

BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

Original Application No. 186 of 2023

(Under Section 14 & Section 15 r/w Section 18 of the National Green Tribunal Act, 2010)

IN THE MATTER OF:

RAVINDRANATH SHANBHOGUEAPPLICANT

VERSUS

UNION OF INDIA AND OTHERSRESPONDENTS

REPORT FILED BY THE FIFTH RESPONDENT IN THE ABOVE CASE



Adv. Rema Smrithi.V.K

ADDITIONAL STANDING COUNSEL
5th Respondent

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 186 of 2023

(Under Section 14 & Section 15 r/w Section 18 of the National Green Tribunal Act, 2010)

IN THE MATTER OF:

RAVINDRANATH SHANBHOGUEAPPLICANT

VERSUS

UNION OF INDIA AND OTHERSRESPONDENTS

VOLUME 1

Index

Sl No.	Description	Pages
1.	Report filed by fifth respondent in Original Application No. 186 of 2023	1-2

Dated this the 1st day of April, 2024.

Rema Smrithi. V.K., Advocate
Additional Standing Counsel

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 186 of 2023

(Under Section 14 & Section 15 r/w Section 18 of the National Green Tribunal Act, 2010)

IN THE MATTER OF:

RAVINDRANATH SHANBHOGUEAPPLICANT

VERSUS

UNION OF INDIA AND OTHERSRESPONDENTS

VOLUME 2

Index

Sl No.	Description	Pages
1	Annexure 1 – Analysis report of the samples collected on 21/12/2023.	3-6
2	Annexure 2 – Analysis report of the samples collected on 01/02/2024.	7-11
3	Annexure 3 – Analysis report of the samples collected on 04/03/2024	12-15

Dated this the 1st day of April, 2024.

Rema Smrithi. V.K., Advocate
Additional Standing Counsel

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 186 of 2023

(Under Section 14 & Section 15 r/w Section 18 of the National Green Tribunal Act, 2010)

IN THE MATTER OF:

RAVINDRANATH SHANBHOGUEAPPLICANT

VERSUS

UNION OF INDIA AND OTHERSRESPONDENTS

VERIFICATION

I, Aurther Xavier J, Environmental Engineer, Kerala State Pollution Control Board, District Office, Kasaragod, do hereby verify on this the 1st day of April, 2024, that all what is stated above are true and correct to the best of my knowledge and information.



A handwritten signature in blue ink, appearing to read "Aurther Xavier J".

Aurther Xavier J

Environmental Engineer

**J. AURTHER XAVIER
ENVIRONMENTAL ENGINEER**

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 186 of 2023

(Under Section 14 & Section 15 r/w Section 18 of the National Green Tribunal Act, 2010)

IN THE MATTER OF:

RAVINDRANATH SHANBHOGUEAPPLICANT

VERSUS

UNION OF INDIA AND OTHERS..... RESPONDENTS

VOLUME 1

REPORT FILED BY THE FIFTH RESPONDENT

I, Aurther Xavier J, aged 54 years, currently working as Environmental Engineer of the District office of Kerala State Pollution Control Board, Kasaragod, do hereby solemnly affirm and state as follows:

1. I am the Environmental Engineer, Kerala State Pollution Control Board (hereinafter referred to as Board), and duly authorized to represent the 5th respondent in the above case. I am aware of the facts affirmed by me in this report. I am swearing this report based on the best of my knowledge, information and belief and the facts revealed from the records.
2. Based on the Order of the Hon'ble National Green Tribunal, dated 20-12-23, alleged illegal dumping of cans, located within the cashew plantation situated in Minchipadavu, within Kerala border, in Nettanige - Mudnur village, was inspected from the district office on 21/12/2023. The alleged well is located inside the plantation belonging to the Plantation Corporation of Kerala (PCK).
3. The total plantation area was said to be about 40 hectares. The well (W) is located in the middle of the plantation area. The well had no water and was seen almost filled with earth / soil. Soil samples were collected from this well (S1), the masonry tank which was once used to dilute the endosulphan to spray (S2), and from a marshy pit of about 10 m²(S3). Water samples were collected from a well located close to the mixing tank in the premises of the Divisional Office of the Plantation Corporation (W1), and from another well (W2), located in a private land about 150m from the tank and the well (W1). The details of this spot inspection and sampling were submitted before the Hon'ble Court in report dated 23-12-2023.
4. All the soil and water samples were sent to Central Laboratory of the Board for analysis. The test result shows that in all the samples (both water and soil), the



