to persons authorized by respondents no. 2 and 6 under Hazardous and Other Waste (Management and Transboundary Movement) Rules (HWM), 2016 but respondents no. 2 and 6 have not provided the requisite information in this regard to them. Respondents no. 2 and 6 are directed to provide requisite information and extend requisite assistance to respondents no. 4 and 7 for exploring the possibility of giving additional work orders to some more authorized persons.

12. Learned Counsel for respondent no. 5 has submitted that respondent no. 5 is subjected to stringent financial conditions hampering lifting of carbon slurry by respondent no. 5 and the extractable quantity differs from the quantity mentioned in the tender.

13. Respondents no. 4 and 7 may look into these aspects and take appropriate action and extend requisite facilities at the storage site to respondent no. 5 for ensuring expeditious disposal of carbon slurry.

14. List on 17.01.2025 for further consideration.

Arun Kumar Tyagi, JM

Dr. Afroz Ahmad, EM

October 15th, 2024
AG

SHUBHAM SALES COMPANY
ARYA BHAWAN, OLD ANAJ MANDI,
ROHTAK-124001
M: +91-20345-45447
+91-92167-23543
E-mail : shubhamsalescom@gmail.com

28.02.2025

To,
The Chairman Committee,
National Fertilisers Limited,
Bathinda.

Reference:Our earlier submissions w.r.t., seeking financial relief & technical support for earliest lifting of remaining carbon material.
And meeting Dt. 28.02.25 at NFL Bathinda.

Subject: Submission of our proposal based upon discussions so far for expeditious removal of the balance Carbon Material from the NFL Bathinda.

Dear Sir,

We respect the initiative proposed by you to consider immediate Financial assistance of Rs. 160.00 Lac against submission of following from our end:

1. We are unable to submit BG as surety/ collateral against Rs. 160.00 Lac . However, we shall submit Undertaking cum Indemnity Bond as prescribed by NFL forwarded by the Committee and PDC for the amount of Rs. 160.00 Lac, in favour of NFL Bathinda.
2. Lift 5000 MT of material by 31.07.2025 and all available material to be lifted by 31.03.2026.
3. Restart lifting immediately.

As communicated earlier and today, we are sincerely committed to complete the lifting of balance material in the shortest possible time. The only constraint has been serious financial burden upon us, and contaminated and poor, inconsistent quality having high % of moisture in it.

We as a goodwill gesture show of our sincerity and undertake to submit indemnity bond (as per the draft format shared by the Committee) and PDC as desired by the committee. We have enclosed signed copy of the draft Indemnity Bond in token of acceptance.

We further undertake to resume the lifting immediately against receipt of your confirmation.

We again reiterate that although this relief is surely going to support our efforts to expedite the lifting. However, we again humbly request and submit that we

ought to have to invest huge funds for fast and expeditious lifting within a time bound manner as per the direction of the Hon'ble NGT in the case matter of OA/620 of 2022. Therefore, you are again humbly requested to consider our other requests and claims for assistance and support pending as under:

1. Issuing of Carbon Material on Zero Price Basis.
2. Payment of interest on the advance deposit amount retained by NFL.
3. Reappropriating the amount of about Rs.83.00 lac with held by NFL, against penalty, and credit the same in to our account.
4. Initiate the process with GST department, for refund of about Rs.15.00 lac levied upon us on account of above amount having been marked in the penalty account.
5. Refund the above amounts along with other funds available with NFL at the earliest.

We, again reiterate our sincere commitments to lift entire material with your timely and sincere support. You are requested to release agreed relief at the earliest, so that we may start the lifting without any delay. And request you to process the pending relief sought as above, based upon our performance.

Thanking You,
Sincerely Yours,

Nupinder Singh Sivia
Partner

28/2/25

Annexure-E

UNDERTAKING-CUM-INDEMNITY BOND
(On Rs. 100/- Non-Judicial Stamp Paper)

I, Nupinder Singh Sivia S/o Shri Mukhtiar Singh aged about 55 years, working as Partner of Shubham sales Company, R/o 44, Bank Colony, Near Green Palace Bathinda, Pb.do hereby make an oath and solemnly affirm as hereunder as director of M/s Shubham Sales Co.:

1. That, I have been duly authorized by a Board Resolution/ Power of Attorney dated 06-04-2024(copy enclosed) to execute and swear this Undertaking-cum-Indemnity Bond for the purpose of securing National Fertilizers Limited, Bhatinda (hereinafter '**NFL, Bhatinda**') towards payment of a sum of Rs. 1,60,00,000/- (Rupees One Crore Sixty Lacs Only) lying with NFL as advance– against Notice Inviting Tender (hereinafter '**NIT**') bearing No. MSTC/CDG/NATIONALF E R T I L I Z E R S L I M I T E D /11/BATHINDA/20-21/22287,
   which shall be paid to M/s Shubham Sales Co., subject to terms herein.
2. I hereby undertake that M/s Shubham Sales Co. shall submit postdated cheques for the amount of Rs. 1,60,00,000/- (Rupees One Crore Sixty Lacs Only) to NFL, Bhatinda and lift carbon slurry to the tune of 5000MT from NFL, Bhatinda by 31.07.2025. Thereafter, M/s Shubham Sales Co. will continue the lifting of the Carbon Slurry and will completely lift the entire material by 31st March 2026 as per the terms & conditions of the NIT / Contract. M/s Shubham Sales Co. will be bound by the terms and condition of the NIT, dated 12.01.2021 and other prevalent laws while lifting and further dealing with the lifted carbon slurry.
3. I hereby further undertake that on completion of lifting of 5000 MT carbon slurry by 31/07/2025, M/s Shubham Sales Co. shall fresh submit postdated cheques for the amount of Rs. 1,60,00,000/- (Rupees One Crore Sixty Lacs Only) to NFL, Bhatinda for completely lifting the entire material by 31st March 2026 as per the terms & conditions of the NIT / Contract. On receipt of fresh postdated cheques, NFL Bathinda shall release the previously submitted postdated cheques to M/s Shubham Sales Co.
4. That if M/s Shubham Sales Co. fails to lift carbon slurry to the tune of 5000MT by 31.07.2025 or entire carbon slurry by 31.03.2026, then M/s Shubham Sales Co. shall be liable to pay / deposit an amount to the tune of Rs. 1,60,00,000/- (Rupees One Crore Sixty Lacs Only) with NFL, Bhatinda.
5. That I affirm that if at any stage it is found that the postdated cheques submitted by M/s Shubham Sales Co. are not encashed / returned due to insufficient funds or for any other reason or any misinterpretation of facts was made, M/s Shubham Sales Co. shall be liable

28/2/25

to pay an amount to the tune of Rs. 1,64,00,000/- (Rupees One Crore Sixty Lacs Only) to NFL, Bhatinda and responsibility/liability shall solely rest with M/s Shubham Sales Co.

6. That any liability arising because of non-adherence to conditions of NIT or prevalent laws in respect of lifting of carbon slurry shall be solely borne by M/s Shubham Sales Co. and NFL, Bhatinda shall be absolved of any liability whatsoever.
7. That the contents of the foregoing paragraphs of this Undertaking-cum-Indemnity Bond are true to the best of my knowledge and belief.
8. That M/s Shubham Sales Co., shall indemnify and keep harmless NFL, Bhatinda and its officers, directors, employees etc. on demand from and against any and all losses, claims, demands, dues, liabilities, damages, penalty, costs, expenses, proceedings, litigation etc. that may be suffered by, or cause to or incurred by NFL, Bhatinda, its officers, directors, employees etc., arising out of or in relation to or in connection with (i) any breach or non-fulfillment by M/s Shubham Sales Co. of its obligations herein; (ii) any claim, demand, litigation etc. raised by any third party and/or competent authorities, courts, tribunals etc.; and/or (iii) any act or omission by M/s Shubham Sales Co.

Signature of the Purchaser/ Representative of the Purchaser

(Deponent)

Dated:28-02-2025

VERIFICATION

I, Nupinder Singh Sivia, the above-named deponent do hereby verify that the contents of the paragraph 1 to 7 are true to my knowledge, nothing has been concealed and no part of it is false.

Signed at Bathinda (Place) on 28-02-2025

(Deponent) 28/2/25

नेशनलफर्टिलाइज़र्सलिमिटेड
(भारतसरकारकाउपक्रम)
बठिंडाइकाई:सिवियॉरोड,बठिंडा –151003 पंजाब
दूरभाष : 0164 – 2270261, 2760262
फैक्स : 0164-2270463
E-mailgslayal@nfl.co.in

A Navratna Company

NATIONAL FERTILIZERS LIMITED
(A Govt. of India Undertaking)
Bathinda Unit: Sibian Road, Bathinda - 151003 (Punjab)
Phone: 0164-2270261, 2760262
Fax : 0164-2270463
e.mail: gslayal@nfl.co.in

Ref. No.NFB: ST/D/24-25/Carbon Slurry Email Date: 12/03/2025

M/s Shubham Sales Co.,
Bhiwani Road, 5.30 KM Stone,
Rohtak - 124001

Subject: For facilitate expeditious lifting of Carbon Slurry against Sale Order No. 393 dated 21/06/2022.

REF.

(i) Your request vide email dated 10/01/2025 to provide financial assistance for expeditious lifting of Carbon Slurry.
(ii) Your email dated 10/02/2025.
(iii) Your discussion alongwith Committee on 25/02/2025 & 28/02/2025.
(iv) Your Letter dated 28/02/2025.

Sir,

This has reference to your above cited request dated 10/01/2025, 10/02/2025 and letter dated 28/02/2025 to facilitate financial assistance for expeditious lifting of Carbon Slurry.

Your above request has been thoroughly examined and is being considered as under:

1. NFL intends to release Rs. 160 Lakhs as financial assistance to M/s Shubham Sales Co., Rohtak against submission of Post-Dated Cheques of equal amount and Undertaking cum Indemnity Bond as submitted vide your letter dated 28/02/2025.
2. You will start the lifting of Carbon Slurry immediately.
3. You will lift 5000 MT of material by 31/07/2025 and lift all balance material by 31/03/2026.

In view of above, you are requested to submit the mutually agreed Undertaking cum Indemnity Bond (on non-judicial stamp paper of Rs. 100/-) along with Post Dated Cheques of equal amount enabling us to proceed further for release of financial assistance for expeditious lifting of Carbon Slurry.

Thanking you,

For & on behalf of

National Fertilizers Limited

Gslayal 12/3/25

Gurpreet Singh Layal

Chief Manager (Matls.)

From: Gurpreet Singh Layal [mailto:gslayal@nfl.co.in]
Sent: Wednesday, March 19, 2025 3:24 PM
To: Dr. Mansi Khanna; शुभम ग्रोवर
Cc: T K Batra; Sandhya Batra; Pawan Agrawal; Punit Jain
Subject: Fwd: Letter Dated 12.03.2025 (Sale Order No. 393 dated 21.06.2022 for Lifting of Carbon Slurry).

Madam

We are forwarding the email reminder sent to M/s Shubham Sales Co., Rohtak. for your kind information.

Regards

Gurpreet Singh Layal
Chief Manager (Matls.)

---------- Forwarded message ---------
From: **Gurpreet Singh Layal** <gslayal@nfl.co.in>
Date: Wed, Mar 19, 2025 at 3:20PM
Subject: Fwd: Letter Dated 12.03.2025 (Sale Order No. 393 dated 21.06.2022 for Lifting of Carbon Slurry).
To: Shubham Sales Co. Rohtak <SHUBHAMSALESCOM@gmail.com>
Cc: Pawan Agrawal <pagrawal@nfl.co.in>, Punit Jain <punit.jain@nfl.co.in>

Dear Sir,

In continuation to trailing mail you are once again requested as under :-

Please submit the mutually agreed Undertaking cum Indemnity Bond (on non-judicial stamp paper of

1. Rs. 100/-) along with Post Dated Cheques of equal amount enabling us to proceed further for release of financial assistance for expeditious lifting of Carbon Slurry.
2. Please start the lifting of Carbon Slurry immediately.

Regards,
Error! Filename not specified.
Gurpreet Singh Layal
Chief Manager (Matls.)

From: **Gurpreet Singh Layal** <gslayal@nfl.co.in>
Date: Wed, Mar 12, 2025 at 9:10AM
Subject: Letter Dated 12.03.2025 (Sale Order No. 393 dated 21.06.2022 for Lifting of Carbon Slurry).
To: Shubham Sales Co. Rohtak <SHUBHAMSALESCOM@gmail.com>
Cc: Pawan Agrawal <pagrawal@nfl.co.in>, Punit Jain <punit.jain@nfl.co.in>

Dear Sir

With Reference to your request dated 10/01/2025, 10/02/2025 & 28/02/2025, please find herewith attached letter for your further necessary actions.

Regards

Gurpreet Singh Layal
Chief Manager (Matls.)

SHUBHAM SALES COMPANY
ARYA BHAWAN, OLD ANAJ MANDI,
ROHTAK-124001

M: +91-90345-45447
+91-92167-23543
E-mail : shubhamsalescom@gmail.com

Byhand

मुख्य महा प्रबन्धक कार्यालय
डायरी संख्या...312....दिनांक...26/3/25

To,

March 26, 2025

The CGM,

NFL, Bathinda.

CM/MATLS) 26/3/25.

Reference: Your letter No. NFB; ST/D/24-25/Carbon Slurry, 12/03/2025.

Subject: Submission Of Indemnity Bond and PDC for Rs. 1,60,00,000.00.

Dear Sir,

As per your letter please find enclosed herewith the indemnity bond duly signed and stamped.

Also please find enclosed herewith 8 No. of cheques of value Rs. 20.00 lac each, total Rs, 160.00 Lac.

Cancelled cheque as bank mandate for transfer of payment in our account.

