

WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt. of West Bengal)
Paribesh Bhawan
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Memo No: 333/24/WPB-F (VI) 2021

Dated: /4, .10.2022

To: All Commissioners of Police / All District Magistrates / All Superintendents of Police / PESO / NEERI / Dept. of Fire & Emergency Services, GoWB

Re: WPA (P) 292 of 2021 With IA No. CAN 1 of 2022

Sabuj Mancha & Anr. Vs. The State of West Bengal & Ors.

In connection with the aforementioned matter the Hon'ble High Court, Calcutta vide order dated 11/10/2022 regarding fire-crackers matter directed as follows:-

"In order to ensure the effective implementation of the aforesaid directions, we direct the Pollution Control Board and the State of West Bengal to take appropriate measures including the following:-

- a) No firecrackers other than green crackers bearing QR Code would be sold in the Bazi-Bazar which is proposed to be held in Kolkata on and from 18.10.2022.
- b) State Pollution Control Board as well as the Commissioner of Police, Kolkata shall deploy appropriate number of personnel in the Bazi Bazar to ensure implementation of the aforesaid direction.
- c) The representatives of the State Pollution Control Board and the police personnel shall be at liberty to inspect the firecrackers which are sold at Bazi Bazar and the police personnel shall seize any banned firecrackers which are offered for sale in the bazar.

- d) Representatives of PESO/NEERI shall also be present at the Bazi Bazar and assist the Pollution Control Board/ police personnel to determine whether the firecrackers which are offered for sale bearing the requisite QR Code;
- e) Similar exercise shall be undertaken by Pollution Control Board and police authorities to prevent importation and sale of firecrackers other than green firecrackers bearing QR Code in any place in the State of West Bengal;
- f) All necessary steps shall be taken by the police authorities/PCB Officials to ensure only green crackers are burst during the festive season strictly in compliance with the directions of the Pollution Control Board vide Memo No. 321-3L/WPB-E(VI)/2020 dated 26.10.2021.
- g) State Pollution Control Board and the State of West Bengal shall undertake public awareness measures including issuance of advertisements in newspapers, announcements on radio/television/social media platforms etc. to spread awareness with regard to restrictions on sale and bursting of crackers during festive season and its beneficial impact on pollution and environment. It shall also make members of the public aware of the penal consequences arising from sale and bursting of banned crackers.

These directions are illustrative in nature and shall be in addition to any other direction or measure taken/that may take by the Pollution Control Board and the State of West Bengal to ensure the sale and bursting of green crackers only in the State of West Bengal.

We hope and trust that the festival of lights does not become a cause for concern where the demon of pollution poisons our air and leads to irreparable damage to the health of the population at large.

State of West Bengal and the Pollution Control Board shall submit report with regard to the steps taken by them for strict implementation of the aforesaid directions relating to sale and bursting of green crackers alone on the adjourned date.

Let the matter appear one week after Puja Vacation before the appropriate Bench".

A copy of the aforesaid order of the Hon'ble High Court, Calcutta is enclosed herewith (Annexure – 'A').

In view of the above your good-office is requested to implement aforementioned Order of

the Hon'ble High Court, Calcutta in its letter and spirit and forward a comprehensive compliance

report to the West Bengal Pollution Control Board on a urgent basis to enable the State Board to

submit the same before the Hon'ble High Court, Calcutta.

Related FAQ as available in the NEERI's Website is also enclosed herewith (Annexure –

'B').

The good-office of PESO and NEERI is requested to inform the deployment of manpower

directly to the concerned Commissioner of Police / Superintendent of Police with an intimation

to the State Board.

Nodal Officer of the West Bengal Pollution Control Board shall be Dr. Debashis

Chakraborty, Sr. Scientist, WBPCB on Mobile No. 9830058840 & email id. ssc2.wbpcb-

wb@bangla.gov.in.

A list of WBPCB officials for Bazi Bazar is enclosed herewith for ready reference

(Annexure - 'C').

(Member Secretary)

W.B.P.C.B.

