

BEFORE THE NATIONAL GREEN TRIBUNAL, NEW DELHI

O.A. NO. 461 OF 2021

IN THE MATTER OF

Vikas Singh & Ors.

..... Applicant.

Vs

State of Bihar & Ors.

.....Respondent.

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State of Bihar & Ors.

.....Respondent.

Factual & Action Taken Report.

I, S. Chandrasekar, aged about 44 years, Son of Mr. S. Subramani, residing at B-202, Amarkunj Apartment, Vivekanand Marg-Patna-800013, do hereby state as follows:-

1. That I am posted as Member Secretary, Bihar State Pollution Control Board, Patna, and as such I am well aware of the facts and circumstances of the present matter.
2. That the Hon'ble Tribunal received a complaint through E-mail in which it has been alleged that due to functioning of M/S N.U. Vista Ltd. located in Durgawati, District- Kaimur, Bihar- 821105, health hazard is

being caused to the nearby residents. The said company is discharging its polluted water in the nearby agricultural land; the cement water slurry is released into the agricultural fields making them infertile and ultimately polluting the nearby rivers and also affects the aquatic life.

3. That the Hon'ble Tribunal registered the aforesaid complaint as Original Application no. 461 of 2021 and vide order dated 28.01.2022 constituted a joint committee of Regional Office of MoEF&CC at Bhubaneswar; Regional Office of CPCB at Kolkata; State PCB and District Magistrate, Kaimur, to look into grievance. The State PCB was made nodal agency for coordination and compliance. Further, the Joint committee was directed to undertake site visit to look into the grievances and take remedial action in accordance with law after following due process and file a factual and action taken report before the Hon'ble Tribunal.
4. That the State PCB after passing of the order dated 28.01.2022, vide its letter no. 458, dated 10.02.2022, informed the members of the joint committee about the passing of the order and requested the members of the committee to convene a meeting for taking further steps for undertaking the site visit.

A copy of the letter no. 458, dated 10.02.2022 is annexed and marked as Annexure-1.

5. That the District Magistrate, Kaimur, vide its order dated 28.02.2022 requested the State PCB to fix a date for the meeting.

A copy of the letter dated 28.02.2022 is annexed and marked as Annexure-2.

6. That accordingly the State PCB vides its letter no. 1080, dated 05.04.2022, fixed the date for meeting on 11.04.2022 informed the committee members about the said meeting.

A copy of the letter no. 1080, dated 11.04.2022 is annexed and marked as Annexure-3.

7. That in the said meeting it was decided that the site visit will be undertaken on 20.04.2022.

A copy of the minutes of the meeting dated 11.04.2022 is annexed and marked as Annexure-4.

8. That it is humbly submitted that in the joint committee a scientist from Regional Office of MoEF&CC at Ranchi was nominated in place of Regional Office of MoEF&CC at Bhubaneswar as Regional Office of MoEF&CC at Bhubaneswar does not have jurisdiction over Bihar and Regional Office of MoEF&CC at Ranchi has jurisdiction over Bihar.
9. That the joint committee paid visit to M/S N.U. Vista Ltd. on 20.04.2022 in the light of the order of the Hon'ble Tribunal. In the said visit the following observations were made by the joint committee:-

Issue raised by the Complainants/Villagers	Observation of Joint Committee..
Regarding serious health hazard to thickly populated area due to	A Health report of habitants of nearby area of the cement plant under reference, provided by the Civil Surgeon-cum-Chief Medical Officer,

the cement plant.	Kaimur (Bhabhua) through DM, Kaimur. In his report Medical Officer Incharge, Primary Health Centre, Durgawati, Kaimur, mentions that health survey of people living near M/S NU vista Ltd. was done. Health checkup of 37 persons was done (Bheria-29; near factory-8). Out of the said 37 person 34 were found to be healthy and 03 person had problems of dry cough and respiratory related problems since last 10 years. Further in the note of the said report it is mentioned that health checkup team went house to house to know the Status of their health and people were found healthy.
Damage of newly constructed road under 'Pradhan Mantri Gramin Sadak Yojna' and occurrence of several accidents by	Road outside the cement plant was observed to be broken/damaged and unpitched at few places.

running of thousands of heavy vehicle.	
Discharge of polluted water on surrounding agricultural land; discharge of cement slurry which damages the crop and turns soil infertile and also pollutes river and affects aquatic life.	<p>a) No sign of discharge of polluted water/cement slurry in surrounding agriculture land was found during inspection.</p> <p>b) Villagers participating with the inspection team, reported that cement dust from the plant reach their agricultural field and making it infertile. These agriculture fields were visited and soil samples were collected from following locations around the cement plant:</p> <ul style="list-style-type: none"> i. Sample No.-1; ii. Sample No.-2; iii. Sample No.-3 (land owner-Sri Harinder Singh; and iv. Sample No.-4 (land owner-Sri Harinder Singh).

	<p>The sample of soil was sent for analysis to Central Pollution Control Board and the soil was tested on various physico-chemical parameters and it was found that the soil is good for agriculture and within standards. However, Electrical Conductivity was above the standards.</p> <p>A report of District Agriculture Officer (DAO), Kaimur (Bhabhua) on the nearby agricultural field/area of the cement plant under reference, provided through DM, Kaimur. DAO vide his letter no. 1971, dated 05.05.2022 has reported that during inspection of nearby agricultural field to MS N.U. Vista Ltd. wheat crops have been harvested. However, on the basis of perusal of crop residue/remains it appears there has not been any adverse effect on the crop production.</p> <p>In kulharia, kharif production (in quintal/ha)</p>
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	<p>was 55.3, 60.4, 51.6, 52.6 in year 2018-2019, 2019-2020, 2020-2021 & 2021-2022 respectively. Rabi production (in quintal/ha) was 31.6 in the year 2020-2021.</p> <p>In Kharsara, kharif production (in quintal/ha) was 56.4, 52.6, 49.6, 49.0 in year 2018-2019, 2019-2020, 2020-2021 & 2021-2022 respectively. Rabi production (in quintal/ha) was 5, 28.9, 31.5 & 31.2 in the year 2018-2019, 2020-2021 & 2021-2022 respectively.</p>
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A copy of the inspection report dated 20.04.2022, Health Report, Soil Analysis Report of the CPCB, copy of District Agriculture Officer, Kaimur, are attached and marked as Annexure-5 Colly.

10. That from the above stated facts it appears that the grievances as raised by the complainants are not true and due to functioning of M/S

N.U. Vista Ltd. health hazard, damage to crops, soil infertility is not being caused/established.

11. That however the Joint Committee also made other observations/noticed short comings and have also recommended steps to be taken as remedial measure in order to address those observations/short comings. The other observations/short comings made/noticed by the joint committee are as follows:-

- i. A pucca drain inside the campus and along periphery of the boundary wall was found under construction during site inspection. At many portions the construction work was found completed; however at some portions construction work was ongoing. In the west side of plant no drain had been constructed nor was under construction;
- ii. Plantations were observed around the plant/project periphery at many portions, however at some places there were gaps and also at some portions no plantations was done. Many of the plants planted were with short and narrow leaves and not very effective in controlling/minimizing the dust propagation from the project. Three tier plantations along the boundary were observed at some places, but at many other places three tier plantations along the boundary wall was not observed;

- iii. Plantations/greenbelt was observed inside the project area also but still there are many places inside the project area where plantations greenbelt/ can be done;
- iv. Dust layers were observed on the roads and other working areas in the project;
- v. Mechanical sweeping machine was found operational in the project. However, there was dust generation during operation of the sweeping machine;
- vi. Fixed water sprinklers were installed inside the campus and along boundary at some places toward/near main gate. However, wide gap between two consecutive sprinklers was observed and sprinkled water was not covering the complete area and considerable areas/places were dry which were causing dust pollution. There is need to increase number of sprinklers to cover the wide area/roads;
- vii. Raw material conveyors are not fully covered. Some open gaps in lower and upper portion were observed from where fugitive dust emission takes place due to speed of wind;
- viii. Clinker, Gypsum and Fly ash were used as raw material. The storage and handling of Clinker and Gypsum was a potential source of fugitive dust emission during their unloading from trucks, due to inadequate covered storage

facilities, loading on conveyor system by pay loader and dropping/free falling of material from height to the hopper of conveyor system. Fugitive dust emission from these hoppers was observed and found that dust suction system attached with the hopper was either not functioning or inadequate. Fly ash was being procured from power plant and transported to the cement plant by Bulkheads. It was being stored in the silo by pneumatic conveyor;

- ix. Large stacks/dumps of the raw materials were kept in open i.e. without any shade/proper covered or enclosed structure. There was dust generation and propagation whenever wind blew and it was propagating outside the boundary of the plant during high wind as observed during inspection;
- x. Dust accumulation on the floors in the cement bag packaging and loading section of the plant was observed. Also observed that dust generation occurred during loading of cement bag on truck. Person employed in cement bags loading section were wearing dust masks, other PPEs;
- xi. Display of environmental parameter monitoring, PM_{10} etc was observed near the main gate of the plant;
- xii. Some plantations were also observed just outside the plant boundary.