Aurther Xavier J

value of Alpha and Beta Endosulphan is Below Detectable Level (BDL) except in the sediment sample S3. The analysis report of the samples as mentioned above is enclosed herewith as **Annexure 1**.

5. For the confirmation of sample S3, soil samples were again collected from some more locations near the plantation on 01/02/2024, including one from the marshy pit from which S3 sample had been collected. All the soil and water samples were sent to Central Laboratory of the Board for analysis. The test results received on 26/02/2024 shows that in all the samples the value of Alpha and Beta Endosulphan is Below Detectable Level. The analysis report of the samples collected as mentioned above is enclosed herewith as **Annexure 2**.
6. For conforming, once again samples were collected on 04/03/2024. The test results received on 21/03/2024 shows that in all the samples the value of Alpha and Beta Endosulphan is Below Detectable Level. The analysis report of the samples collected as mentioned above is enclosed herewith as **Annexure 3**.
7. Thus, it can be inferred that there are no detectable levels of Alpha Endosulphan and Beta Endosulphan in the soil or water samples near the well in the plantation.

All the facts stated above are true to the best of my knowledge, information and belief.

Dated this the 1st day of April, 2024.



ENVIRONMENTAL ENGINEER

J. AURTHER XAVIER
ENVIRONMENTAL ENGINEER

DISTRICT OFFICE, KASARAGOD



KERALA STATE POLLUTION CONTROL BOARD

CENTRAL LABORATORY

കേരള സംസ്ഥാനമലിനീകരണ നിയന്ത്രണ ബോർഡ്

കേന്ദ്ര പരീക്ഷണശാല

An Environmental Laboratory recognised under E(P)A 1986

Certificate No.
TC 8525

Ref. PCB/CL/GC-AR/2018-19/VOL 2

Date: 30.01.2024

From

The Chief Environmental Scientist

To

The Environmental Engineer,
Kerala State Pollution Control Board,
District Office,
Kasaragod.

Sub: Analysis report of Water samples – reg

Sir,

I am enclosing here with the analysis report of the samples received from that office. The details are given below:

Sl. No.	That Office Reference	Source Name	No. of Samples
1	PCB/KSRD/SCI- GEN/1877/2012 dated 22.12.2023	Nettangi Village, Kasaragod	05

Yours faithfully,

CHIEF ENVIRONMENTAL SCIENTIST

KERALA STATE POLLUTION CONTROL BOARD CENTRAL LABORATORY

കേരള സംസ്ഥാനമലിനീകരണ നിയന്ത്രണ ബോർഡ്

കേന്ദ്ര പരീക്ഷണശാല

An Environmental Laboratory recognised under E(P)A 1986
TEST REPORT



Certificate No.
TC 8525

Analysis Report No.	PCB/CL/1008/23-24	Date	30.01.2024	Format	No.PCB/CL/CH/F-7
Ref. No.	PCB/KSRD/SC1-GEN/1877/2012 DATED 22.12.2023	Date of Collection			22 Dec 2023
Received From	EE,DO,KSRD	Date of Receipt			03.01.2024
No. of Sample	05	Period of Analysis			03.01.2024-30.01.2024
Source	Nettangi Village , Kasaragod	Scientist-in-charge			SREEJA K B
Sample Condition	Fit for analysis	Sample Type			Water & Sludge sample
Sample collected by	DO,KSRD	Sample volume & container type			Glass bottle & Plastic tin
Sample preservation	As per APHA/IS:3025 (Part-1)	Type of Test			PESTICIDE

Sample ID: W 1

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/L	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04µg/L
2	Beta Endosulfan	µg/L	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04µg/L