This support is vital but not sufficient for earliest disposal of the material as desired by the NGT.

We are going to commence the work immediately against receipt of the payment from your side, and will make every effort to complete the assignment with time frame applied.

Kind Regards,

Thanking You,

Truly Yours,

Nupinder Singh Sivia

Partner

Encl: As above

सत्यमेव जयते

INDIA NON JUDICIAL

Government of Punjab

e-Stamp

Certificate No.	:	IN-PB11781209860300X
Certificate Issued Date	:	28-Feb-2025 02:36 PM
Certificate Issued By	:	pbbalskgu
Account Reference	:	NEWIMPACC (SV)/ pb7073304/ BHATINDA/ PB-BT
Unique Doc. Reference	:	SUBIN-PBPB707330422369482182796X
Purchased by	:	LAKHVIR SINGH
Description of Document	:	Article 4 Affidavit
Property Description	:	Not Applicable
Area of Property	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	SHUBHAM SALES CO
Second Party	:	Not Applicable
Stamp Duty Paid By	:	SHUBHAM SALES CO
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)
Social Infrastructure Cess(Rs.)	:	0 (Zero)
Total Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

NOTARY RAJINDER SINGH ADVOCATE REGD.No.9815 BATHINDA INDIA

GURBAJ SINGH ACC ID PB7073304 TEH. COMPLEX BATHINDA

Please write or type below this line

PF 0001022852

E-STAMP NO.:-IN-PB11781209860300X

Annexure-E

UNDERTAKING-CUM-INDEMNITY BOND

I, .Nupinder Singh Sivia S/o Shri.Mukhtiar Singh Sivia aged about 55 years, working as authorised partner of M/s Shubham Sales Company , R/o 44 , Bank Colony, Near Green Palace, Barnala Bypass, Bathinda-151001 do hereby make an oath and solemnly affirm as hereunder as director of M/s Shubham Sales Co.:

1. That, I have been duly authorised by a Board Resolution/ Power of Attorney dated 06 April 2024 (copy enclosed) to execute and swear this Undertaking-cum-Indemnity Bond for the purpose of securing National Fertilizers Limited, Bhatinda (hereinafter '**NFL, Bhatinda**') towards payment of a sum of Rs. 1,60,00,000/- (Rupees One Crore Sixty Lacs Only) lying with NFL as advance- against Notice Inviting Tender (hereinafter '**NIT**') bearing No. MSTC/CDG/NATIONAL FERTILIZERS LIMITED/11/BATHINDA/20-21/22287, which shall be paid to M/s Shubham Sales Co., subject to terms herein.
2. I hereby undertake that M/s Shubham Sales Co. shall submit postdated cheques for the amount of Rs. 1,60,00,000/- (Rupees One Crore Sixty Lacs Only) to NFL, Bhatinda and lift carbon slurry to the tune of 5000MT from NFL, Bhatinda by 31.07.2025. Thereafter, M/s Shubham Sales Co. will continue the lifting of the Carbon Slurry and will completely lift the entire material by 31st March 2026 as per the terms & conditions of the NIT / Contract. M/s Shubham Sales Co. will be bound by the terms and condition of the NIT, dated 12.01.2021 and other prevalent laws while lifting and further dealing with the lifted carbon slurry.
3. I hereby further undertake that on completion of lifting of 5000 MT carbon slurry by 31/07/2025, M/s Shubham Sales Co. shall fresh submit postdated cheques for the amount of Rs. 1,60,00,000/- (Rupees One Crore Sixty Lacs Only) to NFL, Bhatinda for completely lifting the entire material by 31st March 2026 as per the terms & conditions of the NIT / Contract. On receipt of fresh postdated cheques, NFL Bathinda shall release the previously submitted postdated cheques to M/s Shubham Sales Co.
4. That if M/s Shubham Sales Co. fails to lift carbon slurry to the tune of 5000MT by 31.07.2025 or entire carbon slurry by 31.03.2026, then M/s Shubham Sales Co. shall be liable to pay / deposit an amount to the tune of Rs. 1,60,00,000/- (Rupees One Crore Sixty Lacs Only) with NFL, Bhatinda.
5. That I affirm that if at any stage it is found that the postdated cheques submitted by M/s Shubham Sales Co. are not encashed / returned due to insufficient funds or for any other reason or any misinterpretation of facts was made, M/s Shubham Sales Co. shall be

liable to pay an amount to the tune of Rs. 1,60,00,000/- (Rupees One Crore Sixty Lacs Only) to NFL, Bhatinda and responsibility/liability shall solely rest with M/s Shubham Sales Co.

6. That any liability arising because of non-adherence to conditions of NIT or prevalent laws in respect of lifting of carbon slurry shall be solely borne by M/s Shubham Sales Co. and NFL, Bhatinda shall be absolved of any liability whatsoever.
7. That the contents of the foregoing paragraphs of this Undertaking-cum-Indemnity Bond are true to the best of my knowledge and belief.
8. That M/s Shubham Sales Co., shall indemnify and keep harmless NFL, Bhatinda and its officers, directors, employees etc. on demand from and against any and all losses, claims, demands, dues, liabilities, damages, penalty, costs, expenses, proceedings, litigation etc. that may be suffered by, or cause to or incurred by NFL, Bhatinda, its officers, directors, employees etc., arising out of or in relation to or in connection with (i) any breach or non-fulfillment by M/s Shubham Sales Co. of its obligations herein; (ii) any claim, demand, litigation etc. raised by any third party and/or competent authorities, courts, tribunals etc.; and/or (iii) any act or omission by M/s Shubham Sales Co.

Signature of the Purchaser/ Representative of the Purchaser

Dated: 26 march 2025

Nupinder Singh Sivia
(Deponent)

VERIFICATION

I, Nupinder Singh Sivia, the above named deponent do hereby verify that the contents of the paragraph 1 to 7 are true to my knowledge, nothing has been concealed and no part of it is false.

Signed at Bathinda (Place) on 26 March, 2025

ATTESTED
RAJINDER SINGH
ADVOCATE & NOTARY
Distt Courts, BATHINDA
26 MAR 2025.

(Deponent)

Indian-Non Judicial Stamp
Haryana Government

Certificate No: [illegible]
GRN No: [illegible]

Seller / First Party Detail

Name: [illegible]
H.No/Floor: 0 Sector/Ward: 0 Landmark: Rohtak
City/Village: Rohtak District: Rohtak State: Haryana
Phone: 90******47 Others: Jagtar singh

Buyer / Second Party Detail

Name: Akhil Arya
H.No/Floor: 1200 Sector/Ward: 14 Landmark: Anaj mandi
City/Village: Rohtak District: Rohtak State: Haryana
Phone: 90******47 Others: Nupinder singh sidhu

Purpose: For change in partnership deed

NOTARY
Regd. No. 9877
Rohtak
Distt.
GOVT. OF INDIA

The authenticity of this document can be verified by scanning this QCode Through

RETIREMENT CUM PARTNERSHIP DEED

This Retirement cum Partnership deed is executed on [illegible] 2023 at Rohtak, Haryana between:

NOTARY
RAJINDER SINGH ADVOCATE
REGD.No.9815
BATHINDA
GOVT. OF INDIA

01. SHRI KULBHUSHAN ARYA S/o Sh. [illegible] Arya, aged about 57 years and resident of Anaj Mandi, mal [illegible] Rohtak (Haryana) (hereinafter called the first party or continuing party)

02. SH. AKHIL ARYA S/o Sh. Bharat Bhushan Arya, aged about 30 years and resident of Anaj Mandi, Mal Godam Road, Rohtak (Haryana) (hereinafter called the second party or continuing party)

03. SH. JASDEEP SINGH AHLUWALIA S/o Sh. Sat Pal Singh Ahluwalia aged about 43 years [illegible] 186, Lamini Road, Kajipura, Patiala (Punjab) (hereinafter called the third party or continuing party)

For Mittal Sales Co.

Partner

For Mittal Sales Co.

Partner

04. SH. JAGTAR SINGH WALIA S/o Sh. Dalip Singh, aged about 54 years and resident of 601, Model Town, Phase-I, Bathinda (Punjab) (hereinafter called the fourth party or continuing party)

05. SH. NUPINDER SINGH SIVIA s/o Sh. Mukhtiar Singh, aged about 51 years and resident of 44, Bank Colony, Near Green Marriage Palace, Bathinda (Punjab) (hereinafter called the Fifth party or continuing party)

and

06. SH. V.K JAIN s/o Sh. H.C Jain, aged about 61 years and resident of D-10, Prashant Vihar, Rohini, Delhi – 110085 (hereinafter called the sixth party or the retiring party)

WHICH expression shall include the heirs, nominees, executors and the administrators of the respective parties.

WHEREAS the first party i.e. Kulbhushan Arya (25% share), second party i.e Mr. Akhil Arya (5% share), third party i.e Mr. Jasdeep Singh Ahluwalia (25% share), fourth party i.e. Mr. Jagtar Singh Walia (21% share), fifth party i.e. Mr. Nupinder Singh Sivia (21% share) and sixth party i.e. V.K Jain (3% share) were carrying on business under the name & style of M/S. SHUBHAM SALES CO. with Head Office at 5.3 Km Mile Stone, Bhiwani Road, Rohtak (Haryana) in partnership vide partnership deed executed on 04.1.2011 and [illegible]

WHEREAS the sixth party Mr. V.K Jain have retired from the said partnership business w.e.f. 27th Oct, 2023 (closing of the day) by virtue of Memorandum of Settlement dt 27.10.2023 and it has been decided not to dissolve the said firm and carry on the running business by the remaining partners on certain terms and conditions and now it deems desirable to have written instrument in respect of said terms and conditions.

NOTARY RAJINDER SINGH ADVOCATE REGD.No.9815 BATHINDA INDIA

NOTARY Regd. No. 58 INDIA

THEREFORE, this instrument witnessth as under:

1. That the firm shall continue to carry on the business under the name and style of SHUBHAM SALES CO.

2. That all the [illegible] liabilities of the aforesaid firm as on 27th Oct, 2023 (closing of the day) [illegible] taken over by the reconstituted firm as the [illegible]

Page 2 of 5

For Shubham Sales Co.

Partner

terms of Memorandum of Settlement dt.27.10.2023. The balance of the retiring party i.e. V.K.Jain (Sixth Party) if any as on 27th Oct 2023 would be transferred to his loan account and would be paid as decided between the parties in the terms of Memorandum of Settlement dt 27.10.2023. The retiring party shall not have any right or lien whatsoever nature in the assets of the firm.

3. That the continuing partners has taken over the running business of the firm along with all the assets and liabilities whether past, present, future, contingent or otherwise in connection with and relating to the said business in any manner whatsoever. Retiring partner not liable for any liability and having no claim in assets of the firm and the retiring partner is being indemnified by the continuing partner with all the assets and liabilities whether past, present, future, contingent or otherwise in connection with and relating to the said business in any manner whatsoever .

4. That the retiring partner vide this retirement deed has relinquished all his rights interest over the entire assets/stocks of carbon slurry lying at NFL, Bathinda, Panipat and Nangal in the terms of Memorandum of Settlement dt 27.10.2023 and the retiring partner will not create any interest or create any hindrance knowingly or unknowingly in future as well.

5. That the business of the partnership shall continue to be [illegible] of collect carbon black spent carbon carbon slurry from NFL, Panipat, Nangal and Bathinda under prevalent and applicable Rules for further [illegible] transportation, processing, disposal, sale cum usage and storage".

6. That the Head Office of the business shall be at 5.3 Km Mile Stone, Bhiwani Road, Rohtak (Haryana). The firm may open any number of branches at any other place or places as required from time to time.

7. The firm is AT WILL.

8. That the capital of the partnership shall be subscribed by the continuing partners as per the Memorandum of Settlement dt 27.10.2023. The partners shall be entitled to charge interest 12% on the capital contributed by them therein. The rate of interest may, however be reduced or enhanced but within the prescribed limit of section 40(b) of the Income Tax Act, 1961. Such interest shall be calculated and credited to the accounts of the partners at the close of the accounting year.

That business of the firm shall be managed and supervised in the best interest of the firm by all or either of the continuing partners and they shall be entitled to take salary remuneration for their active involvement in the business. The active parties shall be entitled to take remuneration Rs. 10,000/- per month. It has also agreed that such salary remuneration computed above shall be credited in the respective capital accounts of the partners on 31st day of March in every financial year and the same may be reduced or enhanced by the mutual consent of the partners without execution of the fresh partnership deed.

10. That the parties shall be entitled to modify the above clauses relating to remuneration and interest payable by executing a supplementary deed of partnership and that the same shall form part of this deed.

11. That the profit and losses as the case may be of the partnership business as per accounts maintained after deducting the expenses relating to the activities of the partnership business including interest and remuneration payable to partners in accordance with this deed or any other supplementary deed that may be executed shall be divided in the FOLLOWING MANNER:

Kulbhushan Arya (First Party)
Akhil Arya (Second Party)
Jasdeep Singh Ahluwalia (Third Party)
Jagtar Singh Walia (Fourth Party)
Nupinder Singh Sivia (Fifth Party)

NOTARY PAJINDER SINGH ADVOCATE REGD.No.9815 BATHINDA

12. That the firm shall open any number of bank accounts & the same shall be operative by the parties as mutually agreed or by any other person authorized by the partners.

13. That no partner shall hypothecate, pledge or alienate in any manner any property of the firm to raise any loan in his individual capacity for his personal purposes. The firm may raise loans and deposits to meet the requirements of the business in the name of the firm from private public institutions and banks etc.

14. That the death, retirement or insolvency of any partner shall not dissolve the firm, but the surviving partners shall carry on the business by taking the legal heir of the deceased party as partner in the said partnership business on the same terms and condition.