Encl: As stated above

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Annexure - (A)

S/L 2 11.10.2022 Court. No. 28 Sourav/ Suvayan/ PA

WPA (P) 292 of 2021 With IA No: CAN 1 of 2022

Sabuj Mancha & Anr. Vs. The State of West Bengal & Ors.

Mr. R. N. Chakraborty Mr. A. De

... for the Petitioner.

Mr. Tapan Kumar Mukherjee

Ms. Saĥeli Mukherjee

... for the State.

Mr. N. C. Bihani

Mrs. P.B. Bihani

Ms. K. Singh

...for W.B.P.C.B.

Mr. Biswaroop Bhattacharyya

Ms. Mayuri Ghosh

Ms. Madhushri Dutta

Ms. Easha Manchanda

Mr. Arnab Sengupta

Mr. Debarshi Dhar

...for the Added Respondents.

CAN 1 of 2022 has been filed in this public interest litigation praying the applicants be added as party respondents and for permission to trade and sell in green firecrackers during the ensuing festive season, that is, Diwali, Kali Puja and Chatt Puja.

At the outset, we direct the applicants to be added as respondents to the writ petition. Cause title of the writ petition be amended accordingly in the course of the day.

Copy of the writ petition be also handed over to them.

Mr. Chakraborty, learned Counsel for the writ petitioner submits the directions given by the Apex Court in Arjun Gopal & Ors. Vs. Union of India & Ors. 1 have been flagrantly violated in the State of West Bengal. No mechanism has been formulated either by the State of West Bengal or by the State Pollution Control Board for ensuring sale and bursting of green crackers only. This has resulted in severe noise and air pollution in the city and other parts of the State in previous years. Hence, he prays there should be a total ban on the sale of crackers in the State.

Mr. Bhattacharyya, learned Counsel for the added respondent Byabasayee Samity submits similar issue had fallen for consideration before the Apex Court in Civil Appeal No. 6561 of 2021. After considering the rival submissions, the Apex Court had set aside the order of total ban on firecrackers passed by this Court in WPA No. 282 of 2021 and remanded the matter for consideration of issuance of appropriate directions upon the State of West Bengal to ensure importation, sale and bursting of green crackers only in the State. Pursuant thereto, a co-ordinate Bench of this Court had directed the Home Secretary and the Commissioners and the Superintendent of Police of the concerned Districts in the State to regulate importation, sale and bursting of crackers. He, therefore, opposes the prayer for total ban of firecrackers.

¹ (2019) 13 SCC 523

Mr. Bihani, learned Counsel for the Pollution Control Board submits his client has issued directions vide Memo No. 321-3L/WPB-E(VI)/2020 dated 26.10.2021 permitting sale and bursting of green crackers only in the State of West Bengal on specified dates within the time frame as stipulated in the notification.

Mr. Tapan Kumar Mukherjee, learned Additional Government Pleader submits appropriate steps have been taken for implementation of the directions issued by this Court in its order dated 03.11.2021 and compliance report in that regard has been filed.

In view of the directions in Arjun Gopal & Ors. (Supra) and the subsequent order of the Apex Court in Goutam Roy and Another Vs. The State of West Bengal and Others², parameters with regard to sale and bursting of crackers in the State of West Bengal are not in dispute. What is agitated before us is the mechanism for implementation of the directions of the Apex Court in the aforesaid decisions. While petitioner has strenuously argued the restrictions on sale and bursting of crackers in the State is merely theoretical, learned Counsel for Pollution Control Board and the State of West Bengal argues the directions had been duly implemented in the past.

