

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
WESTERN ZONE BENCH, PUNE**

**ORIGINAL APPLICATION NO. NO. 16/2023(WZ)**

**I.A. NO. 60/2023 (WZ)**

**IN THE MATTER OF: -**

**MRS. ALKA SUNIL KALE**

**APPLICANT**

**VERSUS**

**STATE OF MAHARASHTRA & ORS.**

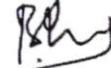
**RESPONDENT(S)**

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Place : Pune

Date : 19.04.2023



(Bharat K Sharma)  
Regional Director



भरत कुमार शर्मा / Bharat Kumar Sharma  
क्षेत्रीय निदेशक / Regional Director  
केंद्रीय प्रदूषण नियंत्रण बोर्ड  
Central Pollution Control Board  
क्षेत्रीय निदेशालय, पुणे / Regional Directorate, Pune  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार  
M/o Env't. Forest & Climate Change, Govt. of India  
सर्वे नं. ११०, हीराबाई धनकुडे हॉल, बाणेर रोड, बाणेर, पुणे - ४११०४५  
Sr. No. 110, Hirabai Dhankude Hall, Baner Road, Baner, Pune-411045



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RESPONDENT(S)

**REPLY AFFIDAVIT ON BEHALF OF RESPONDENT NO. 5,  
CENTRAL POLLUTION CONTROL BOARD (CPCB)**

I, Bharat Kumar Sharma, S/o Shri. D.P Vishwakarma, aged 49 years, working as Scientist 'F' and Regional Director in the Regional Directorate, Central Pollution Control Board, Pune, do hereby solemnly affirm and declare as under:

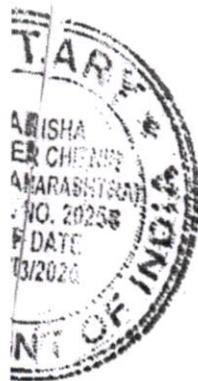
That I, in the capacity of Scientist 'F' of the Central Pollution Control Board (hereinafter referred as CPCB) am fully conversant with the facts of the case and hence, competent to swear this reply affidavit on behalf of the Respondent No. 5 (CPCB)

1. That the averments made in Para 1 are about details of Applicant & types of activities being carried-out with regard to issues related to protection of environment, present original application being filed with a prayer to modify the e-tender condition issued by Respondent no. 1 i.e. Maharashtra Prathamik Shikshan Parishad for the sanitary napkin vending machine & incinerator, in contravention of standards as per the Solid Waste Management Rules, 2016, which are matter of records and need no comments from this Answering Respondent.

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2. That the averments made in Para 1 to 5 under the heading "FACTS IN BRIEF" are about the details of Respondents 1 to 4, E-tender notice for selection of supplier issued by R-1 i.e. Maharashtra Prathamik Shikshan Parishad for supplying & installation of the automatic sanitary pad vending machine & incinerators, details of the tender floated therein, the criteria set out by R-1 in order to bid for the supplying & installation of the automatic sanitary pad vending machines, sanitary napkins and incinerators along with sanitary pads in the Government schools, details of the incineration process and incinerators. The same are matter of records and need no comments from this Answering Respondent.
  3. That the averments in Paras 6 to 14 under the heading "FACTS IN BRIEF" are about deficiencies in the specifications of incinerators in the tender criteria under reference to bid for supply and installation of incinerator for disposal of sanitary waste (sanitary pads/napkin). Such specification deficiency averments are about lower temperature in incinerator i.e. upto 800°C and not having dual chambers comparing with the prescribed standards for incineration for solid waste treatment/disposal facility as stipulated under Clause C under Schedule-II of the SWM Rules, 2016 wherein, it has been stipulated vide Clause (g) under Notes of the said Clause C that "*All the facilities in twin chamber incinerators shall be designed to achieve a minimum temperature of 950°C in secondary combustion chamber and with a gas residence time in secondary combustion chamber not less than 2 (two) seconds.*" Further averments are about sanitary pads/napkins with Super Absorbent Polymers (SAP) to be disposed in the incinerator under reference in Government Schools and health hazard of the students studying in schools.