Sample ID: W 2

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/L	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04µg/L
2	Beta Endosulfan	µg/L	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04µg/L

Sample ID: S1

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04 µg/Kg
2	Beta Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04 µg/Kg

GANDHI NAGAR, KOCHI - 682 020 ഗാന്ധിനഗർ, കൊച്ചി - 682 020
Ph : 0484 220 7781, EPABX: 0484 220 7783 - 86, Fax: 0484 - 220 7781, Mob: 9447975741
E Mail: kspcblekm@gmail.com, kspcbnwmp@gmail.com Web : www.keralapcb.nic.in
Certified for OHSMS (ISO 45001:2018)



Sample ID: S 2

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04 µg/Kg
2	Beta Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04 µg/Kg

Sample ID: S 3

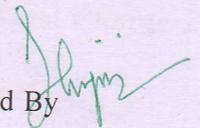
Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	1.36	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04 µg/Kg
2	Beta Endosulfan	µg/Kg	140	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04 µg/Kg

--End of Report--

Checked By


SHAHEERA K.A.
 Assistant Scientist

Authorised By



NOTE: The test results relate only to the sample submitted for analysis and it shouldn't be reproduced except in full without the written permission of the authorised signatory of the lab.

**KERALA STATE POLLUTION CONTROL BOARD
CENTRAL LABORATORY**

കേരള സംസ്ഥാനമലിനീകരണ നിയന്ത്രണ ബോർഡ്

കേന്ദ്ര പരീക്ഷണശാല

An Environmental Laboratory recognised under E(P)A 1986



Certificate No.
TC 8525

Ref. PCB/CL/GC-AR/2018-19/VOL 2

Date: 30.01.2024

**BILL
FOR TEST CHARGES**

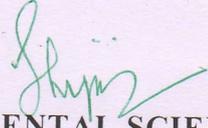
Format No. PCB/CL/F/5.10/1

To: District Office, Kasaragod	Date: 30.01.2024
Source: Nettangi Village, Kasaragod	Ref. No. PCB/KSRD/SCI-GEN/1877/2012 dated 22.12.2023

Sl. No.	Parameters	Test Charge	No. of Samples	Total Charge
1	Alpha Endosulfan	400.00	5	2000.00
2	Beta Endosulfan	400.00	5	2000.00

<u>Particulars</u>	<u>Charge</u>	<u>Quantity</u>	<u>Total</u>
Processing Charge	500.00	5	2500
Grand Total: 6500.00			

In Words (Rs.): Rupees Six Thousand and Five Hundred Only


CHIEF ENVIRONMENTAL SCIENTIST

**KERALA STATE POLLUTION CONTROL BOARD
CENTRAL LABORATORY**

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
കേന്ദ്ര പരീക്ഷണശാല

Recognised as an Environmental Laboratory under E(P)A 1986



Certificate No.
TC 8525

27/2/24

Ref. PCB/CL/GC-AR/2018-19/VOL 2

Date: 23.02.2024

From

The Chief Environmental Scientist

To

The Environmental Engineer,
Kerala State Pollution Control Board,
District Office.

Kasaragod

Sub: Analysis report of Water&Sediment samples – reg

Sir,

I am enclosing here with the analysis report of the samples received from that office.

The details are given below:

Sl. No.	That Office Reference	Source Name	No. of Samples
1	PCB/KSRD/SC1-GEN/1877/2012 dated 02.02.2024	Nettangi Village, Kasaragod	06

Yours faithfully,

[Signature]
CHIEF ENVIRONMENTAL SCIENTIST





TEST REPORT

Analysis Report No.	PCB/CL/1155/23-24	Date	23.02.2024	Format No.	PCB/CL/CH/F-7
Ref. No.	PCB/KSRD/SC1-GEN/1877/2012 dated 02.02.2024	Date of Collection	01.02.2024		
Received From	EE,DO KSRD	Date of Receipt	12.02.2024		
No. of Sample	06	Period of Analysis	12.02.2024- 23.02.2024		
Source	Nettangi Village,Kasaragod	Scientist-in-charge	SREEJA K B		
Sample Condition	Fit for analysis	Sample Type	Water sample& Sediment samples.		
Sample collected by	DO,KSRD	Sample volume & container type	Amber Coloured Glass Bottle& Plastic Container		
Sample preservation	As per APHA/IS:3025 (Part-1)	Type of Test	PESTICIDE		