12. That the State PCB vide its Memo No. 1563, dated 13.05.2022 has issued Proposed Direction under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974, and Section 31A of the Air (Prevention and Control of Pollution) Act, 1981, under which the unit has been given an opportunity to show-cause as to why the unit may not be directed to take steps/perform work in order to address the short comings noticed by the Joint Committee. The State Board has proposed to direct the said unit to:-

- i. i) Increase the height of stack attached with Cement Mill, Packaging Section etc. to a minimum of 30 meters or, as per the formula $H=14(Q)^{0.3}$, whichever is more, where “H” is the height of stack in meters and “Q” is the maximum quantity of SO₂ expected to be emitted in kg/hr through the stack at 100 percent rated capacity of the plant and calculated as per the norms of gaseous emission.
- ii. Increase the number of water sprinklers to cover the wide area/roads and the areas which are not covered by the existing water sprinklers.

- iii. Make arrangement for adequate facilities to control fugitive dust emission during unloading of raw materials-Clinker and Gypsum from the trucks and stored in the plant campus.
- iv. Construct/install covered storage facilities for storage of Clinker and Gypsum. Improve/repair Dust suction system attached with the hopper.
- v. Ensure covering of Raw material conveyors.
- vi. Improve housekeeping including road dust collection, regular sweeping, water sprinkling etc. More vacuum sweeping machines are required to carry out regular sweeping of roads to minimize fugitive emissions of road dust.
- vii. Take remedial measures to arrest dust emitted during loading/unloading of cement bag/clinker/flyash/gypsum on truck.

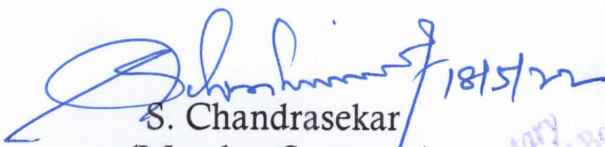
- viii. Make a scheme of massive tree plantation to improve ecology of the surroundings specially to minimize dust in the ambient air due to wind.
- ix. Ensure:
 - a) Storm-water should not be allowed to mix with effluent, treated sewage, scrubber water and/or floor washings. Separation of drainage system for storm water and trade effluent, their re-use in gardening etc.
 - b) Storm-water within battery limits of Industry should be channelized through separate drain(s) as per natural gradient passing through high density polyethylene lined pit(s) each having holding capacity of 10 minutes (hourly average) of rainfall for its catchment area.”
 - c) Maintain ‘zero discharge’ of service wastewater. In case, the industry prefers to discharge service wastewater, the following norms should be complied with: pH- 5.5 to 9.0; Suspended Solid- 100 mg/l; Oil & Grease-10 mg/l.

- x. Install water meter at all points of water intake and consumption to monitor daily water consumption directly.
- xi. Road outside the cement plant was observed to be broken/damaged/unpitched at few places which was due to the movement of heavy trucks of the cement plant consult to the local administration for regular repairing and maintenance of the road.
- xii. Furnish a performance Bank Guarantee of Rs. 40,00,000/- to perform/comply with the directions/work as stated above.

A copy of the Proposed Direction dated
13.05.2022 is annexed and marked as
Annexure-6.

13. That after giving an opportunity to the said unit to file its reply to the aforesaid proposed direction the State PCB will take further action in accordance with Water Act and Air Act.

14. That I have read the contents of the factual & action taken report and have understood the same.


S. Chandrasekar
(Member-Secretary)
Bihar State Pollution Control Board

*Member-Secretary
Bihar State Pollution Control Board
Patna*



ई-मेल/निबंधन द्वारा Annexure-1
बिहार राज्य प्रदूषण नियंत्रण पर्षद्

17

परिवेश भवन, एन.एस.बी.-२, पाटलिपुत्र औद्योगिक क्षेत्र
पो-सदाकत आश्रम, पाटलिपुत्र, पटना-800 010
दूरभाष नं०- 0612-2281250/2282265, फैक्स- 0612-2281050
ई-मेल-msbspcb-bih@gov.in वेबसाइट- <http://bspcb.bihar.gov.in>

पत्रांक: P/Legal 01-46/2022- 458

पटना, दिनांक: 10.02.22

प्रेषक,

एस. चन्द्रशेखर, भा.व.से.
सदस्य-सचिव।

सेवा में,

- I. Deputy Director General of Forest @
Intigrated Regional Office,
A/3, Rail Vihar, Chandrashekharpur,
Bhubaneswar, Odisha- 751023.
E-mail- roez.bsr-mef@nic.in
- II. Regional Director,
Central Pollution Control Board,
G97V+H5Q, Kasba New Market, Sector E,
East Kolkata Twp, Kolkata, West Bengal 700107
E-mail- mkbiswas.cpcb@nic.in
- III. District Magistrate Kaimur,
Dist- Bhabhua.

विषय: M/S N.U. Vista Cement Company (formally – Imami Cement Company Ltd.) NH- 2, 1644, भेड़िया रोड, कुल्हड़िया, दुर्गावती, कैमुर (बिहार) में स्थित सिमेंट कंपनी के तथ्यात्मक पहलुओं की जाँच के संबंध में।

प्रसंग: माननीय राष्ट्रीय हरित अधिकरण प्रधान बेंच, दिल्ली में दायर O.A. No. 461/2022 विकास सिंह एवं अन्य बनाम् बिहार राज्य एवं अन्य में दिनांक: 28.01.2022 को पारित आदेश के अनुपालनार्थ।

महाशय,

उपरोक्त प्रसंगाधीन विषय के संदर्भ में सादर सूचित करना है कि विषयांकित वाद की सुनवाई के दौरान माननीय राष्ट्रीय हरित अधिकरण द्वारा दिनांक: 28.01.2022 को पारित आदेश के अनुपालनार्थ बिहार के कैमुर जिले के M/S N.U. Vista Cement Company (formally – Imami Cement Company Ltd.) NH- 2, 1644, भेड़िया रोड, कुल्हड़िया, दुर्गावती, कैमुर में स्थित सिमेंट कंपनी के उत्पादन के दौरान नागरिकों के स्वास्थ्य, सुरक्षा, कृषि भूमि एवं पर्यावरण को हो रहे नुकसान के संदर्भ में दायर शिकायत के आलोक में विषय-वस्तु एवं तथ्यात्मक पहलुओं की जाँच हेतु निम्नलिखित सदस्यों की संयुक्त समिति का गठन (यथा अधिकरण के प्रासंगिक आदेश में उल्लेखित) किया गया है:-

- I. क्षेत्रीय कार्यालय, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भुवनेश्वर
- II. क्षेत्रीय कार्यालय, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, कोलकता
- III. बिहार राज्य प्रदूषण नियंत्रण पर्षद्
- IV. जिलाधिकारी, कैमूर

ज्ञातव्य है कि विषयांकित मामले में माननीय राष्ट्रीय हरित अधिकरण द्वारा बिहार राज्य प्रदूषण नियंत्रण पर्षद् को समन्वय, सहायता एवं अनुपालन हेतु नोडल एजेंसी बनाया है। पर्षद् द्वारा श्री अनिल कुमार, पर्यावरण अभियंता सह क्षेत्रीय पदाधिकारी, पटना प्रक्षेत्र (मोबाईल नं०-9430511414) को पर्षद् की ओर से विषयांकित वाद में नोडल पदाधिकारी के रूप में नामित किया गया है।

माननीय राष्ट्रीय हरित अधिकरण द्वारा विषयांकित आदेश में निर्देश दिया गया है कि गठित संयुक्त समिति विषय-वस्तु की जाँच हेतु एक महीना के भीतर बैठक कर सकती है। तदनुसार स्थल निरीक्षण कर समिति पर्यावरण नियमों के अनुपालन और पर्यावरण को हुए क्षति (यदि हुई हो तो), का आंकलन कर सकती है तथा पर्यावरण क्षतिपूर्ति लगाने की स्वीकृति दे सकती है। संयुक्त समिति परियोजना प्रस्तावक और अन्य संबंधितों के साथ विमर्श/सहयोग ले सकती है।