In Goutam Roy and Another (Supra) the Apex Court while setting aside a direction on total ban of

² 2021 SCC Online SC 3238

firecrackers recorded the mechanism in place for ensuring the sale and bursting of green crackers as follows:-

"

regarding the question/issue ascertainment by police and/or law inforcement agencies whether the crackers are green crackers or not, comprehensive directions and guidelines are available on the web portals of CSIR-NEERI and PESO and also the green firecrackers contains green logos of CSIR-NEERI and PESO as well as QR codes engrafted on the boxes which can be easily scanned on the NEFRI mobile app to verify the contents used in making those crackers. Moreover, this list of manufactures, those which are engaged with the manufacturing of only firecrackers along with their relevant certificates are also available for online verification, on real time basis, on the web portals of CSIR-NEERI and PESO. As such, the apprehension posed by the Hon'ble High Court at Calcutta to the effect that there is no mechanism in place at present to ascertain whether the crackers being sold or burst/lighted are only green crackers, complying with the norms as set in place by the relevant certifying body, and further it would be an impossible task for the police and/or law enforcement agencies to ascertain the veracity of the certificates of the crackers which are being used by the general public at the time of these festivals, irrespective of the classification under which they are sold, is completely vague and baseless, without any rational and reasonable basis."

After recording the aforesaid mechanism, the Apex Court remanded the matter before this Court for considering the issue of implementation of the aforesaid mechanism.

Pursuant to the remand by the Apex Court, this Court by order dated 03.11.2021 affixed responsibility for enforcement of the orders of the Apex Court as well as the NGT on the Home Secretary and the Commissioners and the Superintendent of Police of the concerned Districts in the State.

It may be apposite to note West Bengal Pollution Control Board vide memo dated 26.10.2021 had already passed the following directions:-

- "1. There shall be a complete ban on the sale and bursting of all kinds of firecrackers, except green crackers in the State of West Bengal, till further orders in this respect.
- 2. In the State of West Bengal only green crackers can be sold and bursting of such crackers shall be allowed for (i) two hours during Deepawali festival from 8 p.m. to 10 p.m. (ii) two hours during Chatt Puja from 6 a.m. to 8 a.m. (iii) 35 minutes during Christmas and New Years' eve from 11.55 p.m. to 12.30 a.m.
- 3. Other than the above festivals, prior permission of the District Magistrates/ Commissioners of Police/Superintendents of Police shall be required for use of only green crackers for a limited period (not more than two hours) in the State of West Bengal.

4. In addition to the above, there shall be strict compliance of all terms and conditions mentioned in the order passed by the Hon'ble Supreme Court of India vide Judgment dated 23.10. 2018 in W.P. (C) No. 728 of 2015 and orders passed by the Hon'ble NGT dated 09.11.2020 and 01.12.2020 passed in O.A. No. 249/2020.

The District Magistrates and Commissioners of Police/Superintendents of Police shall implement the aforesaid directions. Daily action taken report is to be submitted to West Bengal Pollution Control Board in the prescribed proforma."

This memo, *inter alia*, came to be challenged in the present writ petition but no order of stay has been passed thereon.

Learned Counsels for Pollution Control Board and the State of West Bengal assures this Court that the directions given by the Apex Court in *Goutam Roy and Another* (Supra) as well as this Court vide order dated 03.11.2021 shall be scrupulously implemented during the ensuing festive season.

Mechanism to determine which crackers can be treated as green crackers has already been spelt out by the Apex Court in *Goutam Roy and Another (Supra)*. It shall be incumbent on the Pollution Control Board as well as the police authorities to ensure that there is no importation, sale or bursting of crackers other than the green crackers bearing

QR Code as specified in *Goutam Roy and Another* (Supra) in the State of West Bengal.

In order to ensure the effective implementation of the aforesaid directions, we direct the Pollution Control Board and the State of West Bengal to take appropriate measures including the following:-

- a) No firecrackers other than green crackers bearing QR Code would be sold in the Bazi-Bazar which is proposed to be held in Kolkata on and from 18.10.2022.
- b) State Pollution Control Board as well as the Commissioner of Police, Kolkata shall deploy appropriate number of personnel in the Bazi Bazar to ensure implementation of the aforesaid direction.
- c) The representatives of the State Pollution Control Board and the police personnel shall be at liberty to inspect the firecrackers which are sold at Bazi Bazar and the police personnel shall seize any banned firecrackers which are offered for sale in the bazar.
- d) Representatives of PESO/NEERI shall also be present at the Bazi Bazar and assist the Pollution Control Board/ police personnel to determine whether the firecrackers which are offered for sale bearing the requisite QR Code;