Page 3 of 7

Partner

15. That in event of any dispute or difference arises between the parties hereto or their representatives in any way for the regular business of the partnership, the same shall be referred to the Arbitrator under the Arbitration Act than in force.

16. That the parties may change, amend, add, alter, delete any of the above clauses.

17. That for all other purposes the relations of the parties inter se shall be governed by Indian Partnership Act, 1932.

IN WITNESS WHEREOF the parties hereto have hereunto set and subscribed their respective hands on the day and year first herein above written.

WITNESSES

PARTIES

1. (KULBHUSHAN ARYA)
Continuing Partner

2. (illegible)
Continuing Partner

3. (JASDEEP SINGH DHILLON)
Continuing Partner

4. (JAGTAR SINGH WALIA)
Continuing Partner

5. (NUPINDER SINGH SIVIA)
Continuing Partner

6. (V.K JAIN)
Retired Partner

ATTESTED
NARESH KUMAR
ADVOCATE
NOTARY PUBLIC
ROHTAK
26/03/25

ATTESTED
RAJINDER SINGH
ADVOCATE & NOTARY
Distt Courts, BATHINDA
26 MAR 2025

INDIA NON JUDICIAL

Government of Punjab

e-Stamp

Certificate No.	:	IN-PB03819005443985W
Certificate Issued Date	:	06-Apr-2024 09:55 AM
Certificate Issued By	:	pbbalskgu
Account Reference	:	NEWIMPACC (SV)/ pb7073304/ BHATINDA/ PB-BT
Unique Doc. Reference	:	SUBIN-PBPB70733040836510873107 81W
Purchased by	:	LAKHVIR SINGH
Description of Document	:	Article 48 Power of Attorney
Property Description	:	Not Applicable
Area of Property	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	SHUBHAM SALES CO
Second Party	:	NUPINDER SINGH SIVIA AND AKHIL ARYA
Stamp Duty Paid By	:	SHUBHAM SALES CO
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)
Social Infrastructure Cess(Rs.)	:	0 (Zero)
Total Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

NOTARY Regd No. 9877 Distt. Bathinda GOVT. OF INDIA

NOTARY RAJINDER SINGH ADVOCATE REGD.No.9815 BATHINDA INDIA

① ② Jagtar Singh. ③ ④

⑤

GURBAJ SINGH Adv. ID P87073304 TEH. COMPLEX BATHINDA

0023259984

E-Stapm No. IN-PB03819005443985W Dt. 06.04.2024 Bathinda Pb.

Power of Attorney

We, the undersigned all the partners of M/s Shubham Sales Company, 5.30 KM, Bhiwani Road, Rohtak hereby grant full power of attorney to:

1. Nupinder Singh Sivia S/o Late sr. Mukhtiar Singh R/o 44 Bank Colony Near Green Marriage Palace, Bathinda, and 2. Sh. Akhil Arya S/o Sh. Bharat Bushan Arya, Arya Bhawan Anaj Mandi, Ward No 4 Rohtak, who mare also partners in firm, to act on behalf of the firm and all partners of the firm, for the purpose of filing and contesting all legal cases in the courts of India.
2. This power of attorney includes, but is not limited to, the authority to represent the firm, make decisions, and engage legal counsel as necessary, fix fees, file and sign all required pleadings and documents, required by the advocate or any court or any other forum, at the State & Central Government Departments, PSU's, and required for all statutory or non statutory purposes before the concerned authority and for discharging all required obligations under the law and in the interest of business of the firm.

They both are severely or jointly, authorized and are fully empowered to act, sign, file, submit to or engage any person, expert, consultant, lawyer for the purpose of all legal and statutory purposes required by the business of the firm .

All their such acts shall be binding on all the partners and firm.

Made on This 06th day of April 06, 2024 at Bathinda, Punjab..

1. Nupinder Singh Sivia POA/Partner. 2. Akhil Arya POA/Partner

3. Jagtar Singh Walia Partner 4. Kulbushan Arya Partner 5. Jasdeep Singh Ahluwalia

ATTESTED
RAJINDER SINGH
ADVOCATE & NOTARY
Distt. Courts, BATHINDA

ATTESTED
NARESH KUMAR
NOTARY PUBLIC
ROHTAK

26 MAR 2025.

Form-A

[Rule(5)]

REGISTER OF FIRM

(Maintained under Section 59 of the Indian Partnership Act, 1932)

1. Registration number of the firm : **06-14-2024-00020**

2. Name of the Firm (Original) : **M/s SHUBHAM SALES CO.**

3. Name of the Firm (New): **N/A**

4. Date of Registration : **09/04/2024**

5. Duration of the Firm : **AT WILL**

6. Principal place of business (Original) : **BHIWANI ROAD, 5.30 KM STONE ,Rohtak**

7. Other place of business (Original) :

NOTARY RAJINDER SINGH ADVOCATE REGD.No.9815 BATHINDA

A.	List of Partners :			
Sr. No.	Name of the Partner	Permanent address of the Partner	Date of Joining	Date of Ceasing
1	KUL BHUSHAN ARYA	1200/4, PURANI ANAJ MANDI, Rohtak, Haryana	2019-12-04	
2	NUPINDER SINGH SIVIA	44 BANK COLONY, NEAR GREEN PALACE, BARNALA BYEPASS, Bathinda, Punjab	2019-12-04	
3	JAGTAR SINGH WALIA	601, PHASE-1, MODEL TOWN, Bathinda, Punjab	2019-12-04	
4	JASDEEP SINGH AHLUWALIA	330, GIANI ZAILSINGH NAGAR, Rupnagar, Punjab	2019-12-04	
5	AKHIL ARYA	1200/14, ARYA BHAWAN, ANAJ MANDI, WARD NO. 4, Rohtak, Haryana	2019-12-04	

ATTESTED RAJINDER SINGH ADVOCATE & NOTARY Distt. Courts, BATHINDA

District Registrar of Firms
Rohtak, Haryana

26 MAR 2025

Form-C

[Rule(9)]

Acknowlegment of Registration of Firms

Memo No : 2024-04-0000101

The Registrar of Firm, Haryana acknowledges the receipts of the statement prescribed by the section 58(1) of Indian Partnership Act, 1932.

The Statement has been filed and name of the F

M/s **SHUBHAM SALES CO.**

has been entered in the Register of Firms

NOTARY RAJINDER SINGH ADVOCATE REGD.No.9815 BATHINDA INDIA

Rohtak
Dated :[09/04/2024]

ATTESTED
RAJINDER SINGH
ADVOCATE & NOTARY
Distt Courts, BATHINDA

District Registrar of Firms
Rohtak, Haryana

Verification Link: https://haryanaindustries.gov.in/msme/verify/firmregistration/id/46767/ref/06-14-2024-00020

HDFC BANK

401-402, MODEL TOWN DELHI ROAD
, ROHTAK-124001 HARYANA

RTGS / NEFT IFSC : HDFC0000176

Imperia Premium Banking

01082025
D D M M Y Y Y Y

Valid for 3 months only

Pay NFL Bathinda

Or Bearer
या धारक को

Rupees रुपये Twenty 2ac only /-

अदा करें

₹ 2000000/-

A/c No. खाता क्र 50200047948219

Brn: 0176 Pdt: 200
REGULAR CA

Payable at par through clearing/transfer at all branches of HDFC BANK LTD

For SHUBHAM SALES CO

For SHUBHAM SALES Co.

Partner

Authorised Signatories
Please sign above / कृपया यहां हस्ताक्षर करें

⑈000260⑈ ⑆124240002⑆ 05813⑆⑈ 29

HDFC BANK

401-402, MODEL TOWN DELHI ROAD
, ROHTAK-124001 HARYANA

RTGS / NEFT IFSC : HDFC0000176

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⑈000261⑈ ⑆124240002⑆ 05813⑆⑈ 29

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Partner

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HDFC BANK

401-402, MODEL TOWN DELHI ROAD
. ROHTAK-124001 HARYANA

RTGS / NEFT IFSC : HDFC0000176

Imperia Premium Banking

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Or Bearer
या धारक को

Rupees रुपये Twenty 2ac only

अदा करें ₹ 20,000,00/-

A/c No. खाता क्र 50200047948219

Brn: 0176 Pdt: 200
REGULAR CA

Payable at par through clearing/transfer at all branches of HDFC BANK LTD

For SHUBHAM SALES CO

Authorised Signatories
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HDFC BANK

401-402, MODEL TOWN DELHI ROAD
. ROHTAK-124001 HARYANA

RTGS / NEFT IFSC : HDFC0000176

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Or Bearer
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Rupees रुपये Twenty 2ac only

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A/c No. खाता क्र 50200047948219

Brn: 0176 Pdt: 200
REGULAR CA

Payable at par through clearing/transfer at all branches of HDFC BANK LTD

For SHUBHAM SALES CO

Authorised Signatories
Please sign above / कृपया यहां हस्ताक्षर करें

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HDFC BANK

401-402, MODEL TOWN DELHI ROAD
. ROHTAK-124001 HARYANA

RTGS / NEFT IFSC : HDFC0000176

Imperia Premium Banking

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Valid for 3 months only

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Rupees रुपये Twenty 2ac only

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A/c No. खाता क्र 50200047948219

Brn: 0176 Pdt: 200
REGULAR CA

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For SHUBHAM SALES CO

Authorised Signatories
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Valid for 3 months only

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Rupees रुपये Twenty 2ac only

अदा करें ₹ 20,00,000/-

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REGULAR CA

Payable at par through clearing/transfer at all branches of HDFC BANK LTD

For SHUBHAM SALES CO

Authorised Signatories
Please sign above / कृपया यहाँ हस्ताक्षर करें

For SHUBHAM SALES Co. Partner

⑈000259⑈ ⑆124240002⑆ 058131⑈ 29

HDFC BANK

401-402, MODEL TOWN DELHI ROAD
, ROHTAK-124001 HARYANA

RTGS / NEFT IFSC : HDFC0000176

Imperia

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Valid for 3 months only

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Or Bearer

Rupees रुपये

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A/c No. खाता क्र. 50200047948219

Brn: 0176 Pdt: 200
REGULAR CA

Payable at par through clearing/transfer at all branches of HDFC BANK LTD

For SHUBHAM SALES CO

Authorised Signatories

Please sign above / कृपया यहाँ हस्ताक्षर करें

⑈000265⑈ ⑆124240002⑆ 058131⑈ 29

SHUBHAM SALES COMPANY
ARYA BHAWAN, OLD ANAJ MANDI,
ROHTAK-124001
M: +91-92167-23543
E-mail : shubhamsalescomp@gmail.com

By hand.

March 17, 2025

To,

The Executive Director,

NFL, Panipat Haryana.

Reference: Our letter. Dt. 01/03/2025. e-mail dated 11.03.2025 and today's meeting with members of the honourable committee at NFL Panipat.

Subject: Our Final Proposal for disposal of remaining Carbon Slurry/Material from NFL Panipat.

With reference to the referred letter and discussions there on till date, we hereby finally submit as under:

1. That we propose to lift the complete material subject to acceptance of following requested assistance at site as per directions of the honourable NGT, New Delhi in the case matter of OA 620/2022, of Kaushal Kishore Vishwakarma V/s State of Punjab & Others, by 31.03.2028.
2. Refund of complete amount of Rs. 6,79,98,167.00 deposited by us as advance deposit and security deposit as per requested in meeting and reproduced hereunder:
   A. To support us immediate financially to our endeavour to speed up lifting by using mechanical, automatic material handling, water load reduction unit at site, 25% amount I.e. Rs. 1,69,99,542.00, may please be refunded at the shortest possible time, against submission of Indemnity bond & PDC cheques of same value as security and our show of commitment.
   B. Refund of balance of Rs. 5,09,98,625.00 against submission of 5 No. BG's of same value in favor of NFL Panipat, within 45 days of issuance of LOI/Revised Sale Order. NFL shall be having rights to claim reimbursement of Rs. 1,69,99,542.00 paid as advance to us by encashment of cheques and invoking indemnity bond, in case of non-submission of BG's by us.
   C. The said BG's shall be valid for the 36 months plus claim period of 3 months.
   D. The 5 No of BG's will be of equal amount of Rs. 1,01,99,725.00, having the same validity period.
   E. In case of any short lifting of quantity the said PDC/ BG can be encashed against demand raised from us by NFL.
   F. The said security instruments, such as PDC and respective BG's shall be returned by the NFL to us, at lifting of corresponding quantity listed in the below schedule at Sr. No. "H". The last BG shall be returned at completion of the contract to the satisfaction of the Engineer Incharge.
   G. In case the quantity turns out to be lesser than 119208 MT as per today's records of NFL and ponds are free of carbon slurry, the contract shall be considered complete in all respect and all remaining securities shall be returned to us by NFL.

Cont. Page 2

SHUBHAM SALES COMPANY
ARYA BHAWAN, OLD ANAJ MANDI,
ROHTAK-124001
M: +91-90345-45447
+91-92167-23543
E-mail : shubhamsalescom@gmail.com

11. We propose the lifting in the timeline as per the schedule hereunder:

Installment No.	Quantity (MT)	Amount (Rs.)	Qty %	Period of Lifting	Security
1	4208	16999542	25%	01.04.2025 to 31.08.2025	PDC and Indemnity Bond of same value
2	23000	10199725	15%	01.09.2025 to 28.02.2026	5 BG of value of Rs. 1,01,99,725.00 Each.
3	23000	10199725	15%	01.03.2026 to 31.08.2026	
4	23000	10199725	15%	01.09.2026 to28.02.2027	
5	23000	10199725	15%	01.03.2027 to 31.08.2027	
6	23000	10199725	15%	01.09.2027 to 31.03.2028	
Total	**119208**	**67998167**	**100%**		

And to the effect that NFL agrees to our request to provided following on site support:

3. Providing Carbon Slurry Material free of cost.
4. Providing free of cost supply of Power at one point in battery limit of NFL.
5. Providing Steam free of cost basis at Battery limit of NFL. Laying the header to site shall be in our scope, including necessary clearance from statutory bodies.
6. Providing free potable water at Battery limit at one point.
7. Permission for mobilizing & operation and maintenance of our mobile/skid mounted material handling, water load reducing unit at Pond site itself, for speedier Clarence of actual Carbon Material at the earliest possible time.
8. The said unit shall be designed, commissioned & operated as per best engineering, OHSAS, complying with environmental norms and rules of the time at our own cost and risk.
9. We undertake to hand over site back to NFL after removal of all our resources, tools, tackles etc. and also submit clearance certificate from Haryana State Pollution Control Board, to the effect that Carbon Material/Slurry from Pond No. 1 & 2 has been lifted and cleared as per contract, and than we will submit our request for refund of last BG and completion certificate from NFL along with settlement of all accounts.