WATER SAMPLES

Sample ID: WW1

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/L	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04µg/L
2	Beta Endosulfan	µg/L	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	0.04µg/L

Sample ID: WW2

Note: Sample is not sufficient for the analysis and recived in Plastic container instead of Amber coloured bottle.



SLUDGE SAMPLES

Sample ID: SS1

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	5 µg/Kg
2	Beta Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	5 µg/Kg

Sample ID: SS2

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	5 µg/Kg
2	Beta Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	5 µg/Kg

Sample ID: SS3

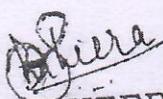
Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	5 µg/Kg
2	Beta Endosulfan	µg/Kg	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	5 µg/Kg

Sample ID: SS4

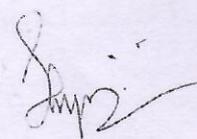
Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	$\mu\text{g/Kg}$	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	5 $\mu\text{g/Kg}$
2	Beta Endosulfan	$\mu\text{g/Kg}$	BDL	In House validated method No.PCB/CL/SOP/7.2.1.3/01	5 $\mu\text{g/Kg}$

-End of Report—

Checked By


SHAHEERA K.A
Assistant Scientist

Authorised By



NOTE: The test results relate only to the sample submitted for analysis and it shouldn't be reproduced except in full without the written permission of the authorised signatory of the lab.



11
KERALA STATE POLLUTION CONTROL BOARD
CENTRAL LABORATORY

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
 കേന്ദ്ര പരീക്ഷണശാല

Recognised as an Environmental Laboratory under E(P)A 1986



Certificate No.
 TC 8525

Ref. PCB/CL/GC-AR/2018-19/VOL 2

Date: 23.02.2024

BILL
FOR TEST CHARGES

Format No.PCB/CL/F/5.10/1

To: The Environmental Engineer, Kerala State Pollution Control Board, District Office, Kasaragod.	Date: 23.02.2024 Ref. No. PCB/KSRD/SC1- GEN/1877/2012 dated 02.02.2024
Source: Nettangi Village, Kasaragod	

Sl. No.	Parameters	Test Charge	No. of Samples	Total Charge
1	Alpha Endosulfan	400.00	5	2000.00
2	Beta Endosulfan	400.00	5	2000.00

<u>Particulars</u>	<u>Charge</u>	<u>Quantity</u>	<u>Total</u>
Processing Charge	500.00	5	2500

Grand Total:6500

In Words (Rs.): Rupees Six Thousand and Five Hundred Only

[Signature]
CHIEF ENVIRONMENTAL SCIENTIST



**KERALA STATE POLLUTION CONTROL BOARD
CENTRAL LABORATORY**

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
കേന്ദ്ര പരീക്ഷണശാല

Recognised as an Environmental Laboratory under E(P)A 1986



Certificate No.
TC 8525

Ref. PCB/CL/GC-AR/2018-19/VOL 2

Date: 18.03.2024

From

The Chief Environmental Scientist

DESPATCHED ON 18/3/24

To

The Environmental Engineer,
Kerala State Pollution Control Board,
District Office,
Kasaragod.

Sub: Analysis report of Water&Sediment samples – reg

Sir,

I am enclosing here with the analysis report of the samples received from that office.