अतः भवदीय से अनुरोध है कि माननीय अधिकरण द्वारा विषयांकित आदेश (संलग्न) के अनुपालनार्थ एक माह के भीतर विषय-वस्तु की जाँच हेतु बैठक आयोजित किया जाय।

माननीय राष्ट्रीय हरित अधिकरण द्वारा निर्देश दिया गया है कि समिति 3 महीना के भीतर तथ्यात्मक एवं कार्रवाई की रिपोर्ट एन०जी०टी० के न्यायिक ई-मेल (judicial-ngt@gov.in) पर (यथा अधिकरण के प्रासंगिक आदेश में उल्लेखित) के अनुसार दायर करेगी।

विषयांकित वाद मामले पर विचार हेतु दिनांक: 20.05.2022 को सूचीबद्ध किया गया है।

अनुलग्नक: यथो०।

विश्वासभाजन

ह०/-

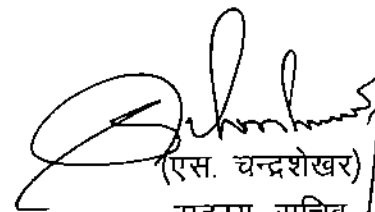
(एस. चन्द्रशेखर)
सदस्य-सचिव

ज्ञापांक:- 458

पटना, दिनांक :- 10-2-2022

प्रतिलिपि:- श्री अनिल कुमार, पर्यावरण अभियंता सह क्षेत्रीय पदाधिकारी, पटना, प्रक्षेत्र को आदेश की प्रति संलग्न करते हुए निर्देश दिया जाता है कि विषयांकित मामले के संदर्भ में सभी संबंधितों से संपर्क स्थापित कर अग्रतर कार्रवाई करना चाहेंगे तथा समिति का तथ्यात्मक जाँच प्रतिवेदन अधोहस्ताक्षरी को उपलब्ध करायेंगे।

अनुलग्नक: यथो०।


(एस. चन्द्रशेखर)
सदस्य-सचिव 10/2/22

निवेदन
A-2



बिहार सरकार
समाहरणालय, कैमूर (भभुआ)
(विधि-शाखा)

Ph No. :- 06189-223241 (O)
Fax No. :- 06189-223301
E-mail : dm-bhabhua.bih@nic.in

पत्रांक-XXIX-36-2022/- 1012 / विधि, दिनांक 28.02.2022

प्रेषक,

जिला पदाधिकारी,
कैमूर (भभुआ)।

सेवा में,

सदस्य-सचिव,
बिहार राज्य प्रदूषण नियंत्रण पर्वद, पटना।

Re, Patna विषय :-

M/S N.U. Vista Cement Company (formally- Imami Cement Company Ltd.) NH-2, 1644, भेड़िया रोड, कुल्हड़िया, दुर्गावती, कैमूर (बिहार) में स्थित सिमेंट कम्पनी के तथ्यात्मक पहलुओं की जाँच के संबंध में।

आपका पत्रांक-458 दिनांक 10.02.2022

प्रसंग :-
महाशय,

उपर्युक्त विषयक संबंध में कहना है कि **M/S N.U. Vista Cement Company**

(formally- Imami Cement Company Ltd.) NH-2, 1644, भेड़िया रोड, कुल्हड़िया, दुर्गावती, कैमूर (बिहार) में स्थित सिमेंट कम्पनी के तथ्यात्मक पहलुओं की जाँच हेतु बैठक आयोजित किये जाने के संबंध में प्रासंगिक पत्र के माध्यम से अनुरोध प्राप्त हुआ है। विदित हो कि मामला विभिन्न राज्यों में पदस्थापित पदाधिकारियों के समन्वय से संबंधित है।

अतः अनुरोध है कि अपने स्तर से बैठक हेतु तिथि निर्धारण करने की कृपा की

जाय।

विश्वसिमाजन,

28/2
जिला पदाधिकारी,
कैमूर (भभुआ)।

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11-04-22

Annexure-3



बिहार राज्य प्रदूषण नियंत्रण पर्षद्

परिवेश भवन, एन0एस0बी0-2, पार्कलुन औद्योगिक क्षेत्र सदाकत आश्रम पटना-800010 दूरभाष संख्या : 2261250/2262265
ई-मेल-msbspcb-bih@gov.in/bspcb@yahoo.com वेबसाइट-<http://bspcb-bihar.gov.in>

पत्रांक: 1080

पटना, दिनांक: 05-4-2022

प्रेषक,

एस0 चन्द्रशेखर, भा0व0से0

सदस्य-सचिव

सेवा में,

1. जिला पदाधिकारी,
कैमूर (भभुआ)
2. Deputy Director General of Forest(C)
Ministry of Environment Forest and Climate Change,
Regional Office (EZ),A/3, Chandersekharpur,
Bhubaneswar-751023,Odisha
E-mail-roez.bsr-mef@nic.in
3. Regional Director,
Central Pollution Control Board,
G97V+H50, Kasab Market, Sector E,
East Kolkata TWP, Kolkata,
West Bengal- 700107
E-mail-mkbiswas.cpcb@nic.in

विषय: M/S N.V Vista Cement Company Formerly-Imami Cement Company Ltd. NH-2,1644 भेड़िया रोड, कुल्हरिया दुर्गावती, कैमूर (बिहार) में स्थित सीमेंट कम्पनी के तथ्यात्मक पहलुओं की जाँच के संबंध में।

प्रसंग: जिला पदाधिकारी, कैमूर (भभुआ) का पत्रांक 1012, दिनांक 28.02.2022 एवं माननीय राष्ट्रीय हरित अधिकरण प्रधान बेंच, दिल्ली (NGT) द्वारा O.A No. 461/2022 विकास सिंह एवं अन्य बनाम् बिहार राज्य एवं अन्य में दिनांक-28.01.2022 को पारित आदेश के अनुपालनार्थ। (छायाप्रति संलग्न)

महाशय,

उपरोक्त विषयक प्रसांगिक पत्र के आलोक में सूचित करना है कि M/S N.V Vista Cement Company Formerly- Imami Cement Company Ltd. NH-2,1644 भेड़िया रोड, कुल्हरिया दुर्गावती, कैमूर (बिहार) में स्थित सीमेंट कम्पनी के आलोक में माननीय राष्ट्रीय हरित अधिकरण प्रधान बेंच, दिल्ली (NGT) द्वारा O.A No. 461/2022 विकास सिंह एवं अन्य बनाम् बिहार राज्य एवं अन्य में दिनांक: 28.01.2022 को पारित आदेश के अनुपालन हेतु दिनांक 11.04.2022 को 11.00 बजे पूर्वाह्न इस

पषद् के सभाकक्ष में Video Conferencing के माध्यम से बैठक आहुत करने का निर्णय लिया गया है।
उक्त विडियो कॉन्फ्रेसिंग का लिंक निम्न प्रकार है।

Join Zoom Meeting

<https://us02web.zoom.us/j/82751649346?pwd=a3pWaW1sdmNLWVM4cmZuNjlrMkZMQT09>

Meeting ID: 82751649346

Passcode: 838565

अनुलग्नक: यथोपरोक्त।

विश्वासभाषित
(एस0 चन्द्रशेखर)
सदस्य-सचिव
05/4/22

Minutes of the meeting held on 11.04.2022 in compliance with orders dated 28.01.2022 of the Hon'ble National Green Tribunal, Principal Bench in O.A No.-461/2021 in the matter of Vikas Singh & Ors Vs State of Bihar on issues related with M/s NU Vista Ltd., Bheriya Road, Khulhariya, Durgawati, Kaimur (Bhabhua) through video conferencing.

Date & Time of meeting: 11th April, 2022; at: 11.00 A.M.

The following officials were present in the meeting through video conferencing:

1. Sri S. Chandrasekar, Member Secretary, Bihar State Pollution Control Board, Patna;
2. Sri M.R. Prasad of Regional Office, MoEF&CC, Bhubaneswar;
3. Sri Rahul Kumar, SDM, Mohania, Kaimur;
4. Sri G.P. Singh, Scientist D, CPCB, Kolkata; and
5. Sri Anil Kumar, Regional Officer, BSPCB, Patna.

Member Secretary, BSPCB, Patna welcomed the officials present through video conferencing and detailed about the order dated 28.01.2022 of Hon'ble NGT, Principal Bench in O.A No.-461/2021 (Vikas Singh & Ors Vs State of Bihar). He expressed that a joint inspection is needed in light of the order passed by the Hon'ble NGT.