Looking forward to hear from you soon.

Thanking You,
Warm Regards,

Nupinder Singh Sivia
Partner

Punit Jain <punit.jain@nfl.co.in>

Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.

Punit Jain <punit.jain@nfl.co.in> Wed, Sep 11, 2024 at 4:53 PM
To: Keshav Arora <karora@mstcindia.co.in>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>, Sandhya Batra <sbatra@nfl.co.in>

Subject: Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.

Reference: Auction No. MSTC/CDG/NATIONAL FERTILIZERS LIMITED/11/BATHINDA/20-21/22287 Dated 12/01/2021 for disposal of Carbon Slurry.

Against above referred E-auction, H-1 bid of M/s Shubham Sales Co., Rohtak has been accepted and Acceptance letter dated 20/04/2021 and 1st DO for 13860 MT Carbon Slurry was issued to M/s Shubham Sales Co., Rohtak. Till date Party has not completed the lifting of the auctioned material.

Further, with reference to the order dated 28.08.2024 passed by Hon'ble NGT in OA 620/2022 (Copy attached), you are requested to Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC at the earliest latest by 13/09/2024.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN

उप प्रबंधक (सामग्री) / Deputy Manager (Materials)

उनके लिए और उनकी तरफ से / For and on behalf of

नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459

ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

NGT Order Dated 28.08.2024
392K

Punit Jain <punit.jain@nfl.co.in>

Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.

Keshav Arora <karora@mstcindia.co.in> Tue, Sep 17, 2024 at 6:00 PM
To: Punit Jain <punit.jain@nfl.co.in>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>, RM CRO <bmcdgmstc@mstcindia.in>, cdgopn2@mstcindia.in

Dear Sir,

Kindly refer to your trailing mail. As per records, as on today 17-09-2024 at MSTC, Buyer **M/s shubham sales co, Rohtak** is dealing in Carbon Slurry with validity till 30-09-2024 as per Haryana State Pollution Control Board Authorization Cum Passbook submitted by buyer at MSTC and found valid as on date.

सादर धन्यवाद,

केशव अरोरा

उप प्रबधक

एम एस टी सी लिमिटेड, चंडीगढ़ कार्यालय

भारत सरकार की एक उद्यम

दूरभाष: 0172-2584921/9830430434

Thanks and regards,

Keshav Arora

Deputy Manager

MSTC Limited, Chandigarh Office

A Government of India Enterprise

Telephone: 0172-2584921/9830430434

अस्वीकरण

इस ईमेल की सामग्री और कोई भी अनुलग्नक गोपनीय हैं और केवल नामित प्राप्तकर्ता (ओं) के लिए अभिप्रेत हैं। यह कोई संलग्न नहीं करेगाप्रवर्तक या एमएसटीसी लिमिटेड या उसके सहयोगियों पर दायित्व। इस ईमेल में प्रस्तुत कोई भी विचार या राय पूरी तरह से लेखक के हैं और जरूरी नहीं कि एमएसटीसी लिमिटेड या उसके सहयोगियों की राय प्रतिबिंबित हो। प्रजनन, प्रसार, नकल, प्रकटीकरण का कोई भी रूप, इस ईमेल के लेखक की पूर्व लिखित सहमति के बिना इस संदेश का संशोधन, वितरण और / या प्रकाशन सख्ती से है

निषिद्ध। यदि आपको यह ईमेल त्रुटि में प्राप्त हुआ है, तो कृपया इसे हटा दें और प्रेषक को तुरंत सूचित करें

Disclaimer

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अस्वीकरण : यह संदेश गोपनीय एवं विशेषाधिकृत है | यह ईमेल एवं इसके साथ प्रेषित फाईलें, गोपनीय और केवल संबोधित व्यक्ति या संस्था के उपयोग के लिए हैं | यदि आपको यह ईमेल गलती से प्राप्त हुआ है तो आप इस ईमेल का प्रसार, वितरण या प्रतिलिपि न करें, प्रेषक को तुरंत ईमेल द्वारा सूचित करें और अपने सिस्टम से इस ईमेल को हटा दें | प्रेषिती के अतिरिक्त अन्य किसी के द्वारा किसी भी ढंग से इस ईमेल का उपयोग अनाधिकृत है और ऐसा कोई उपयोग उपयुक्त कार्रवाई के लिये उत्तरदायी होगा |

Punit Jain <punit.jain@nfl.co.in>

Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.

Punit Jain <punit.jain@nfl.co.in> Fri, Sep 20, 2024 at 10:08 AM
To: Keshav Arora <karora@mstcindia.co.in>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>, RM CRO <bmcdgmstc@mstcindia.in>, cdgopn2@mstcindia.in

Dear Sir

You are requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN

उप प्रबंधक (सामग्री) / Deputy Manager (Materials)

उनके लिए और उनकी तरफ से / For and on behalf of

नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459

ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

[Quoted text hidden]

Punit Jain <punit.jain@nfl.co.in>

Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.

Punit Jain <punit.jain@nfl.co.in> Wed, Sep 25, 2024 at 2:28 PM
To: Keshav Arora <karora@mstcindia.co.in>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>, RM CRO <bmcdgmstc@mstcindia.in>, cdgopn2@mstcindia.in

Reminder:

Dear Sir

Kindly refer to our previous emails and telephonic discussion in the subject matter, You are once again requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.

आपको धन्यवाद,

सादर

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नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459

ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

[Quoted text hidden]

Re: Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.

Me Punit Jain <punit.jain@nfl.co.in>
Thu, 07 Nov 2024 4:19:09 PM +0530 •

To "pankajkumar" <pankajkumar@mstcindia.co.in>

Cc "Gurpreet Singh Layal" <gslayal@nfl.co.in>, "Pawan Agrawal" <pagrawal@nfl.co.in>, "RM CRO" <bmcdgmstc@mstcindia.in>, "cdgopn2" <cdgopn2@mstcindia.in>

REMINDER

Dear Sir

Kindly refer to our previous emails and telephonic discussion in the subject matter, You are once again requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN
उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
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मोबाइल न. / Mobile No 7597288501 / 9878115459
ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

On Wed, Sep 25, 2024 at 2:28 PM Punit Jain <punit.jain@nfl.co.in> wrote:

> Reminder:
>
> Dear Sir
>
> Kindly refer to our previous emails and telephonic discussion in the subject matter, You are once again requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.
> आपको धन्यवाद,
>
> सादर
>
> पुनीत जैन / PUNIT JAIN
> उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
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> नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
> मोबाइल न. / Mobile No 7597288501 / 9878115459
> ई मेल/Email: punit.jain@nfl.co.in
>
> REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

On Fri, Sep 20, 2024 at 10:08 AM Punit Jain <punit.jain@nfl.co.in> wrote:

> > Dear Sir
> >
> > You are requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.
> >
> > आपको धन्यवाद,
> >
> > सादर
> >
> > पुनीत जैन / PUNIT JAIN
> > उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
> > उनके लिए और उनकी तरफ से / For and on behalf of
> > नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
> > मोबाइल न. / Mobile No 7597288501 / 9878115459
> > ई मेल/Email: punit.jain@nfl.co.in

Re: Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.

Me Punit Jain <punit.jain@nfl.co.in>
Tue, 17 Dec 2024 12:11:48 PM +0530 •

To "pankajkumar" <pankajkumar@mstcindia.co.in>, "RM CRO" <bmcdgmstc@mstcindia.in>

Cc "Gurpreet Singh Layal" <gslayal@nfl.co.in>, "Pawan Agrawal" <pagrawal@nfl.co.in>

Reminder:

Dear Sir

Kindly refer to our previous emails and telephonic discussion in the subject matter, You are once again requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN
उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
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मोबाइल न. / Mobile No 7597288501 / 9878115459
ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

On Thu, Nov 7, 2024 at 4:19 PM Punit Jain <punit.jain@nfl.co.in> wrote:

> REMINDER
>
> Dear Sir
>
> Kindly refer to our previous emails and telephonic discussion in the subject matter, You are once again requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.
>
> आपको धन्यवाद,
>
> सादर
>
> पुनीत जैन / PUNIT JAIN
> उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
> उनके लिए और उनकी तरफ से / For and on behalf of
> नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
> मोबाइल न. / Mobile No 7597288501 / 9878115459
> ई मेल/Email: punit.jain@nfl.co.in
>
> REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

On Wed, Sep 25, 2024 at 2:28 PM Punit Jain <punit.jain@nfl.co.in> wrote:

> > Reminder:
> >
> > Dear Sir
> >
> > Kindly refer to our previous emails and telephonic discussion in the subject matter, You are once again requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.
> > आपको धन्यवाद,
> >
> > सादर
> >
> > पुनीत जैन / PUNIT JAIN
> > उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
> > उनके लिए और उनकी तरफ से / For and on behalf of
> > नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
> > मोबाइल न. / Mobile No 7597288501 / 9878115459
> > ई मेल/Email: punit.jain@nfl.co.in

Re: Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.

Me Punit Jain <punit.jain@nfl.co.in>
Wed, 18 Dec 2024 10:52:03 AM +0530 •

To "ssharma" <ssharma@mstcindia.co.in>, "RM CRO" <bmcdgmstc@mstcindia.in>

Cc "gslayal" <gslayal@nfl.co.in>, "pagrawal" <pagrawal@nfl.co.in>, "pankajkumar" <pankajkumar@mstcindia.co.in>

Dear Sir

With reference to trailing mail, following e-auctions were conducted earlier for sale / disposal of Carbon Slurry through MSTC Chandigarh office on behalf of our unit:

1. Auction No. MSTC/CDG/NATIONAL FERTILIZERS LIMITED/23/ BATHINDA/19-20/25127 dated 30.12.2019
2. Auction No. MSTC/CDG/NATIONAL FERTILIZERS LIMITED/24/BATHINDA/19-20/32703 dated 20.02.2020
3. Auction No. MSTC/CDG/NATIONAL FERTILIZERS LIMITED/11/ BATHINDA/20-21/22287 dated 12.01.2021

You are requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN
उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
उनके लिए और उनकी तरफ से / For and on behalf of
नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459
ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

On Wed, Dec 18, 2024 at 1:07 AM RM CRO <bmcdgmstc@mstcindia.in> wrote:

> Dear Sir,
>
> In order to provide details concerning previous registered buyers who participated / registered for the auctions of the Carbon Slurry; kindly provide us previous e-auction reference number and/or e-auction reference date, if any, conducted from MSTC Chandigarh Regional Office.
>
> Also this is to inform that consequent upon transfer of our official Shri Keshav Arora, presently Shri Suneel Kumar Sharma, Assistant Manager (Operations) (E-Mail: cdgopn6@mstcindia.in; Mobile: 7986758707) from MSTC Chandigarh Regional Office is looking after e-auctions on behalf of your unit.
>
> सादर धन्यवाद
> क्षेत्रीय प्रबंधक
> चंडीगढ़ क्षेत्रीय कार्यालय
> एमएसटीसी लिमिटेड
>
> **From:** punit.jain@nfl.co.in [mailto:punit.jain@nfl.co.in]
> **Sent:** 17 December 2024 12:12
> **To:** pankajkumar@mstcindia.co.in; RM CRO
> **Cc:** gslayal@nfl.co.in; pagrawal@nfl.co.in
> **Subject:** Re: Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.
>
> Reminder:
>
> Dear Sir
>
> Kindly refer to our previous emails and telephonic discussion in the subject matter, You are once again requested to provide all the previous registered buyers who participated / registered for the auctions of the Carbon Slurry and also provide the contact information (i.e. Mobile No., Email ID) if available with MSTC.
>
> आपको धन्यवाद,

RE: Provide the list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd. – I) available with M/s MSTC.

SS Suneel Sharma <ssharma@mstcindia.co.in>
Tue, 24 Dec 2024 11:52:46 AM +0530 •

To "'Punit Jain'" <punit.jain@nfl.co.in>

Cc "gslayal" <gslayal@nfl.co.in>, "pagrawal" <pagrawal@nfl.co.in>, "pankajkumar" <pankajkumar@mstcindia.co.in>, "'RM CRO'" <bmcdgmstc@mstcindia.in>

Tags G-Important

महोदय/महोदया

Dear Sir/Mam

Details of the buyers who participated in the auctions as requested in your trailing email 18.12.24 are given below.