The details are given below:

Sl. No.	That Office Reference	Source Name	No. of Samples
1	PCB/KSRD/SC1-GEN/1877/2012 dated 05.03.2024	Nettangi Village, Kasaragod	05

Yours faithfully,

CHIEF ENVIRONMENTAL SCIENTIST



13
KERALA STATE POLLUTION CONTROL BOARD
CENTRAL LABORATORY

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
കേന്ദ്ര പരീക്ഷണശാല

An Environmental Laboratory recognized under E(P)A 1986



TEST REPORT

Analysis Report No.	PCB/CL/1268/23-24	Date	18.03.2024	Format	No.PCB/CL/CH/F-7
Ref. No.	PCB/KSRD/SC1-GEN/1877/2012 dated 05.03.2024	Date of Collection	04.03.2024		
Received From	EE,DO KSRD	Date of Receipt	06.03.2024		
No. of Samples	05	Period of Analysis	06.03.2024-16.03.2024		
Source	Nettangi Village,Kasaragod	Scientist-in-charge	SREEJA K B		
Sample Condition	Fit for analysis	Sample Type	Water sample& Sediment samples.		
Sample collected by	DO,KSRD	Sample volume & container type	Amber Coloured Glass Bottle& Plastic Container		
Sample preservation	As per APHA/IS:3025 (Part-1)	Type of Test	PESTICIDE		

WATER SAMPLES

Sample ID: EW4

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/L	BDL	APHA 6630B&C 24 th edition	0.04µg/L
2	Beta Endosulfan	µg/L	BDL	APHA 6630B&C 24 th edition	0.04µg/L

SEDIMENT SAMPLES

Sample ID: ES1

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	BDL	APHA 6630B&C 24 th edition	5µg/Kg
2	Beta Endosulfan	µg/Kg	BDL	APHA 6630B&C 24 th edition	5µg/Kg

GANDHI NAGAR, KOCHI - 682 020
Ph: 0484 220 7781, EPABX: 0484 220 7783 - 86, Fax: 0484 - 220 7781, Mob: 9447975741
E Mail: kspcbclekm@gmail.com, kspcbnwmp@gmail.com Web: www.keralapcb.nic.in
Certified for OHSMS (ISO 45001:2018)

Sample ID: ES2

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	BDL	APHA 6630B&C 24 th edition	5µg/Kg
2	Beta Endosulfan	µg/Kg	BDL	APHA 6630B&C 24 th edition	5µg/Kg

Sample ID: ES3

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	BDL	APHA 6630B&C 24 th edition	5µg/Kg
2	Beta Endosulfan	µg/Kg	BDL	APHA 6630B&C 24 th edition	5µg/Kg

Sample ID: ES4

Sl. No.	Parameters	Unit	Value	Test Method	Detection Limit
1	Alpha Endosulfan	µg/Kg	BDL	APHA 6630B&C 24 th edition	5µg/Kg
2	Beta Endosulfan	µg/Kg	BDL	APHA 6630B&C 24 th edition	5µg/Kg

--End of Report--

Checked By

SHAHEERA K.A
Assistant Scientist

Authorised By

SREEJA. K.B.
Environmental Scientist

NOTE: The test results relate only to the sample submitted for analysis and it shouldn't be reproduced except in full without the written permission of the authorised signatory of the lab.

**KERALA STATE POLLUTION CONTROL BOARD
CENTRAL LABORATORY**

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
കേന്ദ്ര പരീക്ഷണശാല

Recognised as an Environmental Laboratory under E(P)A 1986



Certificate No.
TC 8525

Ref. PCB/CL/GC-AR/2018-19/VOL 2

Date: 18.03.2024

BILL
FOR TEST CHARGES

Format No.PCB/CL/F/5.10/1

To: The Environmental Engineer,
Kerala State Pollution Control Board,
District Office,
Kasaragod.

Date: 18.03.2024

Ref. No. PCB/KSRD/SC1-
GEN/1877/2012 dated
05.03.2024

Source: Nettangi Village, Kasaragod

Sl. No.	Parameters	Test Charge	No. of Samples	Total Charge
1	Alpha Endosulfan	400.00	5	2000.00
2	Beta Endosulfan	400.00	5	2000.00

<u>Particulars</u>	<u>Charge</u>	<u>Quantity</u>	<u>Total</u>
Processing Charge	500.00	5	2500

Grand Total: 6500/-

In Words (Rs.): Rupees Six Thousand and Five Hundred Only


CHIEF ENVIRONMENTAL SCIENTIST