- e) Similar exercise shall be undertaken by Pollution

 Control Board and police authorities to prevent
 importation and sale of firecrackers other than
 green firecrackers bearing QR Code in any place in
 the State of West Bengal;
- f) All necessary steps shall be taken by the police authorities/PCB Officials to ensure only green crackers are burst during the festive season strictly in compliance with the directions of the Pollution Control Board vide Memo No. 321-3L/WPB-E(VI)/2020 dated 26.10.2021.
- g) State Pollution Control Board and the State of West Bengal shall undertake public awareness measures including issuance of advertisements in newspapers, announcements on radio/television/social media platforms etc. to spread awareness with regard to restrictions on sale and bursting of crackers during festive season and its beneficial impact on pollution and environment. It shall also make members of the public aware of the penal consequences arising from sale and bursting of banned crackers.

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State of West Bengal and the Pollution Control Board shall submit report with regard to the steps taken by them for strict implementation of the aforesaid directions relating to sale and bursting of green crackers alone on the adjourned date.

Let the matter appear one week after Puja Vacation before the appropriate Bench.

(Apurba Sinha Ray, J.) (Joymalya Bagchi, J.)

Annexura - (B)

Frequently asked question:

1. What are Green Crackers?

Ans. Fireworks/firecrackers made with reduction in size of shell, elimination of ash usage etc., reduced usage of raw materials in the compositions, of uniform acceptable quality, and/or use of additives as dust suppressants to reduce emissions with specific reference to particulate matter (PM) [SO2 and NO2] leading to:

- a minimum of PM reduction of 30 %
- a minimum of PM reduction of 20% and rest 10% of gaseous emission (mass of gases emitted based on composition) or more reduction of gaseous emission (Mass of gases emitted based on composition)
- All the above reduction shall be based on when compared with conventional composition for a given category of crackers/fireworks

Source: CSIR-National Environmental Engineering Research Institute

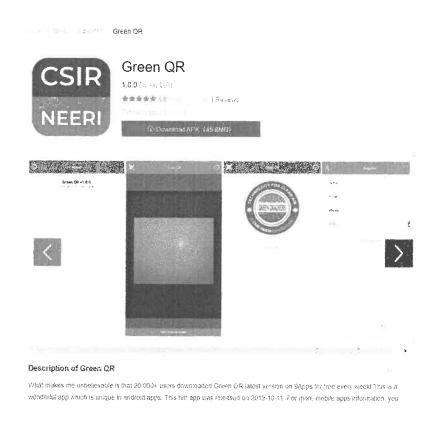
2. Novel features of the Green Crackers:

- Know how based on novel concept of exploiting exothermic heat of materials (zeolite, clays, silica gel, lime and Alumina) for bursting of crackers.
- Shows matching performance in sound (100-120 dBA) with commercial crackers.
- Overcomes issues of particulate and gaseous emissions.
- PM reduction by more than 80% for peroxide-based crackers.
- PM reduction by 30% for water-based crackers.
- Significant NO_x and SO_x reduction envisaged.
- Reduction in cost due to avoidance of Potassium Nitrate and Sulphur.

Source: CSIR-National Environmental Engineering Research Institute

3. How to identify "Green Crackers"?

Ans. The identification must be done by seeing their Logo and scanning the QR Code using 'CSIR NEERI Green QR Code app".



4. What is the difference between "Conventional Firecracker" and "Green cracker"?

Ans.