Sr. no.	Buyer Regn. No.	Mob. No.	Email Id.
Auction No. MSTC/CDG/NATIONAL FERTILIZERS LIMITED/23/ BATHINDA/19-20/25127 dated 30.12.2019			
1	SHUBHAM SALES CO./36213	9034680772	shubhamsalesco@gmail.com
2	MIRZAPUR METAL REFINERY/133335	9910930505	mirzapur9450314661@gmail.com
Auction No. MSTC/CDG/NATIONAL FERTILIZERS LIMITED/24/BATHINDA/19-20/32703 dated 20.02.2020			
1	SHIVAM CHEMICAL/119217	9812005805	shivamchemical06@gmail.com
2	shubham sales co/140098	9813122762	shubhamsalescom@gmail.com
3	MIRZAPUR METAL REFINERY/133335	9910930505	mirzapur9450314661@gmail.com
Auction No. MSTC/CDG/NATIONAL FERTILIZERS LIMITED/11/ BATHINDA/20-21/22287 dated 12.01.2021			
1	shubham sales co/140098	9813122762	shubhamsalescom@gmail.com
2	MIRZAPUR METAL REFINERY/133335	9910930505	mirzapur9450314661@gmail.com

The above details may also be checked with data available in Seller's MSTC login or the manual record maintained by NFL, if any.

सादर धन्यवाद/ Thanks & regards,
सुनील कुमार शर्मा/ Suneel Kumar Sharma,
सहायक प्रबंधक/ Assitant Manager,
एमएसटीसी लिमिटेड चंडीगढ़ क्षेत्रीय कार्यलय/ MSTC Ltd. Chandigarh Regional Office

Punit Jain <punit.jain@nfl.co.in>

Carbon Slurry Disposal

Punit Jain <punit.jain@nfl.co.in> Sat, Sep 14, 2024 at 3:10 PM
To: "mirzapur9450314661@gmail.com" <mirzapur9450314661@gmail.com>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>

Dear Sir

Earlier, you participated in our auctions for disposal of Carbon Slurry under HWM Rules-2016 - CAT. 18.2 SCHD-I.

In this regard, you are requested to confirm that currently you are working in the field of Carbon Slurry disposal. In case you are working in this field, kindly submit your valid authorization Certificate from Concern State Pollution Control Board enabling us to contact / send you our future enquiries.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN

उप प्रबंधक (सामग्री) / Deputy Manager (Materials)

उनके लिए और उनकी तरफ से / For and on behalf of

नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459

ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

एन एफ एल
N F L
A Navratna Company

Punit Jain <punit.jain@nfl.co.in>

Carbon Slurry Disposal

Punit Jain <punit.jain@nfl.co.in> Thu, Sep 19, 2024 at 10:18 AM
To: "mirzapur9450314661@gmail.com" <mirzapur9450314661@gmail.com>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>

Reminder:

Dear Sir

Kindly refer to our trailing mail and telephonic conversation held on 14.09.2024. You are requested to confirm that currently you are working in the field of Carbon Slurry disposal. In case you are working in this field, kindly submit your valid authorization Certificate from Concern State Pollution Control Board enabling us to contact / send you our future enquiries.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN

उप प्रबंधक (सामग्री) / Deputy Manager (Materials)

उनके लिए और उनकी तरफ से / For and on behalf of

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मोबाइल न. / Mobile No 7597288501 / 9878115459

ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

[Quoted text hidden]

Punit Jain <punit.jain@nfl.co.in>

Carbon Slurry Disposal

Punit Jain <punit.jain@nfl.co.in> Sat, Sep 14, 2024 at 3:10 PM
To: "shivamchemicals500@gmail.com" <shivamchemicals500@gmail.com>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>

Dear Sir

Earlier, you participated in our auctions for disposal of Carbon Slurry under HWM Rules-2016 - CAT. 18.2 SCHD-I.

In this regard, you are requested to confirm that currently you are working in the field of Carbon Slurry disposal. In case you are working in this field, kindly submit your valid authorization Certificate from Concern State Pollution Control Board enabling us to contact / send you our future enquiries.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN

उप प्रबंधक (सामग्री) / Deputy Manager (Materials)

उनके लिए और उनकी तरफ से / For and on behalf of

नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459

ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

एन एफ एल
N F L
A Navratna Company

Punit Jain <punit.jain@nfl.co.in>

Carbon Slurry Disposal

Punit Jain <punit.jain@nfl.co.in> Thu, Sep 19, 2024 at 10:16 AM
To: "shivamchemicals500@gmail.com" <shivamchemicals500@gmail.com>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>

Reminder:

Dear Sir

Kindly refer to our trailing mail and telephonic conversation held today. You are requested to confirm that currently you are working in the field of Carbon Slurry disposal. In case you are working in this field, kindly submit your valid authorization Certificate from Concern State Pollution Control Board enabling us to contact / send you our future enquiries.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN

उप प्रबंधक (सामग्री) / Deputy Manager (Materials)

उनके लिए और उनकी तरफ से / For and on behalf of

नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459

ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

[Quoted text hidden]

Punit Jain <punit.jain@nfl.co.in>

Carbon Slurry Disposal

Shivam Chemicals <shivamchemicals500@gmail.com> Fri, Sep 20, 2024 at 8:56 AM
To: Punit Jain <punit.jain@nfl.co.in>

Respected Sir,

As per our telephonic conversation and the information provided by you in the mail, I would like to confirm you that currently I am working in the field of Carbon Slurry disposal. I would also like to bring to your notice that my current authorisation certificate is under renewal. I could also get a new certificate if you provide us with an opportunity for carbon slurry disposal for your future endeavours.

We guarantee you the best carbon slurry disposal services. Kindly provide us with the information about your future carbon slurry disposal requirements.

[Quoted text hidden]
[Quoted text hidden]

Punit Jain <punit.jain@nfl.co.in>

Carbon Slurry Disposal

Punit Jain <punit.jain@nfl.co.in> Mon, Sep 23, 2024 at 2:39 PM
To: Shivam Chemicals <shivamchemicals500@gmail.com>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>

Sir,

Thanks for your prompt response.

In this regard, you are requested to provide the following:

1. Latest Copy of Sale Order of Carbon Slurry executed by you.
2. Date of expiry of the Hazardous Waste Authorization for Carbon Slurry of your firm.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN

उप प्रबंधक (सामग्री) / Deputy Manager (Materials)

उनके लिए और उनकी तरफ से / For and on behalf of

नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459

ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

[Quoted text hidden]

A Navratna Company

Punit Jain <punit.jain@nfl.co.in>

Carbon Slurry Disposal

Punit Jain <punit.jain@nfl.co.in> Wed, Sep 25, 2024 at 5:17 PM
To: Shivam Chemicals <shivamchemicals500@gmail.com>
Cc: Gurpreet Singh Layal <gslayal@nfl.co.in>, Pawan Agrawal <pagrawal@nfl.co.in>

Sir

With respect to trailing mail and as per telephonic discussion, you are once again requested to provide the following on priority:

1. Latest Copy of Sale Order of Carbon Slurry executed by you.
2. Date of expiry of the Hazardous Waste Authorization for Carbon Slurry of your firm.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN

उप प्रबंधक (सामग्री) / Deputy Manager (Materials)

उनके लिए और उनकी तरफ से / For and on behalf of

नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459

ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417, Website: www.nationalfertilizers.com

[Quoted text hidden]

Re: Carbon Slurry Disposal

Me Punit Jain <punit.jain@nfl.co.in>
Thu, 07 Nov 2024 4:17:41 PM +0530 •
To "Shivam Chemicals" <shivamchemicals500@gmail.com>
Cc "Gurpreet Singh Layal" <gslayal@nfl.co.in>, "Pawan Agrawal" <pagrawal@nfl.co.in>

REMINDER:

Dear Sir

Kindly refer our trailing mail, you are once again requested to provide the following on priority:

1. Latest Copy of Sale Order of Carbon Slurry executed by you.
2. Date of expiry of the Hazardous Waste Authorization for Carbon Slurry of your firm.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN
उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
उनके लिए और उनकी तरफ से / For and on behalf of
नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459
ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417,
Website: www.nationalfertilizers.com

On Wed, Sep 25, 2024 at 5:17 PM Punit Jain <punit.jain@nfl.co.in> wrote:

> Sir
>
> With respect to trailing mail and as per telephonic discussion, you are once again requested to provide the following on priority:
>
> 1. Latest Copy of Sale Order of Carbon Slurry executed by you.
> 2. Date of expiry of the Hazardous Waste Authorization for Carbon Slurry of your firm.
>
> आपको धन्यवाद,
>
> सादर
>
> पुनीत जैन / PUNIT JAIN
> उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
> उनके लिए और उनकी तरफ से / For and on behalf of

Re: Carbon Slurry Disposal

Me Punit Jain <punit.jain@nfl.co.in>
Tue, 17 Dec 2024 12:05:36 PM +0530 •

To "Shivam Chemicals" <shivamchemicals500@gmail.com>

Cc "Gurpreet Singh Layal" <gslayal@nfl.co.in>, "Pawan Agrawal" <pagrawal@nfl.co.in>

Reminder:

Dear Sir

Kindly refer our trailing mail and as per our telephonic conversations held, you are once again requested to provide the following on priority:

1. Latest Copy of Sale Order of Carbon Slurry executed by you.
2. Date of expiry of the Hazardous Waste Authorization for Carbon Slurry of your firm.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN
उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
उनके लिए और उनकी तरफ से / For and on behalf of
नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459
ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417,
Website: www.nationalfertilizers.com

On Thu, Nov 7, 2024 at 4:17 PM Punit Jain <punit.jain@nfl.co.in> wrote:

> REMINDER:
>
> Dear Sir
>
> Kindly refer our trailing mail, you are once again requested to provide the following on priority:
>
> 1. Latest Copy of Sale Order of Carbon Slurry executed by you.
> 2. Date of expiry of the Hazardous Waste Authorization for Carbon Slurry of your firm.
>
> आपको धन्यवाद,
>
> सादर
>
> पुनीत जैन / PUNIT JAIN

Re: Carbon Slurry Disposal

SC Shivam Chemicals <shivamchemicals500@gmail.com>
Thu, 02 Jan 2025 3:02:41 PM +0530 •

To "Punit Jain" <punit.jain@nfl.co.in>

Tags G-Important

Respected Sir,

As per our telephonic conversation and the information provided by you in the mail, I would like to confirm you that currently I am working in the field of Carbon Slurry disposal. I would also like to bring to your notice that my current authorisation certificate is under renewal. I could also get a new certificate if you provide us with an opportunity for carbon slurry disposal for your future endeavours.

We guarantee you the best carbon slurry disposal services. Kindly provide us with the information about your future carbon slurry disposal requirements.

On Tue, 17 Dec 2024 at 12:05 PM, Punit Jain <punit.jain@nfl.co.in> wrote:

> Reminder:
>
> Dear Sir
>
> Kindly refer our trailing mail and as per our telephonic conversations held, you are once again requested to provide the following on priority:
>
> 1. Latest Copy of Sale Order of Carbon Slurry executed by you.
> 2. Date of expiry of the Hazardous Waste Authorization for Carbon Slurry of your firm.
>
> आपको धन्यवाद,
>
> सादर
>
> पुनीत जैन / PUNIT JAIN
> उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
> उनके लिए और उनकी तरफ से / For and on behalf of
> नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
> मोबाइल न. / Mobile No 7597288501 / 9878115459
> ई मेल/Email: punit.jain@nfl.co.in
>
> REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417,
> Website: www.nationalfertilizers.com
>
> On Thu, Nov 7, 2024 at 4:17 PM Punit Jain <punit.jain@nfl.co.in> wrote:
>
> > REMINDER:

Re: Carbon Slurry Disposal

Me Punit Jain <punit.jain@nfl.co.in>
Tue, 14 Jan 2025 9:09:27 AM +0530 •
To "Shivam Chemicals" <shivamchemicals500@gmail.com>
Cc "Gurpreet Singh Layal" <gslayal@nfl.co.in>, "Pawan Agrawal" <pagrawal@nfl.co.in>

Dear Sir

Kindly refer to our earlier communications on the subject matter.

It is mentioned that till date you have not submitted the valid Hazardous waste Authorization nor any sale order executed by you for disposal of Carbon slurry.

Further, approx. 4 months have been passed since your response that your Hazardous waste licence is under renewal. But till date you have not submitted the copy of Hazardous waste Certificate.

It is mentioned that your firm is only considered for our future disposal activity of Carbon Slurry only if you have valid Hazardous waste certificate and other necessary documents. Therefore, if you are interested in future disposal activity of Carbon Slurry, you are once again requested to get the Hazardous waste Licence and submit the same on priority basis.

आपको धन्यवाद,

सादर

पुनीत जैन / PUNIT JAIN
उप प्रबंधक (सामग्री) / Deputy Manager (Materials)
उनके लिए और उनकी तरफ से / For and on behalf of
नेशनल फर्टिलाइज़र्स लिमिटेड, बठिंडा / National Fertilizers Ltd, Bathinda-151003
मोबाइल न. / Mobile No 7597288501 / 9878115459
ई मेल/Email: punit.jain@nfl.co.in

REGD. OFFICE : SCOPE COMPLEX, CORE-III, 7 INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI - 110 003, Tel: 011-24360066, FAX: 24361553, CIN: L74899DL1974GO1007417,
Website: www.nationalfertilizers.com

On Fri, Jan 3, 2025 at 11:57 AM Punit Jain <punit.jain@nfl.co.in> wrote:

> Dear Sir
>
> Kindly refer our trailing mail and as per our telephonic conversations held, you are once again requested to provide the following on priority:
>
> 1. Latest Copy of Sale Order of Carbon Slurry executed by you.

नेशनल फर्टिलाइज़र्स लिमिटेड
(भारत सरकार का उपक्रम)
बठिंडा इकाई: सिबियां रोड,
बठिंडा, पंजाब–151003
0164-2270261, 2760262, फैक्स: 2760270

एन एफ एल
NFL
A Navrata Company

NATIONAL FERTILIZERS LIMITED
(A Govt. of India Undertaking)
Bathinda Unit- Sibian Road,
Bathinda, Punjab-151003
0164-2270261, 2760262, Fax: 2760270

Ref: NFB/CGM Sectt./35

Dtd.:September 20th '2024

Sh.Pankaj Purohit
General Manager (Steam & Power)
M/s Gujarat Narmada Valley Fertilizers & Chemicals Limited,
Bharuch, Gujarat

Subject: Regarding utilization of carbon along with Coal in Boilers.