SDM, Mohania, Kaimur stated that :-

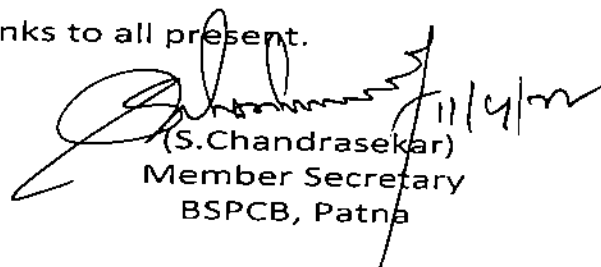
- Chawon Panchayat Vikash Samittee is not a registered committee.
- The cement unit M/s NU Vista Ltd is about 40 km away from Mohania.
- Area of the plant is 18.25 acres.
- The unit is surrounded by boundary wall of 6 to 8 ft height along with tree plantation. Water sprinkling system is also installed.
- This is a cement grinding unit based on dry process and cement slurry or of similar nature discharge was not noticed as on date. Clinker, fly ash and activated gypsum are used as main raw materials.
- He informed that DM, Kaimur will be on leave till 18th April, 2022 and as directed by him any date for joint inspection may be scheduled after 18th April, 2022.

Sri M.R. Prasad, Regional Office, MoEF&CC, Bhubaneswar stated that area under reference is covered under the jurisdiction of Regional Office, Ranchi of MoEF&CC. They are in process of correspondence with them in this regard.

Sri GP Singh of CPCB stated that any date of inspection may be fixed.

After discussion, 20th April, 2022 has been fixed for the joint inspection of the unit.

The meeting ended with a vote of thanks to all present.


(S. Chandrasekar)
Member Secretary
BSPCB, Patna

Inspection report in compliance with orders dated 28.01.2022 of the Hon'ble National Green Tribunal, Principal Bench in O.A No.-461/2021 in the matter of Vikas Singh & Ors Vs State of Bihar on issues related with M/s NU Vista Ltd., Bheriya Road, Khulhariya, Durgawati, Kaimur (Bhabhua).

1	Date of Inspection	20.04.2022
2	Site Inspection	M/s NU Vista Ltd., Bheriya Road, Khulhariya, Durgawati, Kaimur (Bhabhua), Bihar and sites shown by the complainant/villagers.
3	<p>Inspection was conducted by the team in accordance with the orders of the Hon'ble NGT.</p> <p>The following officials were participated in the inspection:</p> <ul style="list-style-type: none"> i. Sri Vinod Prasad Singh, I/C DM (Additional Collector PGR Cum DPGRO), Kaimur, Bhabhua; ii. Sri Rajeev Ranjan, Scientist 'E', IRO, Ranchi, MoEF & CC, Govt. Of India since IRO, Bhubaneswar, MoEFCC does not have jurisdiction over Bihar and Jharkhand State; iii. Sri Anil kumar, Regional Officer, Bihar State Pollution Control Board, Patna; and iv. Sri Toufic Aslam, Scientist 'B', Central Pollution Control Board, Regional Directorate, Kolkata. <p>The following officials of M/s NU Vista Ltd. were participated in the inspection:</p> <ul style="list-style-type: none"> i. Sri Prakash Dhakate, Vice President-Unit Head; ii. Sri Manas Dwibedy, Sr. Engineer, Environment; iii. Sri Ravi Chandrashekar, AGM-P&A; iv. Sri Sandeep Srivastav, Dy. G.M, P & Qc; and v. Sri Nitin Mehrotra, Manager. <p>The following complainant/villagers were participated in the inspection:</p> <ul style="list-style-type: none"> i. Sri Vikash Kumar Singh, Bheriya, Durgawati, Kaimur, Mob. No.-8840545193; ii. Sri Vishal Vikram Singh, Bheriya, Durgawati, Kaimur, Mob. No.-8840212922; iii. Sri Amit Kumar Singh, Bheriya, Durgawati, Kaimur, Mob. No.-9631317878; iv. Sri Arvind Panday, Bheriya, Durgawati, Kaimur, Mob. No.-9113749190; v. Sri Dharmendra Kumar Singh, Mob. No.-9651905803; vi. Sri Harendra Kumar Singh, Dhnechha, Mob. No.-7739921959; and vii. Sri Vikash Singh, Sarpanch, Dhanecha, Mob. No.-9128415311. <p>Note:-Copy of Presence Table/Register is enclosed as Annexure-1.</p>	
4	General Information about the unit	<ul style="list-style-type: none"> i. This cement unit was first of all established by M/s Eco Cement Ltd. and obtained Environmental Clearance (EC) from the MoEF & CC vide dated 31st October, 2011. Thereafter, M/s Emami Cement Ltd. which is a part of M/s Emami Group had taken over this unit and EC was transferred to this unit by MoEF & CC vide dated 04th November, 2019. Thereafter, name of the unit has been changed from 'Emami Cement Ltd.' to 'NU Vista Ltd. w.e.f 4th June, 2020. ii. This is cement grinding unit located at Bheriya Road, Khulhariya, Durgawati, Kaimur (Bhabhua), Bihar. At present unit is operating 1 MTPA capacity. iii. Following raw materials are being used:

		<p>a) Clinker; b) Fly ash; and c) Gypsum.</p> <p>iv. PP reported that “Clinker is procured from M/s Risda Cement Plant, Chattisgarh and transported by railway wagons from the plant to Railway Siding at Mugalsarai (UP). Further, it is being transported by trucks from Mugalsarai Railway Siding to the cement plant.</p> <p>Gypsum is imported from Oman & Iran to the Dhamra Port at Orissa by ships. They are transported by railway wagons from Dhamra Port at Orissa to Railway Siding at Mugalsarai (UP). Further, it is being transported by trucks from Mugalsarai Railway Siding to the cement plant.</p> <p>Fly ash is being procured from captive power plant of Hindalco at Renukoot (UP). It is transported from there to the cement plant by Bulklers.”</p> <p>v. Manufacturing process in brief:-Clinker and Gypsum are transported from storage shed to the mill hopper by conveyor belt, then material comes to cement mill or ball mill where they inter-grinded. After ball mill, inter-grinded material with fly ash coming from another outlet goes to Separator where coarse material and fine are separated. Coarse material are again sent to the ball mill for re-grinding and fine material cement as final product is stored in silo for packaging.</p> <p>vi. Manufacturing process in this cement plant is ‘dry processes and does not require water. Water is required mainly for cooling purposes at various points and for domestic use.</p>
5	<p>Issues raised by the complainant/villagers</p> <p>i. Regarding serious health hazard to thickly populated area due to the cement plant.</p>	<p>Observation of inspecting team</p> <p>Health report of habitants of nearby area of cement plant under reference, provided by the Civil Surgeon cum Chief Medical Officer, Kaimur (Bhabhua) through DM, Kaimur, which copy is being attached as Annexure-I. In his report dated 22.04.2022 Medical officer incharge, Primary health center, Durgawati, Kaimur, mentions that health survey of people near M/s NU Ltd. (former Emami Cement Ltd.) was done. Out of 37 people whose health checkup was done (Bheria=29; near factory=8) 34 people were found healthy and 03</p>

		people had problems of dry cough and respiratory related problems since last 10 years. In the note of the report it is mentioned that health checkup team went house to house to know the status of their health and people were found healthy.
	ii. Damage of newly constructed road under 'Pradhan Mantri Gramin Sadak Yojna' and occurrence of several accidents by running of thousands of heavy vehicles.	Road outside the cement plant was observed to be broken/damaged/unpitched at few places which may be seen in photographs attached.
	iii. Discharge of polluted water on surrounding agricultural land and damaging the crop and in the absence of any drainage facilities cement slurry passes through agricultural fields settled there and making it infertile and ultimately join the river.	<p>a) No sign of discharge of polluted water/cement slurry in surrounding agriculture land was found during inspection.</p> <p>b) Villagers participating with the inspection team, reported that cement dust from the plant reach their agricultural field and making it infertile. These agriculture fields were visited and soil samples were collected from following locations around the cement plant:</p> <ol style="list-style-type: none"> Sample No.-1; Sample No.-2; Sample No.-3 (land owner-Sri Harinder Singh; and Sample No.-4 (land owner-Sri Harinder Singh). <p>Analysis report of above soil samples of four locations is being attached as Annexure-II.</p> <p>A report of District Agriculture Officer, Kaimur (Bhabhua) of nearby agricultural field/area of cement plant under reference, provided through DM, Kaimur, which copy is being attached as Annexure-III. District agriculture officer, kaimur vide letter no. XXXII-IC-19/1971 dated 05.05.2022 has informed District officer, Kaimur that during inspection of nearby agricultural field to M/s NU Vista Cement the wheat crops had been cut. However, on the basis of perusal of crop</p>