Green Fire Cracker	Conventional Firecracker
Definition: Green crackers do not	Fireworks is a device which contains
contain harmful chemicals and reduce	gunpowder and other combustible
air pollution. They are eco-friendly.	chemicals which causes striking
That is green crackers are less harmful	effects and when ignited they explode.
as compared to conventional	
firecrackers	
Composition: Green crackers include	
flower pots, pencils, sparklers,	1 /
maroons, bombs, and chakkar, low	, ,
Thermite amount, minimum usage of	1 1
Aluminium. Green crackers don't	
contain barium substance which is	Charcoal
used in the firecrackers to add green	4. Regulators: Metals
colour. Green crackers will reduce at	5.Coloring agents: Strontium, Copper,
least 30 percent emissions using	Barium. Sodium, Calcium, Iron
particulate matter Potassium Nitrate as	6. Binders: Dextrin (e.g.: Starch)
an oxidant.	V V V V V V V V V V V V V V V V V V V

5. Is there any list of approved fireworks units producing "Green Crackers" including brand name?

Ans. The Link for the approved industries and firework units by CSIR- NEERI was given below:

- 1. Registration Number for Fireworks Industries As on February 05, 2021... https://www.neeri.res.in/file_homes/46581446 Registration 05022021 firework.pdf
- 2. List of Fireworks NDA as on June 03, 2022. https://www.neeri.res.in/file_homes/List%20of%20FWM%20registered %20with%20CSIR-NEERI%20(990-030622).pdf

6. Who certifies "Green Crackers"?

Ans. CSIR-NATIONAL ENVIRONMENTAL ENGINEERING RESEARCH INSTITUTE (CSIR- NEERI).

7. Is there any logo or QR Code to identify Green Crackers?

Ans. Yes there is both Logo and QR code present to identify the "Green Crackers.". All of them are mentioned below:

GREEN FIREWORKS LOGO

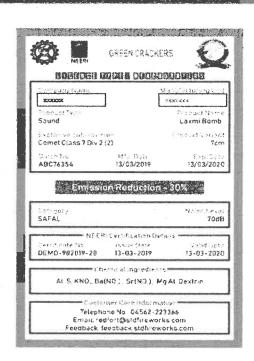






GREEN FIREWORKS QR CODE





8. Is there any sound limit applicable to "Green Crackers" also?

Ans. For

- SWAS & STAR: 105 110 dB(A)
- SAFAL: 110-115 dB(A)

9. Is there any Court Order relating to "Green Crackers"?

- A. Supreme Court
- B. National Green Tribunal

Ans. Yes.

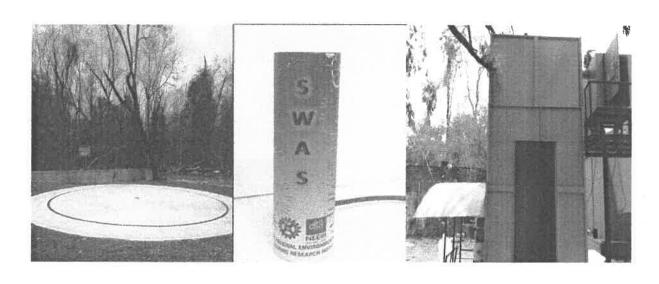
- A. Hon'ble Supreme Court of India vide Judgement dated 23.10.2018 passed in Writ Petition (Civil) No. 728 of 2015 allowed to manufacture and sale green crackers.
- B. Hon'ble National Green Tribunal vide order dated 09.11.2020 and 01.12.2020 passed in O.A. No. 249/2020 directed use of green crackers in cities/towns where air quality is moderate or below.

10. Is there any Website for further information in this regard?

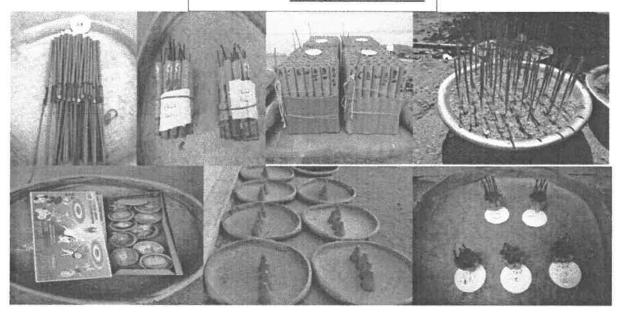
Ans. Yes, the following are the two links where further information could be found