Dear Sir,

We are in receipt of a communication from CPCB regarding the utilization of carbon by M/s Gujarat Narmada Valley Fertilizers & Chemicals Limited (GNVFCL) in the boiler along with coal.

At Bathinda Ammonia-Urea complex of National Fertilizers Limited (NFL), in the year 2012, we have successfully replaced LSHS with Natural Gas by replacing the front-end of Ammonia plant along with modification in the support fuel of coal fired boilers. Before 2012, Ammonia was produced with the partial oxidation process with raw material as LSHS, which used to generate carbon. Part of the said carbon was being recycled in the process itself, however, part of the carbon was being shifted to designated carbon ponds area for further disposal by complying the prevalent guidelines & procedure. Since 2012, no carbon was generated from our plant.

For the past few years, we are in the process of disposal of the already stored carbon from the designated carbon ponds area, by way of sale through MSTC to the 3rd parties. However, the progress of carbon lifting is not matching with the targets chalked down for the complete disposal.

As mentioned above, it came to our notice that apart from producing Ammonia through Natural gas reforming route, M/s GNVFC is still utilizing the LSHS for production of a small quantity of Ammonia. Further the carbon so generated (around 2000 MTPA) during the process is being utilized in-house along with coal in the boilers.

To fast track the disposal process, NFL Bathinda unit is also planning to utilize the part of carbon stored in carbon ponds area in the existing coal fired boilers.

In this regard, we hereby request M/s GNVFC to share their methodology / procedure being adopted for feeding carbon in the coal fired boilers including precautions & guidelines being complied by them.

Thanking you,

Yours sincerely,

20.9.24

(Tarun Kumar Batra)
Chief General Manager

एन एफ एल
NFL

Re: Regarding utilization of carbon along with Coal in Boilers

T K Batra <tkbatra@nfl.co.in> Sun, Sep 22, 11:40 AM (22 hours ago)

to Pankaj, yogesh, bcc: Rajesh, bcc: Sandhya

Dear Sh Pankaj Purohit
Thanks for the quick response.
Regards
TKBatra CGM NFL Bathinda

On Sat, Sep 21, 2024, 16:25 Pankaj Purohit <pkpurohit@gnfc.in> wrote:

Dear Sir,

First of all, the efforts put by you and your team at NFL for environment protection by recycling the effluents are highly appreciated.

GNFC operates gasification of LSHS by partial oxidation for ammonia production in addition to NG reforming. During the process of partial oxidation of oil, some gray water / soot water are generated. These carbon soot bearing effluents are being stored at carbon soot settling pond at ETP plant. Over a period, after soot settling and drying, carbon soot is sent to Coal Handling plant for recycling along with coal being fed to the boilers. We have used substantial quantity of carbon soot and no combustion related problems were observed.

As intended in your letter, NFL plans to use / recycle carbon soot to their boilers.

Based on our experience, GNFC suggests the following for successful utilization of carbon soot to the boilers:

- Carbon soot should not contain traces of oil because it may create choking in bowl mills and may lead to poor performance of mills.

- Carbon soot may be mixed with coal in proportion of 1:20

- If required, little amount of water may be sprayed on soot so that dusting can be avoided.

- Unburnt / LOI content in bottom ash / fly ash may please be observed.

Hope the above will be useful. You may contact any time for mutual benefits.

Regards,

P K Purohit

General Manager

Steam & Power Generation, Urea Group of Plants

GNFC Ltd.

On 20/09/2024 15:33, T K Batra wrote:

Sir,

As discussed, kindly find attached letter on the subject and respond at the earliest please.

आदर सहित

तरुण कुमार बत्रा
मुख्य महाप्रबंधक
एन.एफ.एल., बठिंडा यूनिट

नेशनल फर्टिलाइज़र्स लिमिटेड
(भारत सरकार का उपक्रम)
बठिंडा इकाई : सिबियाँ रोड,बठिंडा –151003 पंजाब
दूरभाष : 0164 - 2270220, 2760200
फैक्स : 0164-2270463

एन एफ एल
NFL
A Navratna Company

NATIONAL FERTILIZERS LIMITED
(A Govt. of India Undertaking)
Bathinda Unit: Sibian Road, Bathinda - 151003 (Punjab)
Ph.: 0164-2270220 , 2760200
Fax: 0164-2270463

Ref: NFB/LAB/PPCB/2024

Dated : 23.09.2024

To
Environmental Engineer,
Punjab Pollution Control Board,
Zonal Office, Street No.12,
Power House Road,
Bathinda.

Subject: Compliance of the Directions given by Hon'ble NGT in the matter OA 620/2022 titled as Kaushal Kishore v/s State of Punjab & Ors.

Dear Sir,

In reference to the subject cited above and the Order dated 28.08.2024 passed by the National Green Tribunal in OA 620/2022 titled as Kaushal Kishore Vishwakarma vs. State of Punjab and Ors. In terms of the order the following directions have been issued in para 52:-

"In view of statutory provisions referred to above requiring time bound disposal of hazardous waste of carbon slurry and also the quantity lifted by respondent no. 5 so far, we consider it necessary to seek response from respondents no. 2, 4, 6, 7 and 11 as to measures required to be taken for suitably increasing the number of contractors for disposal of the quantity of carbon slurry stored by respondents no. 4-NFL,Bathinda and 7-NFL, Panipat within the period of 180 days in time bound manner without any further extension of time."

For compliance of the above directions, your good self is requested to provide the list of Licensed Contractors, registered with the PPCB, who in turn could help to expedite the process of lifting the Carbon Slurry from NFL, Bathinda within the period of 180 days in time bound manner. Presently, job of disposal of carbon slurry has been entrusted with M/s Shubham Sales, Rohtak but the disposal rate is very less.

You are also requested to give a suitable time to discuss the measures required to be taken for increasing the number of contractors for disposal of the quantity of carbon slurry stored at the unit.

Yours Truly,

For National Fertilizers Limited, Bathinda

Chief Mgr (Lab)

Received 23.9.24

कॉरपोरेट कार्यालय : ए-11, सैक्टर-24, नोएडा - 201301 (उ.प्र.), दूरभाष : 0120-2412383, फैक्स : 0120-2412384
Corporate Office : A-11 , Sector – 24 , Noida - 201301 (UP), Tel : 0120-2412383, Fax : 0120 - 2412384
जीकृत कार्यालय: स्कोप कॉम्प्लेक्स ,कोर – III , 7, इन्स्टिट्यूशनल एरिया, लोधी रोड, नई दिल्ली– 110003,दूरभाष:011-24361252, फैक्स: 011-24361553
Regd. Office : Scope Complex Core – III , 7 , Institutional Area , Lodhi Road, New Delhi -110003 ,Tel : 011-24361252, Fax: 011-24361553
CIN : L74899DL1974GOI007417 Website : http://www.nationalfertilizers.com @nationalfertilizers

1606

PUNJAB POLLUTION CONTROL BOARD
Zonal Office, Street No. 12, Power House Road, Bathinda
Email : seezobti@gmail.com

LiFE Lifestyle for Environment

No. 109 **Registered** Dated 10/1/2025

To

M/s National Fertilizers Ltd.,
Sivian Road, Bathinda.

Subject: **Imposition of Environmental Compensation (EC) – order thereof.**

Ref: **Industry's letter dated 24.10.2024**

In regard to letter under reference, the Board was requested to provide an up to date list of the licensed contractors registered with the State Board, who in turn could assist the industry in expediting the process of lifting the carbon slurry in a time bound manner.

In regard to above, it is intimated that there is no re-processor of hazardous waste of category 18.2 i.e. carbon slurry of schedule-I of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 in the State of Punjab.

This is for your kind information please.

10/01/2025

Environmental Engineer (ZB)
For Chairman, PPCB

Endst. No. _____ **Dated** _____

A copy of the above is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office, Bathinda for information and further necessary action please.

cd

Environmental Engineer (ZB)
For Chairman, PPCB

seemachawla@nfl.co.in

From:	Seema Chawla <seemachawla@nfl.co.in>
Sent:	13 February 2023 12:33
To:	sdewan@continentalcarbonindia.com; vkmaheshwari@continentalcarbonindia.com
Cc:	BIMLA SOREN
Subject:	utilisation of carbon

Dear Sir,

NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s CCIL is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon .

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 16 March 2023 12:09
To: 'Sharma, Puneet'; 'Mittal, Lokesh'; 'Dua, Vikram'; 'Dewan, Sanjay'; 'Dubey, V. K.'
Cc: BIMLA SOREN; bbgrover
Subject: use of Carbon

Dear Sir,

NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether as on date , M/s CCIL is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 20 May 2023 12:50
To: csrc.sales@continentalcarbonasia.com
Cc: BIMLA SOREN; bbgrover
Subject: use of Carbon

Dear Sir,

NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether as on date , M/s CCIL is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

Annexure A

seemachawla@nfl.co.in

From: seemachawla@nfl.co.in
Sent: 20 September 2024 16:09
To: 'csrc.sales@continentalcarbonasia.com'
Cc: 'BIMLA SOREN'
Subject: RE: use of Carbon

Dear Sir,

We are waiting for your response

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 20 May 2023 12:50
To: csrc.sales@continentalcarbonasia.com
Cc: BIMLA SOREN <bimlasoren@nfl.co.in>; bbgrover <bbgrover@nfl.co.in>
Subject: use of Carbon

Dear Sir,

NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether as on date , M/s CCIL is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon.

आदर सहित :
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National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From:	Seema Chawla <seemachawla@nfl.co.in>
Sent:	23 February 2023 08:24
To:	saligram8@gmail.com
Cc:	bbgrover; mngoyal@nfl.co.in
Subject:	Carbon Slurry

Dear Sir,

This has reference to the telecom regarding subject matter.

It is understood that your company has the relevant permissions for utilisation of carbon. As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016. You may kindly provide the details of your company and the valid authorisations you have from PCBs for collection, transportation and Utilization of carbon slurry under category 18.2 of Schedule-1.

आदर सहित :
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Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
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नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 16 March 2023 11:44
To: 'Aashish Kulshreshtha'
Cc: BIMLA SOREN
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. You may kindly indicate whether Carbon is being utilised in your industry?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Aashish Kulshreshtha <Kulshreshthaa@shreecement.com>
Sent: 16 March 2023 11:48
To: Seema Chawla
Cc: BIMLA SOREN
Subject: Re: use of carbon

Dear Ma'am
Thanks for the offer.
Can you provide us sample of 10 kg for necessary Lab or test analysis .
Apart from this we also want to lift dry fly ash from your plant, kindly spare meeting timings accordingly.

Regards,
Aashish

seemachawla@nfl.co.in

From: Aashish Kulshreshtha <Kulshreshthaa@shreecement.com>
Sent: 20 May 2023 12:20
To: Seema Chawla
Cc: 'BIMLA SOREN'; bbgrover
Subject: Re: use of carbon
Attachments: image001.jpg

Dear Mam
Our executive Mr Ramsuraj will visit at your plant on Monday before lunch timing 12 -12:30 PM.
Thanks for the above.

Regards
- Aashish

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: Saturday, 20 May 2023, 12:04 pm
To: Aashish Kulshreshtha <Kulshreshthaa@shreecement.com>
Cc: 'BIMLA SOREN' <bimlasoren@nfl.co.in>; bbgrover <bbgrover@nfl.co.in>
Subject: RE: use of carbon

Dear Sir,

We are awaiting your response.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla [mailto:seemachawla@nfl.co.in]
Sent: 16 March 2023 11:59
To: 'Aashish Kulshreshtha'
Cc: 'BIMLA SOREN'; bbgrover
Subject: RE: use of carbon

Dear Sir,

You may come anytime tomorrow after 1400 hrs or day after tomorrow any time.

आदर सहित :
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उप महा प्रबंधक(तकनीकी सेवाएँ)
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नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Aashish Kulshreshtha [mailto:Kulshreshthaa@shreecement.com]
Sent: 16 March 2023 11:48
To: Seema Chawla
Cc: BIMLA SOREN
Subject: Re: use of carbon

Dear Ma'am
Thanks for the offer.
Can you provide us sample of 10 kg for necessary Lab or test analysis .
Apart from this we also want to lift dry fly ash from your plant, kindly spare meeting timings accordingly.