		<p>residue/remains it appears there has not been any adverse affect on the crop production.</p> <p>In Kulharia for Kharif production (in quintal/ha) was 55.3, 60.4, 51.6, 52.6 in year 2018-19, 2019-20, 2020-21, 2021-22 respectively; for Rabi, production (in quintal/ha) was 31.6 in the year 2020-2021 reportedly.</p> <p>In Kharsara for Kharif production (in quintal/ha) was 56.4, 52.6, 49.6, 49.0 in the year 2018-19, 2019-20, 2020-21, 2021-22 respectively; for Rabi, production (in quintal/ha) was 5, 28.90, 31.5 and 31.20 in the year 2018-19, 2020-21, 2021-22 respectively.</p>
	v. Health care facilities provided by the unit to the villagers suffering from the diseases caused by damage to environment by the said cement company.	This being complied with as reported by the unit.
6	<p><u>Other observation of inspecting team:</u></p> <ol style="list-style-type: none"> A pucca drain inside the campus and along periphery of the boundary wall was found under construction during site inspection. At many portions the construction work was found completed; however at some portions construction work was ongoing. In the west side of plant no drain had been constructed nor under construction as observed. Plantations were observed around the plant/project periphery at many portions, however at some places there were gaps and also at some portions no plantations were developed. Many of the plants developed were with short and narrow leaves and not very effective in controlling/minimizing the dust propagation from the project. Three tier plantations along the boundary were observed at some places, but at many other places three tier plantations along the boundary were not observed. Plantations/greenbelt was observed inside the project area also but still there are many places inside the project area where plantations greenbelt/ can be developed. Dust layers were observed on the roads and other working areas in the project. Mechanical sweeping machine was found operational in the project. However, there was dust generation during operation of the sweeping machine which was not desirable. Fixed water sprinklers were installed inside the campus and along boundary at some places toward/near main gate. However, wide gap between two consecutive sprinklers was observed and sprinkled water was not reaching to complete area and considerable areas/places were remained dry which were 	

	<p>potential source of dust pollution. There was need to increase number of sprinklers to cover the wide area/roads.</p> <p>vii. Raw material conveyors were not fully covered. Some open gaps in lower and upper portion were observed from where fugitive dust emission may be taken place due to high speed of wind.</p> <p>viii. Clinker, Gypsum and Fly ash were used as raw material. The storage and handling of Clinker and Gypsum was a potential source of fugitive dust emission during their unloading from trucks, due to inadequate covered storage facilities, loading on conveyor system by pay loader and dropping/free falling of material from height to the hopper of conveyor system. Fugitive dust emission from these hoppers was observed and found that dust suction system attached with the hopper was either not functioning or inadequate.</p> <p>Fly ash was being procured from power plant and transported to the cement plant by Bulklers. It was being stored in the silo by pneumatic conveyor.</p> <p>ix. Large stacks/dumps of the raw materials were kept in open i.e. without any shade/proper covered or enclosed structure. There was dust generation and propagation whenever wind blew and it was propagating outside the boundary of the plant during high wind as observed during inspection.</p> <p>x. Dust accumulation on the floors in the cement bag packaging and loading section of the plant was observed. Also observed that dust generation occurred during loading of cement bag on truck. Person employed in cement bags loading section were wearing dust masks, other PPEs.</p> <p>xi. Display of environmental parameter monitoring, PM₁₀ etc was observed near the main gate of the plant.</p> <p>xii. Some plantations were also observed just outside the plant boundary. Labelled photographs (numbering 1 to 40) of the project and surrounding sites in support of the above mentioned observations is given in annexure.</p>
9	<p>Recommendations of inspecting team.</p> <p>This cement grinding unit is old one and initially it was established in 2011. Processes of cement grinding and raw material handling is based on very old technology. Raw materials are manually handled with the help of JCB/Loaders etc; cement is currently ground in ball mills whereas vertical roller mills are more effective than ball mills. Road Transportation of raw materials by trucks is also increase the pollution load. Modernization of cement plant is very much needed. Therefore, unit may be directed to submit a comprehensive action plan for the modernization of cement grinding unit to monitor and ensure the following:</p> <ol style="list-style-type: none"> 1. The height of stack attached with Cement Mill, Packaging Section etc. shall be of a minimum of 30 metres or, as per the formula $H=14(Q)^{0.3}$, whichever is

	<p>more, where “H” is the height of stack in metres and “Q” is the maximum quantity of SO₂ expected to be emitted in kg/hr through the stack at 100 percent rated capacity of the plant and calculated as per the norms of gaseous emission.</p> <ol style="list-style-type: none"> 2. Control of fugitive emission from several points in the plant. 3. Cement dust should not be clearly visible on leaf of trees inside the plant and should confirm emission of fugitive emissions. 4. Covered shed should be provided to store all raw materials and conveyor to transport raw materials should be completely covered. 5. Further improvement in housekeeping is required including road dust collection, regular sweeping, water sprinkling etc. mechanical sweeping machines should be increased and also should be made effective in dust suction are required to carry out regular sweeping of roads to minimize fugitive emissions of road dust. 6. Calibration of Online monitoring system on regular basis. 7. Massive tree plantation is recommended to improve ecology of the surroundings specially to minimize dust in the ambient air. 8. The storage and handling of raw materials is a potential source of fugitive dust emission, contamination of soil and groundwater. Storm water flowing through these materials may become contaminated. 9. Wastewater in the cement plant may result from surface run-off during rain. 10. Waste water from utility operations like cooling purposes in different phases of the process (e.g., bearings etc), causes no substantial contribution to water pollution. They should be re-cycled. 11. Storm-water should not be allowed to
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		<p>mix with effluent, treated sewage, scrubber water and/or floor washings. Separation of drainage system for storm water and trade effluent, their re-use in gardening etc.</p> <p>12. Storm-water within battery limits of Industry shall be channelized through separate drain(s) as per natural gradient passing through high density polyethylene lined pit(s) each having holding capacity of 10 minutes (hourly average) of rainfall for its catchment area.”</p> <p>13. All efforts shall be made by the industry for ‘zero discharge’ of service wastewater. In case, the industry prefers to discharge service wastewater, the following norms shall be complied with: pH- 5.5 to 9.0; Suspended Solid-100 mg/l; Oil & Grease-10 mg/l.</p> <p>14. Installation of water meter at all points of water consumption to monitor daily water consumption directly.</p>
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Note:- Still Photographs during inspection attached.

(Toufic Aslam)
Scientist ‘B’, CPCB,
Regional Directorate,
Kolkata

(Anil kumar)
Regional Officer,
BSPCB, Patna

(Rajeev Ranjan)
Scientist ‘E’,
IRO, Ranchi,
MoEFCC,
Govt. Of India

(Vinod Prasad Singh)
I/C DM (Additional
Collector PGR Cum
DPGRO), Kaimur



Raw material storage shed



Drainage under construction



Drainage under construction



Raw material storage shed



Cement packaging section

Cement packaging section



Cement packaging section



Cement packaging section



Hopper to handle raw material

Hopper to handle raw material



Storage of raw material

Storage of raw material



Rain water harvesting pond



Fugitive dust emission due to wind



Fugitive dust emission due to wind



Display Board



Road outside the factory gate

Road outside the factory gate



Soil sampling in agricultural field outside the plant



Soil sampling in agricultural field outside the plant



	<p>season if proper drainage system, siltation tanks, etc. not constructed.</p> <p>10. Waste water from utility operations like cooling purposes in different phases of the process (e.g., bearings etc), cause no substantial contribution to water pollution. They should be re-cycled.</p> <p>11. Storm-water should not be allowed to mix with effluent, treated sewage, scrubber water and/or floor washings. Separation of drainage system for storm water and trade effluent, their re-use in gardening etc.</p> <p>12. Storm-water within battery limits of industry shall be channelized through separate drain(s) as per natural gradient passing through high density polyethylene lined pit(s) each having holding capacity of 10 minutes (hourly average) of rainfall for its catchment area.</p> <p>13. All efforts shall be made by the industry for 'zero discharge' of service wastewater. In case, the industry prefers to discharge service wastewater, the following norms shall be complied with: pH- 5.5 to 9.0; Suspended Solid-100 mg/l; Oil & Grease-10 mg/l.</p> <p>14. Installation of water meter at all points of water consumption to monitor daily water consumption directly.</p>
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Note:- Still Photographs during inspection attached.