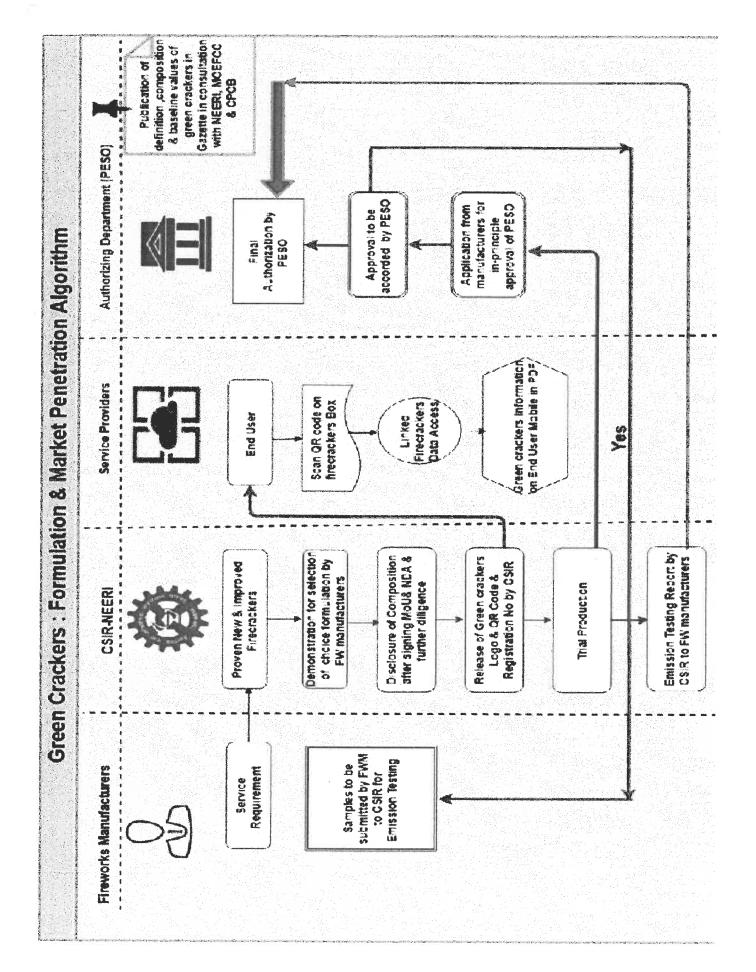
- 1. NEERI Green Cracker Webpage as on September 19, 2022. https://www.neeri.res.in/abouts/details/green-crackers#googtrans(en|en)
- 2. NEERI Green Cracker Online Report as on September 26, 2021. https://www.neeri.res.in/contents/banner_details/green-crackers/5d81cbedbc313#googtrans(en|en)
- 3. Methodology and its protocol for Emission Testing of green crackers as on September 19, 2022

 https://www.neeri.res.in/file_homes/97806733 Emission%20Methodolog y%20 %20NEERI%20Website.pdf
- 4. Protocol for shortlisting NABL labs for emissions testing as on September 19, 2022 https://www.neeri.res.in/file_homes/59951067 protocol for nabl shortlisting labs.pdf
- 5. Registration Forms for Fireworks Manufacturers as on September 19, 2022:
 - a. Registration Form for Green Fireworks Formulations
 https://docs.google.com/forms/d/e/1FAIpQLSe4ykBI9bErwCko3a
 <a href="htt
 - b. Registration form for "Emission Testing of Fireworks Samples" https://docs.google.com/forms/d/e/1FAIpQLSe25KDg3zUHqKewzxMktSec3PPE-IvNthxzOyfirhwvqKncPQ/viewform
 - c. Registration form for "Purity Testing of Chemicals & Additives of Fireworks Samples" https://docs.google.com/forms/d/e/1FAIpQLScYrzjywVt9sohtnpFf cv9SbpqHFsS7rZ8M3M4CC1zTh2m5-A/viewform