Regards,
Aashish

एन एफ एल
seemachawla@nfl.co.in
A Navratna Company
पानीपत इकाई
PANIPAT UNIT

From: seemachawla@nfl.co.in
Sent: 14 January 2025 10:25
To: 'aashish.kulshreshtha@shree-cement.com'
Cc: Bimla Soren
Subject: use of carbon

Dear Sir,

In reference to trailing mail, sample was collected by the concerned. Kindly indicate whether that Carbon can be utilised in your industry

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: seemachawla@nfl.co.in
Sent: 14 January 2025 09:40
To: 'lalitesh.singh@adityabirla.com'
Cc: Bimla Soren; Rajiv Girdhar
Subject: FW: use of carbon

Dear Sir,

In reference to trailing mail, kindly indicate whether Carbon can be utilised in your industry.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 20 June 2023 12:59
To: Lalitesh Singh <lalitesh.singh@adityabirla.com>
Cc: BIMLA SOREN <bimlasoren@nfl.co.in>
Subject: FW: use of carbon

Dear Sir,
We are awaiting our response.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla [mailto:seemachawla@nfl.co.in]
Sent: 16 March 2023 11:52
To: Lalitesh Singh
Cc: BIMLA SOREN
Subject: use of carbon

DOCUMENT-34 (COLLY)

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 08:41
To: acchelp@acclimited.com
Cc: BIMLA SOREN; bbgrover
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s ACC is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 08:59
To: corporate@indiacements.co.in
Cc: BIMLA SOREN; bbgrover
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s India Cements is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
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उप महा प्रबंधक(तकनीकी सेवाएँ)
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नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From:	Seema Chawla <seemachawla@nfl.co.in>
Sent:	22 May 2023 09:02
To:	zclho@zcltd.com
Cc:	BIMLA SOREN; bbgrover
Subject:	use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s Zuari Cement Ltd is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 09:04
To: info@sagarcements.in
Cc: BIMLA SOREN; bbgrover
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s Sagar Cements Ltd is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 09:07
To: info@anjanicement.com
Cc: BIMLA SOREN; bbgrover
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s Anjani Portland Cement Ltd is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 09:09
To: ncl@nclind.com
Cc: BIMLA SOREN; bbgrover
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s NCL Industries (Cement Division) is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 12:38
To: marketing@anjanicement.com
Cc: BIMLA SOREN
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s NCL Industries (Cement Division) is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
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उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
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National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 14:35
To: customercare@dalmiacement.com
Cc: BIMLA SOREN
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s NCL Industries (Cement Division) is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
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Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
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नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: seemachawla@nfl.co.in
Sent: 20 September 2024 16:09
To: 'acchelp@acclimited.com'
Cc: 'BIMLA SOREN'
Subject: RE: use of carbon

Dear Sir,

We are waiting for your response

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 08:41
To: acchelp@acclimited.com
Cc: BIMLA SOREN <bimlasoren@nfl.co.in>; bbgrover <bbgrover@nfl.co.in>
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s ACC is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
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उप महा प्रवंधक(तकनीकी सेवाएँ)
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नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: seemachawla@nfl.co.in
Sent: 20 September 2024 16:09
To: 'corporate@indiacements.co.in'
Cc: 'BIMLA SOREN'
Subject: RE: use of carbon

Dear Sir,

We are waiting for your response

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 08:59
To: corporate@indiacements.co.in
Cc: BIMLA SOREN <bimlasoren@nfl.co.in>; bbgrover <bbgrover@nfl.co.in>
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s India Cements is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
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नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: seemachawla@nfl.co.in
Sent: 20 September 2024 16:08
To: 'zclho@zcltd.com'
Cc: 'BIMLA SOREN'
Subject: RE: use of carbon

Dear Sir,

We are waiting for your response

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 09:02
To: zclho@zcltd.com
Cc: BIMLA SOREN <bimlasoren@nfl.co.in>; bbgrover <bbgrover@nfl.co.in>
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s Zuari Cement Ltd is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: seemachawla@nfl.co.in
Sent: 20 September 2024 16:08
To: 'info@sagarcements.in'
Cc: 'BIMLA SOREN'
Subject: RE: use of carbon

Dear Sir,

We are waiting for your response

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 09:04
To: info@sagarcements.in
Cc: BIMLA SOREN <bimlasoren@nfl.co.in>; bbgrover <bbgrover@nfl.co.in>
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s Sagar Cements Ltd is authorized by PCB's under schedule 1, category 18,2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: seemachawla@nfl.co.in
Sent: 20 September 2024 16:07
To: 'marketing@anjanicement.com'
Cc: 'BIMLA SOREN'
Subject: RE: use of carbon

Dear Sir,

We are waiting for your response

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 12:38
To: marketing@anjanicement.com
Cc: BIMLA SOREN <bimlasoren@nfl.co.in>
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s NCL Industries (Cement Division) is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From:	seemachawla@nfl.co.in
Sent:	20 September 2024 16:08
To:	'ncl@nclind.com'
Cc:	'BIMLA SOREN'; 'bbgrover'
Subject:	RE: use of carbon

Tracking:	**Recipient**	**Recall**
	'ncl@nclind.com'	
	'BIMLA SOREN'	
	'bbgrover'	
	Bimla Soren	Failed: 20-09-2024 16:12

Dear Sir,

We are waiting for your response

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 09:09
To: ncl@nclind.com
Cc: BIMLA SOREN <bimlasoren@nfl.co.in>; bbgrover <bbgrover@nfl.co.in>
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s NCL Industries (Cement Division) is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla

seemachawla@nfl.co.in

From: seemachawla@nfl.co.in
Sent: 20 September 2024 16:07
To: 'customercare@dalmiacement.com'
Cc: 'BIMLA SOREN'
Subject: RE: use of carbon

Dear Sir,

We are waiting for your response

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 22 May 2023 14:36
To: customercare@dalmiacement.com
Cc: BIMLA SOREN <bimlasoren@nfl.co.in>
Subject: use of carbon

Dear Sir,

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016 and as per the CPCB guidelines in July 2017, for Pre-processing & Co-processing of Hazardous and other wastes in Cement Plant as per H&OW(M&TBM) Rules 2016, cement industries can use carbon in kilns.
NFL Panipat Unit is having stock of carbon lying in Carbon ponds generated from old FO based plant before 2013. Kindly confirm whether, M/s Dalmia Ceement is authorized by PCB's under schedule 1, category 18.2 for utilization of carbon ?

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

DOCUMENT-36 (COLLY)

From: Seema Chawla [mailto:seemachawla@nfl.co.in]
Sent: 30 January 2023 11:30
To: 'feedback@uppcb.com'
Cc: ips@nfl.co.in; BIMLA SOREN; 'mngoyal@nfl.co.in'
Subject: Disposal of Carbon Slurry

Dear Sir,

This has reference to the subject matter regarding the disposal of carbon slurry. It is to be mentioned here that the carbon slurry lying at N.F.L. Panipat Unit premises was generated from oil based Ammonia Plant, as by-product, before commissioning of NG based Ammonia Plant in year 2013. After the commissioning and lining up NG based Ammonia Plant, there is no generation of Carbon Slurry.

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016. In this regard we would like to know the parties who have been issued the authorisation for collection, transportation and Utilization of carbon slurry under category 18.2 of Schedule-1 by your goodself.

We shall be highly obliged.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla [mailto:seemachawla@nfl.co.in]
Sent: 31 January 2023 09:10
To: 'hqtech-pcb@mp.gov.in'
Cc: ips@nfl.co.in; 'mngoyal@nfl.co.in'; BIMLA SOREN
Subject: Disposal of Carbon Slurry

Dear Sir,

This has reference to the subject matter regarding the disposal of carbon slurry. It is to be mentioned here that the carbon slurry lying at N.F.L. Panipat Unit premises was generated from oil based Ammonia Plant, as by-product, before commissioning of NG based Ammonia Plant in year 2013. After the commissioning and lining up NG based Ammonia Plant, there is no generation of Carbon Slurry.

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016. In this regard we would like to know the parties who have been issued the authorisation for collection, transportation and Utilization of carbon slurry under category 18.2 of Schedule-1 by your goodself.

We shall be highly obliged.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Seema Chawla [mailto:seemachawla@nfl.co.in]
Sent: 30 January 2023 12:27
To: 'gpcbchairman@gmail.com'
Cc: ips@nfl.co.in; BIMLA SOREN; 'mngoyal@nfl.co.in'
Subject: Disposal of Carbon Slurry

Dear Sir,

This has reference to the subject matter regarding the disposal of carbon slurry. It is to be mentioned here that the carbon slurry lying at N.F.L. Panipat Unit premises was generated from oil based Ammonia Plant, as by-product, before commissioning of NG based Ammonia Plant in year 2013. After the commissioning and lining up NG based Ammonia Plant, there is no generation of Carbon Slurry.

As per notification from MOEF, disposal of Carbon is to be as per HoWM rules, 2016. In this regard we would like to know the parties who have been issued the authorisation for collection, transportation and Utilization of carbon slurry under category 18.2 of Schedule-1 by your goodself.

We shall be highly obliged.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From:	Seema Chawla <seemachawla@nfl.co.in>
Sent:	16 March 2023 12:05
To:	feedback@uppcb.com
Cc:	ips@nfl.co.in; BIMLA SOREN; mngoyal@nfl.co.in
Subject:	RE: Disposal of Carbon Slurry

Dear Sir,

We are waiting for your response.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रबंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 16 March 2023 12:04
To: hqtech-pcb@mp.gov.in
Cc: ips@nfl.co.in; mngoyal@nfl.co.in; BIMLA SOREN; bbgrover
Subject: RE: Disposal of Carbon Slurry

Dear Sir,

We are awaiting for your response.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

seemachawla@nfl.co.in

From: Seema Chawla <seemachawla@nfl.co.in>
Sent: 16 March 2023 12:05
To: gpcbchairman@gmail.com
Cc: ips@nfl.co.in; BIMLA SOREN; mngoyal@nfl.co.in
Subject: RE: Disposal of Carbon Slurry

Dear Sir,

We are waiting for your response.

आदर सहित :
सीमा चावला
Seema Chawla
उप महा प्रवंधक(तकनीकी सेवाएँ)
DGM (Technical Services)
नेशनल फ़र्टिलाइज़रस लिमिटेड, पानीपत
National fertilizers limited, Panipat
Mobile : +91 9996547743

From: Shubham Sales Co. Rohtak [mailto:shubhamsalescom@gmail.com]
Sent: 18 April 2024 14:53
To: Mahesh Patil
Cc: B. B. Grover
Subject: Request for assistance in execution of speedier lifting of Carbon Material from Pond No. 1 and 2 from Panipat unit.

Dear Sir,

It is humbly requested that we have already written to you for the support required from your side for the expeditious lifting of material in view of the matter pending with Honorable NGT New Delhi.

Through this mail I am writing to seek your support by issuing necessary directions to the concerned departments and personnel for the respective actions required to be taken at their end.

1. Placement of trucks and billing on all days of the month.
2. Improvement in billing software that keeps on breaking down regularly. This holds our trucks for long hours for want of placement and dispatch.
3. Although in contract it is not provided for, we need 3 Phase Electricity supply. We undertake to pay the monthly bills for the usage, for running of tubewell for water sprinkling on rasta and washing & lighting.

4. Allow mechanical screening and packaging machine for separation of carbon from high ash mixed material.

We request you to approve the submitted requests at the earliest so that we may play our part well.

Thanking You,
Truly yours,

Nupinder Singh Sivia
Partner

एन एफ एल
NFL
पानीपत इकाई
PANIPAT UNIT

नेशनल फर्टिलाइज़र्स लिमिटेड
(भारत सरकार का उपक्रम)
गोहाना रोड, पानीपत, हरियाणा – 132 106
(ISO-9001, ISO-14001 एवं OHSAS-18001 इकाई)
फोन: 0180-2652481,483 एवं 485, 0180-2681304
फैक्स: 0180-2652515
ई-मेल: nflpanipat@nfl.co.in
website: www.nationalfertilizers.com

एन एफ एल
NFL

National Fertilizers Limited
(A Government of India Undertaking)
Gohana Road, Panipat, Haryana – 132 106
(An ISO-9001, ISO-14061 & OHSAS-18001 Unit)
Phone: 0180-2652481, 483 & 485, 0180-2681304
FAX : 0180-2652515
E-mail: nflpanipat@nfl.co.in
website: www.nationalfertilizers.com

Ref: NFP/DISPOSAL/CARBON SLURRY/D-209/585 SPEED POST Date: 30-04-2024

30 SEP 2024

To,

M/s Shubham Sales Co.,
5.30 K.M Mile Stone,
Bhiwani Road,
Rohtak-124001, Haryana

Sub: Lifting of Carbon Slurry Lying in Ponds at NFL, Panipat.

Dear Sir,

In reference to your letter dated 09.04.2024 & e-mail dated 18.04.2024, we have examined the request submitted by you for expeditious lifting of carbon slurry and our reply is as under:

1. Placement of trucks and billings on all days of the month will be allowed provided you intimates one day in advance in case of weekly off/holiday, so that necessary manpower can be arranged accordingly.
2. The billing software is working normally. However, in case any issue arises same will be resolved expeditiously whenever any problem is encountered.
3. To have expeditious lifting of carbon slurry, as per request by you, 3-phase electricity supply which is available at D&C Cell, Panipat will be provided by NFL to you at D&C Cell, NFL Panipat location as a single point. Power evacuation from D&C Cell NFL Panipat shall be in your scope and payment for electricity will be made by you on actual monthly basis based on NFL meter as per NFL procedure.
4. Packaging machine & screening may be allowed on a condition that you guarantee to lift entire quantity by 31.03.2025 from the ponds so as to get final clearance from HSPCB/NGT within time schedule of 31.03.2025.
5. In addition to above it is also observed that on daily basis you are deploying 3-4 trucks only. To expedite lifting, you are requested to increase the number of trucks deployed on daily basis.

You are requested to give your confirmation on above points at the earliest.

NFL is committed to extend all the support for smooth & expeditious execution of the contract.

Thanking you

For & On behalf Of
National Fertilizers Limited, Panipat

(Mahesh Patil)
Chief Manager (Materials)

नेशनल फर्टिलाइजर्स लिमिटेड
(भारत सरकार का उपक्रम)
पानीपत इकाई गोहाना रोड, [illegible]
दूरभाष: 0180-2652481
फैक्स: 0180-2652515

NATIONAL FERTILIZERS LIMITED
(A Government of India Undertaking)
Panipat Unit: Gohana Road, Panipat-132106 (Haryana)
Phone: 0180-2652481
Fax: 0180-2652515 GST No. 06AAACN0189N1Z8

Ref. No.: NFL/PT/TS/PE/१५०५ Date: 10.09.2024

क्षेत्रीय अधिकारी,
हरियाणा राज्य प्रदूषण नियंत्रण बोर्ड,
एस.सी.ओ. 55, सैक्टर- 25, हुडा,
पानीपत -132103

Dear Sir,

Subject: Request for Information on Authorized Contractors for Lifting Carbon Slurry from NFL Panipat.