Aslam
10.05.2022
(Toufic Aslam)

Scientist 'B',
CPCB, Regional
Directorate, Kolkata

Akumar
10.05.22
(Anil kumar)

Regional Officer,
BSPCB, Patna

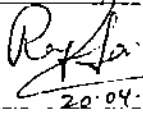
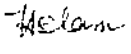
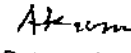
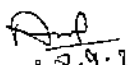
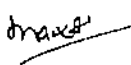
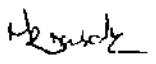

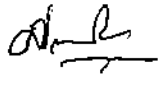
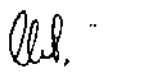


Rajeev
10.05.22
(Rajeev Ranjan)

Scientist 'E',
IRO, Ranchi,
MoEFCC,
Govt. Of India

Vinod
10.05.22
(Vinod Prasad Singh)

I/C DM (Additional
Collector PGR Cum
DPGRO), Kaimur

माननीय राष्ट्रीय हरित अधिकरण (NGT), प्रधान बेंच, दिल्ली द्वारा O.A. No.-461/2021, विकास सिंह एवं अन्य बनाम् बिहार राज्य एवं अन्य में दिनांक 28.01.2022 को पारित आदेश के अनुपालन हेतु दिनांक 20.04.2022 को स्थल जांच (M/s NU Vista Ltd., Bheriya Road, Kulhariya, Durgawati, Kaimur (Bhabhua)) में भाग लेने वाले पदाधिकारियों/इकाई प्रतिनिधियों/ग्रामीणों की उपस्थिति पंजी।

क्र०सं०	नाम एवं पदनाम	पता	मोबाईल नं०	ई-मेल	हस्ताक्षर
1.	Rajeev Ranjan. Scientist 'E'	IRO Ranchi, MOEFCC, Govt of India	9113396110	ro.ranchi- mef@gov.in	 20.04.22
2.	Taufiq Aslam Scientist 'B'	CPCB Regional Directorate Kolkata	7827106649	taufiq.cpcb@ gov.in	 20.04.2022
3.	ANIL KUMAR R.O.	BSPCB, Patna	9430511414	bpcb@yahoo .com	 20.04.22
4.	Vinod pr. Singh AC (PGR), Kaimur	Collectorate - Kaimur, Bhabhua	9546987822	vprgrkaimur @gmail.in	 20.04.22
5.					
6.	Prakash Dhakate Vice President-Unit Head	NU Vista Ltd. Bhabhua Plant	7596060234	Prakash.dhakate @nuvoco.com	
7.	Manas Debbedy Sr. Exe. Environment	NU Vista Ltd Bhabhua Plant	7596060234	manas.debedy @nuvoco.com	
8.	Ravi Chandrasekhar ACM-PFA	NU Vista Ltd. Bhabhua Plant	9981509185	ravi.chandrasekhar @nuvoco.com	
9.	S. Shrivastava Dy. G.M. P&QC	NVL Bhabhua	7596060215	sandeep.shrivastava @nuvoco.com	
10.	NITIN MEHROTRA MANAGER	NVL Bhabhua	7596060242	nitin.mehrotra @nuvoco.com	
11.	VIKASH KR. SINGH	BHERIA, DURGAWATI KAIMUR-821105	8620545193	vikashsingh@gmail (com)	
12.	Vishal Vikram Singh	Bheria Durgawati Kaimur, 821105	8840442922	thakurvishal Singh 75@gmail.com	

13.	Amit Kumar Sns Amit Sns	Bheria durgam Kantola Bheria	9631317830		amb.
14.					
15.	Amit Kumar Sns	Mannipal Bheria Durgam Kantola	911374919	Amit Kumar Sns 14950	Amit Kumar Sns
16.	Amal Kumar Sns Dharmendra Kumar Sns	Amal Kumar Sns Dharmendra Kumar Sns	9651905803		Amal
17.	Harendera Kumar Sns	Dharmendra Kumar Sns	97399219 SA		
18.	Pamier Sns 21244	Pamier Sns	912841 5311		
19.					
20.					
21.					
22.					
23.					
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25.					
26.					
27.					



कार्यालया असैनिक शल्य चिकित्सक-सह-मुख्य चिकित्सा पदाधिकारी
कैमूर, भभुआ



फोन नं-06189-222703, मो-9470003354

ई-मेल :- cskainmur@gmail.com

पत्रांक..... 81A

प्रेषक,

असैनिक शल्य चिकित्सक-सह
मुख्य चिकित्सा पदाधिकारी
कैमूर, भभुआ

सेवा में,

जिला पदाधिकारी
कैमूर (भभुआ)

दिनांक..... 22/04/22

विषय:- जॉच प्रतिवेदन भेजने के संबंध में।

प्रसंग:- भवदीय के पत्रांक-1183/गो० दिनांक-21.04.2022


महाशय,

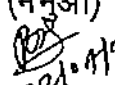
उपर्युक्त विषयक प्रसंगाधीन पत्र के आलोक में M/s NU Ltd. Former Emami Cements Ltd. भेरियों रोड, कुल्हरिया, दुर्गावती, कैमूर (भभुआ) स्थित ईमामी सिमेन्ट कम्पनी के आस-पास के टोलो/बसावटो में रहने वाले स्थानीय लोगों के स्वास्थ्य जॉच कर जॉच प्रतिवेदन इस पत्र के साथ संलग्न कर भेजा जा रहा है।

अतः भवदीय को सादर सूचनार्थ समर्पित।

अनुलग्नक - यथोपरि।

विश्वासभाजन


22.04.22
असैनिक शल्य चिकित्सक-सह
मुख्य चिकित्सा पदाधिकारी
कैमूर, (भभुआ)


22.04.22



कार्यालय, प्रभारी चिकित्सा पदाधिकारी, दुर्गावती, (कैमूर)



Ph. No. :- 06187221565, E-Mail:- phcdurgawatiphc@gmail.com

पत्रांक - BPMV/DUR/122

दिनांक 22/4/22

प्रेषक :- प्रभारी चिकित्सा पदाधिकारी
प्राथमिक स्वास्थ्य केंद्र, दुर्गावती, कैमूर

सेवा में, अखंडित स्वास्थ्य निचल एवं मुख्य
चिकित्सा पदाधिकारी, कैमूर

विषय :- जॉन्स प्रतिवेदन प्रेषण के संबंध में

प्रसंग :- अवधीय डा पत्रांक न 95 दिनांक 21/4/22

महोदय,
उपरोक्त विषयक एवं प्रसंगधीन पत्र के आलोच
में आज दिनांक 22/4/22 को 17/5 NU Ltd.
former Emami Cement Ltd. भेरियो टीड,
उल्हाड़िया, दुर्गावती कैमूर के आहवाज के शेलों एवं
कागजों में रहने वालों की मेडिकल टीम गठित
कर स्वास्थ्य जांच की गई। जॉन्स परान्त संबंधित
प्रतिवेदन जो निम्नवत है, अवधीय डा द्वारा समर्पित
है :-

क्रम क्रम	स्वास्थ्य जांच की गई लोगों की संख्या	ग्राम का नाम	कुल स्वास्थ्य व्यक्ति की संख्या	अवधि व्यक्तियों की संख्या	अवधि
1.	37	भेरियो-29 कैमूर-8 गांव	34	03	हररी (बॉली एवं जॉन्स संबंधी)

नोट :- साथ ही टीम द्वारा घर-घर भ्रमण करते हुए लोगों की
स्वास्थ्य जांच कर ली गई, भौट के निकटस्थ स्वास्थ्य गांव गए,
अतः अवधीय डा द्वारा समर्पित

विश्वनाथ

22/4/22

प्रभारी चिकित्सा पदाधिकारी
प्राथमिक स्वास्थ्य केंद्र
दुर्गावती (कैमूर)

22/4/22

ANNEXURE - IV

Central Pollution Control Board

Eastern Regional Directorate

Zonal Laboratory Kolkata

303 Sevoke Road, 7th Floor, Sevoke Road

Ph: 91-33-2744187/2744188/2744189

E-mail: kolkata@cpclb.gov.in



Test Report

NO.174

Date: 04.04.2022

Sample Details	Agricultural Land (M/s N U Vista Cement Co.)	Lab Reference Number	174/2022
Sample Received From	Tourist Aslam	Sampling Date	20.04.2022
Address	CPCB RD-Kolkata	Sample Received on	22.04.2022
Test Material	soil/sediment	Total No. of Sample	4
Sample Condition		Period of Analysis	22.04.2022 to 28.04.2022
Objective		Remarks	

Results

Parameter:	pH	EC	Available Phosphorus	Available Nitrogen	Exchangeable Ca	Exchangeable Mg	Exchangeable Sodium	Exchangeable Potassium	SAR	Soil Texture	Organic Carbon
Method: APHA 23rd Ed. No. 475-488, 3rd. 2001											
Minimum Detection Limit	0.2										
SAMPLE ID	Units:	µS/cm	mg/gm	mg/gm	mg/gm	mg/gm	mg/gm	mg/gm		%	%
Point No.1	7.8	1615	0.048	0.15	8.72	2.3	0.203	0.256	0.016	*	1.13
Point No.2	7.7	1377	0.011	0.16	9.52	1.75	0.206	0.295	0.016	*	1.16
Point No.3	8.0	527	0.036	0.11	13.4	3.40	0.232	0.240	0.015	*	1.20
Point No.4	7.8	916	0.015	0.12	12.2	2.82	0.221	0.560	0.015	*	1.51

Analyst's Signature

(1.) For sampling details pl. refer to ARF No

174/2022

Dated: 22.04.2022

(2.) The results are reported based on the materials received. (3.) Sample will be destroyed after one month from the date of issue of the certificate unless other was specified. Sample will be preserved according to standard method. (4.) The test report shall not be reproduced except in full, without the written permission of Laboratory.