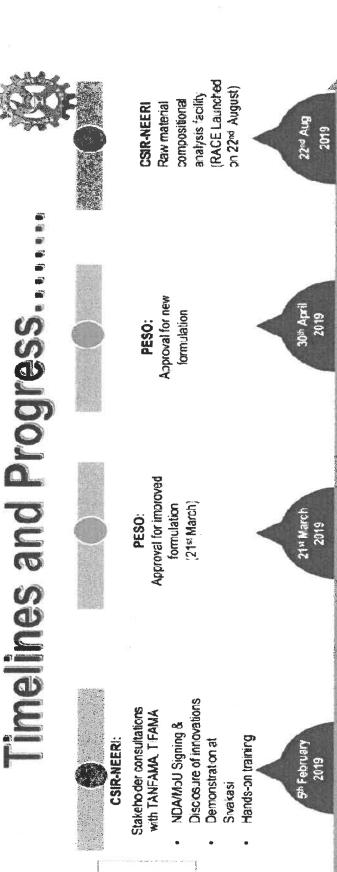


CSIR-NEERI's "New and Improved Firecrackers "









in-progress

Yet to start

Completed

30th April 222td Aug 2019 10th May 2019

FWM:
Bulk production of Bulk production of new formulation

Product approval application

Successful testing of R&L prototypes

CSIR-NEERI:

FWN:

FM: Fireworks manufacturers
PESO: Petroleum Safety and Explosive Organization
CSIR-NEERI: National Environmental Engineering Research Institute

Green Crackers: An Initiative of CSIR --NEERI

List of WBPCB officials

	1			
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Shri Arup Kumar Dey, Env. Engineer & Incharge or his authorized representative	Dr. Dipanjana Maulik, Sr. Env. Engineer & In- charge or her authorized representative	Smt. Rita Datta (Sadhu), Env. Engineer & In- charge or her authorized representative	Shri Bimalendu Mal, Env. Engineer & Incharge or his authorized representative	Shri Tapan Kr. Biswas, Sr. Env. Engineer & In- charge or his authorized representative
9432491943	9830212784	9433788593	9836288884	9434741632
ee2.wbpcb-wb@bangla.gov.in	see5.wbpcb-wb@bangla.gov.in	ee14.wbpcb-wb@bangla.gov.in	ee5.wbpcb-wb@bangla.gov.in	ee13.wbpcb-wb@bangla.gov.in
Durgapur	Hooghly	Howrah	Barrackpore	Alipore
Purba Bardhaman district, Durgapur Sub- division of Paschim Bardhaman district, Bankura district Birbhum district	Hooghly District	Howrah District	Entire district of Nadia and 24 Parganas (North) except areas of the Police Stations of Bidhannagar, Lake Town, Baranagar, Airport, Dum Dum, Rajarhat, Nimta and Minakha I & II blocks of 24 Parganas (North)	Police Stations of: Regent Park, Netaji Nagar, Bansdroni Haridevpur, Behala, Thakurpukur, Sarsuna, Parnasree, Maheshtala, Budge Budge, Bishnupur, Canning, Gosaba, Basanti, Jaynagar, Kulti and Diamond Harbour Sub- Division

.

	10	9	00
Shri Goutam Kumar Paul, Env. Engineer & In- charge or his authorized representative	Shri Sudip Barua, Asst. Env. Engineer & Incharge or his authorized representative	Shri Sudip Bhattacharya, Env. Engineer & In- charge or his authorized representative	Dr. Prasun Kumar Mondal, Asst. Env. Engineer & In- charge or his authorized representative
9830144086	9830034269	9434030006	9123346835 9434352465
aee13.wbpcb-wb@bangla.gov.in	aee28.wbpcb-wb@bangla gov.in	ee11.wbpcb-wb@bangla.gov.in	aee32.wbpcb-wb@bangla.gov.in
Siliguri	Malda	Asansol	Haldia
Darjeeling district, Alipurduar district, Kalimpong district, Coochbehar district, Jalpaiguri district	Murshidabad district Malda district Dakshin Dinajpur district Uttar Dinajpur district	Asansol Sub-Division of Paschim Bardhaman district Purulia district	Purba Medinipur district Paschim Medinipur district Jhargram district