In reference to the Order dated 28.06.2024 passed by the Hon'ble National Green Tribunal (NGT) in OA 620/2022 titled *Kaushal Kishore Vishwakarma Vs. State of Punjab and Ors.*. The order directs National Fertilizers Limited (NFL) to expedite the disposal of carbon slurry stored at our Bathinda and Panipat units within a time-bound period of 180 days.

Further as directed by NGT, NFL seeks your assistance in providing us with list of licensed and authorized contractors registered with HSPCB under schedule I category 18.2 who can undertake the disposal and lifting of the carbon ponds at NFL Panipat unit. This information is crucial for NFL to ensure timely disposal and avoid any non-compliance or penalties.

You are kindly requested to share the relevant details of the contractors. This will help NFL expedite the contractor selection process and ensure compliance with the Hon'ble NGT's orders.

We look forward to your prompt response so that the required actions can be taken in a timely manner.

Thank you for your cooperation.

Yours sincerely,

Thanking You,

For National Fertilizers Limited,

10/9/24

सीमा चावला

उप महा प्रबन्धक (तकनीकी सेवाएँ)

O/C

नेशनल फर्टिलाइजर्स लिमिटेड
(भारत सरकार का उपक्रम)
पानीपत इकाई गोहाना रोड, पानीपत.132106(हरियाणा)
दूरभाष: 0180.2652481
फैक्स: 0180.2652515

NATIONAL FERTILIZERS LIMITED
(A Government of India Undertaking)
Panipat Unit: Gohana Road, Panipat-132106 (Haryana)
Phone: 0180-2652481
Fax: 0180-2652515 GST No. 06AAACN0189N1Z8

Ref. No.: NFL/PT/TS/PE/ Date: 13.09.2024

क्षेत्रीय अधिकारी,
हरियाणा राज्य प्रदूषण नियंत्रण बोर्ड,
एस.सी.ओ. 55, सैक्टर- 25, हुडा,
पानीपत -132103

Dear Sir,

Subject: Request for Meeting regarding Information on Authorized Contractors for Lifting Carbon Slurry from NFL Panipat as per NGT orders.

In reference to the Order dated 28.08.2024 passed by the Hon'ble National Green Tribunal (NGT) in OA 620/2022 titled *Kaushal Kishore Vishwakarma Vs. State of Punjab and Ors.*. The order directs National Fertilizers Limited (NFL) to expedite the disposal of carbon slurry stored at our Bathinda and Panipat units within a time-bound period of 180 days.

Further as directed by NGT, M/s National Fertilizers Ltd. Panipat seeks your assistance for finalising the measures to be taken for suitably increasing the number of contractors for disposal of the quantity of carbon slurry stored in carbon ponds at NFL Panipat unit..

We humbly request to you, please grant permission for meeting for discussions regarding above cited matter and indicate suitable date and time for the same at earliest possible. This will help us expedite the contractor selection process and ensure compliance with the Hon'ble NGT's orders.

We look forward to your prompt response so that the required actions can be taken in a timely manner.

Thank you for your cooperation.

Yours sincerely,

For National Fertilizers Limited,

13/9/24

सीमा चावला
उप महाप्रबन्धक (तकनीकी सेवाएँ)

From: vkmeena@nfl.co.in <vkmeena@nfl.co.in>
Sent: 17 September 2024 18:28
To: admin@mstcecommerce.com
Cc: MANOJPANDEY <nroopn8@mstcindia.in>; mpandey@mstcindia.co.in; mpatil@nfl.co.in; seemachawla@nfl.co.in
Subject: Request for providing list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd.-I) available with MSTC.

M/s MSTC Limited,

Reference: e-Auction No. MSTC/NRO/NATIONAL FERTILIZERS LIMITED/9/GOHANA ROAD/19-20/32756 Dated 02.03.2020 for Disposal of Carbon Slurry.

Dear sir,

Against above referred E-auction, H-1 bid of M/s Shubham Sales Co, Rohtak was accepted and Acceptance letter dated 30.11.2020 & Delivery Order dated 30.03.2021 by MSTC was issued to them. Subsequently, letter dated 15.12.2023 was

issued by NFL Panipat to M/s Shubham Sales Co., Rohtak to start the lifting of the carbon slurry lying in the carbon ponds at NFL, Panipat. Party has not completed the lifting of the auctioned material till date.

Further, with reference to the order dated 28.08.2024 passed by Hon'ble NGT in the OA 620/2022, you are requested to provide the list of registered parties dealing in lifting of Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd.-I) available with MSTC at the earliest latest by 19.09.2024.

Regards

विनोद कुमार मीणा,
प्रबंधक (सामग्री)-स्टोर्स,
नेशनल फर्टिलाइजर्स लिमिटेड, पानीपत
ईमेल: vkmeena@nfl.co.in

From: nroopn8@mstcindia.in [mailto:nroopn8@mstcindia.in]
Sent: 17 September 2024 20:00
To: vkmeena@nfl.co.in
Cc: mpatil@nfl.co.in; seemachawla@nfl.co.in; rmnromstc@mstcindia.in; SETU DUTT SHARMA
Subject: RE: Request for providing list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd.-I) available with MSTC.

महोदय / महोदया,

Dear Sir/Mam.

कृपया सामग्री की डिलीवरी के संबंध में खरीदार के साथ लिखित या मौखिक संचार को सूचित करें। इसके अलावा, एमएसटीसी एचडब्ल्यूएम नियम, 2016 की अनुसूची IV और उसके बाद के संशोधनों में सूचीबद्ध उत्पादों में सौदा करने वाले बोलीदाताओं का एक अलग रिकॉर्ड रखता है। चूंकि कार्बन अवशेष/स्लरी एचडब्ल्यूएम नियमों की अनुसूची IV के अंतर्गत नहीं आता है, इसलिए एमएसटीसी इसके लिए खरीदारों के अलग रिकॉर्ड नहीं रख रहा है। इसके अलावा, आपसे एनजीटी ओए के खंड संख्या/खंड संख्या का उल्लेख करने का अनुरोध किया जाता है, जिसमें एमएसटीसी को कार्बन स्लरी/अवशेषों के खरीदारों की सूची प्रदान करने की आवश्यकता होती है ताकि हम एमएसटीसी के बैकएंड डेटाबेस का उपयोग करने का प्रयास कर सकें और आपको इसे प्रदान करने के लिए अपेक्षित जानकारी प्राप्त करने का प्रयास कर सकें।

Please inform the written or verbal communications with the buyer with respect to the delivery of the material. Further, MSTC maintains a separate record of the bidders who deal into the products listed out in the Schedule IV of the HWM Rules, 2016 and the amendments thereafter. As carbon residue/slurry does not come under Schedule IV of the HWM rules, MSTC is not maintaining the separate records of the buyers for the same. Further, you are requested to mention the clause no./section no. of the NGT OA which required MSTC to provide the list of the buyers of Carbon slurry/residue so that we may try to use the backend database of MSTC and try to get the requisite information to provide the same to you, if possible.

धन्यवाद / Thanks

भवदीय / With Regards.
मनोज पाण्डे / Manoj Pandey
उप प्रबंधक / Deputy Manager
एमएसटीसी लिमिटेड (भारत सरकार का उपक्रम) के लिए / For MSTC Ltd (A Govt. of India Enterprise)
जीवन विकास भवन, 30/31ए, पहला तल / Jeevan Vikas Building, 30/31A, 1st Floor
आसफ अली रोड (हमदर्द के सामने), नई दिल्ली / Asaf Ali Road (opp. Hamdard), New Delhi – 110002
Ph.:- 011-23214201, 011-23213945, 011-23212358
https://www.mstcecommerce.com, https://www.mstcindia.co.in

seemachawla@nfl.co.in

From:	VINOD KUMAR MEENA <vkmeena@nfl.co.in>
Sent:	18 September 2024 12:42
To:	nroopn8@mstcindia.in
Cc:	mpatil@nfl.co.in; seemachawla@nfl.co.in; rmnromstc@mstcindia.in; 'SETU DUTT SHARMA'
Subject:	RE: Request for providing list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd.-I) available with MSTC.

Dear sir,

In reference to your trailing mail, kindly refer the clause no./section no. 51 & 52 of the Hon'ble NGT OA 620/2022 and provide the list of registered parties dealing in lifting of Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd.-I) available with MSTC.

Regards

विनोद कुमार मीणा,
प्रबंधक (सामग्री)-स्टोर्स,
नेशनल फर्टिलाइज़र्स लिमिटेड, पानीपत
ईमेल: vkmeena@nfl.co.in

From: vkmeena@nfl.co.in <vkmeena@nfl.co.in>
Sent: 11 January 2025 15:24
To: MANOJPANDEY <nroopn8@mstcindia.in>; mpandey@mstcindia.co.in
Cc: mpatil@nfl.co.in; seemachawla@nfl.co.in
Subject: RE: Request for providing list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd.-I) available with MSTC.

Dear sir,

In view of our trailing mail, kindly provide the list of registered parties dealing in lifting of Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd.-I) available with MSTC.

Regards

(विनोद कुमार मीणा),
प्रबंधक (सामग्री)-स्टोर्स,
नेशनल फर्टिलाइज़र्स लिमिटेड, पानीपत
ईमेल: vkmeena@nfl.co.in

seemachawla@nfl.co.in

A Navratna Company

पानीपत इकाई
PANIPAT UNIT

From: nroopn8@mstcindia.in
Sent: 13 January 2025 05:46
To: vkmeena@nfl.co.in
Cc: mpatil@nfl.co.in; seemachawla@nfl.co.in
Subject: RE: Request for providing list of registered parties dealing in Carbon Slurry (under HWM Rules-2016 Cat. 18.2 Schd.-I) available with MSTC.

महोदय / महोदया,
Dear Sir/Mam,

वर्तमान में एमएसटीसी लिमिटेड के पास खतरनाक अपशिष्ट- "कार्बन स्लरी" की खरीद के लिए वैध लाइसेंस रखने वाला कोई पंजीकृत बोलीदाता नहीं है। चूंकि एमएसटीसी ने पिछले 4-5 वर्षों से अपने किसी भी पंजीकृत विक्रेता के लिए कार्बन स्लरी की ई-नीलामी नहीं की है और ऐसे में बोलीदाताओं ने एमएसटीसी पोर्टल पर कार्बन स्लरी के लिए लाइसेंस को सक्रिय/नवीनीकृत नहीं किया होगा। आशा है कि उपरोक्त बातें स्पष्ट हो गई होंगी।

Currently there is no registered bidder having valid licence for purchase of hazardous waste-"carbon slurry" registered with MSTC Limited. As MSTC has not e-auctioned carbon slurry for any of its registered sellers for last 4-5 years and as such bidders may not have activated/renewed the licence for carbon slurry on MSTC portal. Hope the above clarifies.

धन्यवाद / Thanks

भवदीय / With Regards,
मनोज पाण्डे / Manoj Pandey
उप प्रबंधक / Deputy Manager
एमएसटीसी लिमिटेड (भारत सरकार का उपक्रम) के लिए / For MSTC Ltd (A Govt. of India Enterprise)
जीवन विकास भवन, 30/31ए, पहला तल / Jeevan Vikas Building, 30/31A, 1st Floor
आसफ अली रोड (हमदर्द के सामने), नई दिल्ली / Asaf Ali Road (opp. Hamdard), New Delhi – 110002
Ph.:- 011-23214201, 011-23213945, 011-23212358
https://www.mstcecommerce.com, https://www.mstcindia.co.in

नेशनल फर्टिलाइजर्स लिमिटेड
(भारत सरकार का उपक्रम)
पानीपत इकाई गोहाना रोड, पानीपत-132103 (हरियाणा)
दूरभाष: 0180-2652481
फैक्स: 0180-2652515

एन एफ एल
NFL
RATNA COMPANY

NATIONAL FERTILIZERS LIMITED
(A Government of India Undertaking)
Panipat Unit: Gohana Road, Panipat-132106 (Haryana)
Phone: 0180-2652481
Fax: 0180-2652515 GST No: 06AAACN0189N1ZX

Ref. No.: NFL/PT/TS/PE/1534

Date: 08.11.2024

क्षेत्रीय अधिकारी,
हरियाणा राज्य प्रदूषण नियंत्रण बोर्ड,
एस.सी.ओ. 55, सैक्टर- 25, हुडा,
पानीपत -132103

Dear Sir,

Subject: Request for Information of Authorized Contractors for Lifting Carbon Slurry from NFL Panipat.

In reference to the Order dated 15.10.2024 passed by the Hon'ble National Green Tribunal (NGT) in OA 620/2022 titled "Kaushal Kishore Vishwakarma Vs. State of Punjab and Ors.". The order directs National Fertilizers Limited (NFL) to expedite the disposal of carbon slurry stored at Panipat Unit with in time -bound period of 180 days.

Further as directed by NGT, M/s National Fertilizers Ltd. Panipat seeks your assistance in providing requisite information under schedule I category 18.2 who can undertake the disposal and lifting of the carbon slurry from the carbon ponds at NFL Panipat unit.

We humbly request you to provide requisite information and extend requisite assistance to NFL Panipat for exploring the possibility of giving additional work orders to some more authorized contractors for Lifting Carbon Slurry at earliest possible. This will help us expedite the contractor selection process.

This information is crucial for us to ensure timely disposal, ensure compliance with the Hon'ble NGT's orders and thereby avoid any non-compliance. We look forward to your prompt response so that the required actions can be taken in a timely manner.

Thank you for your cooperation.

Yours sincerely,

Haryana State Pollution Control Board Panipat
11/11/2024

For & on behalf of
National Fertilizers Limited,

Narendra Singh
Chief Manager (Lab)