Authorised Signatory
Scientist 'C'
Authorized Signatory

Authorised Signatory
M K Dasgupta
RD & MR

Doc No. CB/2LK/CR/17/8/1	Issue No. 04	Issue Date: 01.01.2020	Specific criteria for soil, sediment & sludge analysis in Chemical Laboratory
Amendment No. 0	Amendment Date: 0		Page No. 01 of 01

Soil Sampling:

Soil samples were taken on the day of inspection from four locations of surrounding agricultural fields around M/s NU Vista Ltd., Kaimur. Soil samples were taken at 0 to 30 cm depth from each sampling spot, making a total of 04 samples. These were taken to the laboratory at CPCB Regional Directorate, Kolkata for analysis. Various physico-chemical parameters of soil samples collected from the different locations of the impugned area were analyzed to determine the soil nutrient status.

Soil Analysis Result:

Parameters	Locations			
	Point No. 1	Point No. 2	Point No. 3	Point No. 4
pH	7.8	7.7	8.0	7.8
Electrical Conductivity ($\mu\text{S}/\text{cm}$)	1615	1377	527	916
Available Phosphorus (mg/gm)	0.048	0.011	0.036	0.015
Available Nitrogen (mg/gm)	0.15	0.16	0.11	0.12
Available Calcium (mg/gm)	8.72	9.52	13.4	12.2
Available Magnesium (mg/gm)	2.3	1.75	3.40	2.82
Exchangeable Sodium (mg/gm)	0.203	0.206	0.232	0.221
Exchangeable Potassium (mg/gm)	0.256	0.295	0.240	0.560
Sodium Absorption Ratio (SAR)	0.016	0.016	0.015	0.015
Organic Carbon (%)	1.13	1.16	1.20	1.51

Results and Discussions:

pH:

The soil pH values of the study area are slightly alkaline and range between 7.7 to 8.0 with a maximum of 8.0 at Point No. 3 and minimum of 7.7 at Point No. 2. Soil pH of all the points experienced neutral to basic conditions. This may be primarily due to the presence of base forming cations associated with carbonates and bicarbonates found naturally in soils and irrigation waters. Due to relatively low precipitation amounts, there is little leaching of base forming cations resulting in pH values 7 or more than 7 in all of the points. The range of soil pH of the study area indicates a good sign for agricultural production.

Electrical Conductivity:

Electrical Conductivity (EC), as the measure of current carrying capacity, gives a clear picture of the amount of soluble salts present in the soil. It plays a major role in the salinity of soils. There is a relation between electrical conductivity and salinity i.e. lesser the EC value low will be the salinity value of soil and vice versa.

The soil conductivity of the four points ranged from 527 to 1615 $\mu\text{S}/\text{cm}$. Electrical Conductivity values within 800 $\mu\text{S}/\text{cm}$ are considered as normal nature of soil. The range of soil EC of the impugned area indicate values that are critical for germination.

Organic Carbon:

The organic substances are a major determinant of soil structure, moisture content, pH and the soil nutrient status of the topsoil. This differentiates among the fertile and non-fertile soils. Organic Carbon values of <0.5 % are considered low, between 0.5% to 0.75% are considered medium and >0.75% are considered high.

Organic Carbon levels of the four soil samples ranged between 1.13% to 1.51% with a maximum at Point No. 4 and minimum at Point No. 1. The range of soil organic carbon of the, impugned area indicates characteristics of a good soil.

Phosphorus:

Phosphorus is the second most important macronutrient available in the soil. Chemically, phosphorus exists in the soil in the form of both organic and inorganic forms. Generally, plants are dependent on inorganic phosphorus especially in the form of phosphate ions, whereas organic phosphates are also important sources of phosphorus in almost all types of soils.

Level of phosphorus in the soil samples collected are ranging from 15 to 48 mg/kg with a maximum at Point No.1 and minimum at Point No. 4. All the values of available phosphorus are more than 15 mg/kg which is generally considered as the critical level below which phosphorus deficiency symptoms are likely to occur in many crops. Thus, the soil of the project area is suitable for crop production.

Potassium:

This element is important in grain formation, and is absolutely necessary for tuber development. Potassium increases crop resistance to certain diseases. It helps to prevent the undesirable growth of plants that is sometimes caused by excessive nitrogen. From the results of potassium content of the soil samples collected; it is found that values range from 240 to 560 mg/kg. The normal range of potassium content of soil for various agricultural crops is 195.5 to 312.8 mg/kg.

Sodium adsorption ratio (SAR):

The sodium adsorption ratio is a measure of the amount of sodium (an undesirable element) relative to calcium and magnesium (desirable elements) in soil. Soils with high SAR values tend to have poor structure, and low water infiltration and percolation rates. Soils with a high SAR usually have a high pH and EC. If pH and EC are within acceptable ranges, SAR should also be acceptable. In the soil samples collected, the range of SAR across the points varied from 0.015 to 0.016 which are well within the permissible limit of agricultural practices.



कार्यालय जिला कृषि पदाधिकारी कैमूर, (भभुआ)

E-mail: dao-kal-bjh@nic.in

Mob No. 9431818734

पत्रांक ~~XXXX~~ -16-19/571

कृ० भभुआ / दिनांक 05/05/2022

प्रेषक,

जिला कृषि पदाधिकारी
कैमूर (भभुआ)।

सेवा में,

जिला पदाधिकारी,
कैमूर (भभुआ)।

विषय:- संशोधित जाँच प्रतिवेदन उपलब्ध कराने के संबंध में।

प्रसंग:- भवदीय पत्रांक XIX-68-22/1182/गो०, भभुआ दिनांक 21.04.2022

महाशय,

उपर्युक्त विषय एवं प्रसंग के संबंध में सादर सूचित करना है कि दिनांक 23.04.2022 को दुर्गावती प्रखण्ड के प्रखण्ड कृषि पदाधिकारी एवं कृषि समन्वयकों के साथ स्थलीय जाँच किया गया। जाँचोपरान्त संशोधित वांछित प्रतिवेदन इस पत्र के साथ संलग्न कर भवदीय को भेजा जा रहा है।

सादर सूचनार्थ समर्पित।

अनु०:- यथोक्त।

विश्वासमाजन

(Signature)
जिला कृषि पदाधिकारी,
कैमूर (भभुआ)।
5-5-22 5/5/22

जांच प्रतिवेदन

M/S NU Vista Former-Cement Ltd भेरियां रोड के सटे पश्चिम मौजा-कुल्हड़ियां, प्रखण्ड-दुर्गावती, कैमूर में अवस्थित है। भेरिया रोड से पुरब पंचायत खड़सरा अन्तर्गत मौजाच धनेछा अवस्थित है। विगत 04 वर्षों का उत्पादन/उपज से संबंधित प्रतिफल निम्न प्रकार है:-

पंचायत-खजुरा

उपज-क्वि0/हे0

क्र	मौजा	वित्तिय वर्ष	उपज (खरीफ)	उपज (रबी)	अभ्युक्ति
1	2	3	4	5	6
01	कुल्हड़िया	2018-19	55.3	—	
02		2019-20	60.40	—	-
03		2020-21	51.6	31.6	
04		2021-22	52.6	—	

पंचायत-खड़सरा

उपज-क्वि0/हे0

क्र	मौजा	वित्तिय वर्ष	उपज (खरीफ)	उपज (रबी)	अभ्युक्ति
1	2	3	4	5	6
01	धनेछा	2018-19	56.4	28.90	
02		2019-20	52.6	—	
03		2020-21	49.6	31.5	
04		2021-22	49.0	31.20	

स्थल निरीक्षण के क्रम में पाया गया कि आस-पास के खेतों में गेहूँ का फसल कट चुका है। परंतु फसल अवशेष (खुंटी) के अवलोकन से फसल के उत्पादन पर वर्तमान में कोई प्रतिकूल प्रभाव परिलक्षित नहीं होता है।

सादर सूचनार्थ ।

कृषि समन्वयक :-

Abhishek Kumar Singh
 प्रखण्ड कृषि पदाधिकारी
 दुर्गावती
Abhishek Singh

05/05/2022
 प्रखण्ड कृषि पदाधिकारी,
 दुर्गावती।

2.7.20

REGISTERED

**BIHAR STATE POLLUTION CONTROL BOARD**

Parivesh Bhawan

N.S-B/2, Industrial Area, Patliputra, Patna- 800 010 EPABX & 0612-2261250/2262265, Fax & 0612-2261050

E-mail- msbspcb-bih@gov.in, Website <http://bspcb.bihar.gov.in>

Ref. No.:-

Patna, dated:-

FromAshok Kumar Ghosh,
Chairman.**To**M/S NU Vista,
At- Bheria Road, Kulharia, Durgawati,
District- Kaimur (Bhabhua) - 821105.**Proposed Direction under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 31 A of the Air (Prevention and control of Pollution) Act, 1981.**

- 1) **WHEREAS**, you were granted "Consent- to- Operate" (hereinafter referred to as CTO) from Bihar State Pollution Control Board (hereinafter referred to as the 'Board') under Section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974, vide this Board's letter no. 7002, dated 15.05.2018.
- 2) **WHEREAS**, you were granted CTO from State Board under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, (hereinafter referred to as 'Air Act', vide this Board's letter no. 7001, dated 15.05.2018.
- 3) **WHEREAS**, the Hon'ble National Green Tribunal, Principal Bench, New Delhi was in receipt of complaint by E-mail regarding pollution being caused by your unit and the Hon'ble Tribunal registered the said complaint as O.A. No. 461 of 2019.

- 4) **WHEREAS**, the Hon'ble Tribunal, vide their order dated 28.01.2022 passed in O.A. No. 461 of 2019, constituted a joint committee of Regional Office of MoEF&CC at Bhubaneswar; Regional Office of CPCB at Kolkata; State Pollution Control Board & District Magistrate, Kaimur, to look into the grievances.
- 5) **WHEREAS**, the said joint committee inspected your unit on 20.04.2022 and *inter-alia* observed that:-
- i. A pucca drain inside the campus and along periphery of the boundary wall was found under construction during site inspection. At many portions the construction work was found completed; however at some portions construction work was ongoing. In the west side of plant no drain had been constructed nor under construction as observed;
 - ii. Plantations were observed around the plant/project periphery at many portions, however at some places there were gaps and also at some portions no plantations were developed. Many of the plants developed were with short and narrow leaves and not very effective in controlling/minimizing the dust propagation from the project. Three tier plantations along the boundary were observed at some places, but at many other places three tier plantations along the boundary were not observed;
 - iii. Plantations/greenbelt was observed inside the project area also but still there are many places inside the project area where plantations greenbelt/ can be developed;

- iv. Dust layers were observed on the roads and other working areas in the project;
- v. Mechanical sweeping machine was found operational in the project. However, there was dust generation during operation of the sweeping machine which was not desirable;
- vi. Fixed water sprinklers were installed inside the campus and along boundary at some places toward/near main gate. However, wide gap between two consecutive sprinklers was observed and sprinkled water was not covering the complete area and considerable areas/places were dry which were causing dust pollution. There was need to increase number of sprinklers to cover the wide area/roads;
- vii. Raw material conveyors were not fully covered. Some open gaps in lower and upper portion were observed from where fugitive dust emission may taken place due to speed of wind;
- viii. Clinker, Gypsum and Fly ash were used as raw material. The storage and handling of Clinker and Gypsum was a potential source of fugitive dust emission during their unloading from trucks, due to inadequate covered storage facilities, loading on conveyor system by pay loader and dropping/free falling of material from height to the hopper of conveyor system. Fugitive dust emission from these hoppers was observed and found that dust suction system attached with the hopper was either not functioning or inadequate.

Fly ash was being procured from power plant and transported to the cement plant by Bulklers. It was being stored in the silo by pneumatic conveyor.

- ix. Large stacks/dumps of the raw materials were kept in open i.e. without any shade/proper covered or enclosed structure. There was dust generation and propagation whenever wind blew and it was propagating outside the boundary of the plant during high wind as observed during inspection;
 - x. Dust accumulation on the floors in the cement bag packaging and loading section of the plant was observed. Also observed that dust generation occurred during loading of cement bag on truck. Person employed in cement bags loading section were wearing dust masks, other PPEs;
 - xi. Display of environmental parameter monitoring, PM₁₀ etc was observed near the main gate of the plant;
 - xii. Some plantations were also observed just outside the plant boundary.
- 6) **WHEREAS**, the Board has issued a Direction vide its Memo no. 1135, dated 13.04.2022, directing you to submit a time bound action plan to ensure compliance with Environmental Clearance Conditions and CTO conditions.
- 7) **WHEREAS**, you filed a reply to the aforesaid direction wherein you have submitted in a tabular form the status of compliance of Environment Clearance conditions and CTO conditions. However, the reply was found to be not satisfactory as you have not given a time line; further in view of findings of the inspection dated 20.04.2022 it is

evident that you are not complying with the Environment Clearance conditions and CTO conditions.

- 8) **WHEREAS**, the said committee on basis of findings of the inspection has also made recommendations in their report.

I, therefore, in exercise of the powers conferred by section 31A of the Air Act, 1981 and Section 33A of the Water Act, 1974 **propose to direct you to:**

- i) Increase the height of stack attached with Cement Mill, Packaging Section etc. to a minimum of 30 meters or, as per the formula $H=14(Q)^{0.3}$, whichever is more, where “H” is the height of stack in meters and “Q” is the maximum quantity of SO₂ expected to be emitted in kg/hr through the stack at 100 percent rated capacity of the plant and calculated as per the norms of gaseous emission.
- ii) Increase the number of water sprinklers to cover the wide area/roads and the areas which are not covered by the existing water sprinklers.
- iii) Make arrangement for adequate facilities to control fugitive dust emission during unloading of raw materials-Clinker and Gypsum from the trucks and stored in the plant campus.
- iv) Construct/install covered storage facilities for storage of Clinker and Gypsum. Improve/repair Dust suction system attached with the hopper.
- v) Ensure covering of Raw material conveyors.

- vi) Improve housekeeping including road dust collection, regular sweeping, water sprinkling etc. More vacuum sweeping machines are required to carry out regular sweeping of roads to minimize fugitive emissions of road dust.
- vii) Take remedial measures to arrest dust emitted during loading/unloading of cement bag/clinker/flyash/gypsum on truck.
- viii) Make a scheme of massive tree plantation to improve ecology of the surroundings specially to minimize dust in the ambient air due to wind.
- ix) Ensure:
 - a) Storm-water should not be allowed to mix with effluent, treated sewage, scrubber water and/or floor washings. Separation of drainage system for storm water and trade effluent, their re-use in gardening etc.
 - b) Storm-water within battery limits of Industry should be channelized through separate drain(s) as per natural gradient passing through high density polyethylene lined pit(s) each having holding capacity of 10 minutes (hourly average) of rainfall for its catchment area.”
 - c) Maintain ‘zero discharge’ of service wastewater. In case, the industry prefers to discharge service wastewater, the following norms should be complied with: pH- 5.5 to 9.0; Suspended Solid-100 mg/l; Oil & Grease-10 mg/l.
- x) Install water meter at all points of water intake and consumption to monitor daily water consumption directly.

- xi) Road outside the cement plant was observed to be broken/damaged/unpitched at few places which was due to the movement of heavy trucks of the cement plant consult to the local administration for regular repairing and maintenance of the road.
- xii) Furnish a performance Bank Guarantee of Rs. 40,00,000/- to perform/comply with the directions/work as stated above.

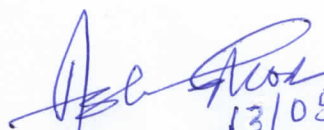
Sd/-
(Ashok Kumar Ghosh)
Chairman

Memo no.: 1563

Patna, Dated: 13/5/22

Copy to:

- (i) The Regional Officer, Patna for information and necessary action.
- (ii) The Legal Cell, Patna for records.


13/05/22
(Ashok Kumar Ghosh)
Chairman