It is humbly submitted that as per the provision stipulated under section 14(i) of SWM Rules, 2016, one of the duties of this answering Respondent no. 5 (i.e. CPCB) is to publish guidelines, from time to time, on environmental aspects of processing and disposal of solid waste to enable local bodies to comply with the provisions of these rules. Accordingly, CPCB has published Guidelines for Management of Sanitary Waste in the month of May 2018. Copy of the Guidelines is provided in [https://cpcb.nic.in/uploads/MSW/Final\\_Sanitary\\_Waste\\_Guidelines\\_15.05.2018.pdf](https://cpcb.nic.in/uploads/MSW/Final_Sanitary_Waste_Guidelines_15.05.2018.pdf).

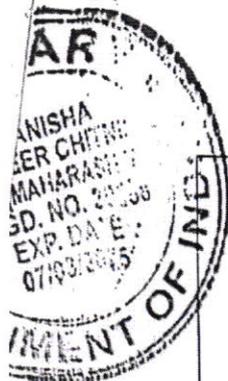
Incinerator for disposal of sanitary waste (sanitary napkins/pads) is required to comply with the said provisions as stipulated under para 6 of the CPCB guidelines and as applicable



The Specifications/ Pollution Control Norms as specified in the guidelines for various incinerators are provided as under:

Option	Type of waste	Where to Use	Specifications/Pollution control norms
<b>Low-cost, locally made incinerators</b>	Napkins and other wastes. Best suited for pads with high cellulose content, not those that have super absorbent polymers (SAP)	Rural Girls School, Colleges, Institutions, Hostels etc	<ul style="list-style-type: none"> <li>Manually operated</li> <li>Minimum Size: 3' × 3' × 3'</li> <li>Design: As given in MHM Guidelines, Technical Guide 2</li> <li>Capacity should be ~200 Napkins/Day</li> <li>Comprises of two chambers (for firing and ash collection)</li> <li>An emission control system along with a door for firing</li> <li>Made of brick masonry</li> <li>Opacity of the smoke shall not exceed 20%.</li> <li>All the emissions to air other than steam or water vapor shall be odorless and free from mist, fume and droplets</li> <li>Operation temperature reaches up to 300°C</li> <li>Assure 100% burning effectiveness</li> <li>The incineration chamber shall be designed to include an auxiliary gas or oil burner to be used as necessary to maintain the prescribed minimum combustion temperatures.</li> <li>If diesel is used, low Sulphur diesel shall be used as fuel in the incinerator.</li> <li>Compliance to General Emission Standards for air pollutants notified under <b>E (P) Act, 1986</b> or as may be prescribed by SPCBs/PCCs</li> </ul>
<b>Electric incinerators</b>	Bulk amount of napkin wastes	Girls toilets, community toilets, complexes, Malls, Society Complex etc.	<ul style="list-style-type: none"> <li>Ensure complete burning of napkin.</li> <li>Ensure instant disposal in a scientific and hygienic way with fully automatic way and burn completely.</li> <li>Burns 150 to 200 napkins/day, can be</li> <li>programmed for cycles/day</li> </ul>

			<ul style="list-style-type: none"> <li>• Self-disposal by user by directly putting into the incinerator</li> <li>• Ash generation should not exceed more than 5% per napkin</li> <li>• Ash should be collected in separate tray and ensure stack on that tray</li> <li>• Auto power &amp; thermal cut-off and automatic temperature maintenance should be there for safety of user</li> <li>• Inside refractory lining should be excellent heat retention to avoid thermal loss</li> <li>• The residence time for gaseous products in the combustion chamber will be designed to be at least 2 seconds to ensure complete combustion.</li> <li>• The emission from incinerators shall comply the General Emission Standards mentioned under <b>Standard for incineration</b> section in <b>SWM Rules, 2016</b>.</li> </ul>
<b>High temperature incinerators for bio-medical waste</b>	Incinerate all types of pads (those with high cellulose content, high moisture content, and those with SAP) and all types of biomedical waste	Waste burnt at central /combined incinerator facility t	<ul style="list-style-type: none"> <li>• The incinerator shall be designed for capacity more than 50 kg/hr.</li> <li>• The double chamber incinerator shall preferably be designed on "controlled-air" incineration principle, as particulate matter emission is low in such incinerator. Minimum 100% excess air shall be used for overall design.</li> <li>• No incinerator shall be allowed to operate unless equipped with Air Pollution Control Device (APCD).</li> <li>• The incineration ash shall be stored in a closed sturdy container in a masonry room to avoid any pilferage. Finally, the ash shall be disposed in a secured landfill.</li> <li>• Emission control measures must be followed as per <b>Schedule II of the Bio-medical Waste Management Rules, 2016</b>, notified under the Environment (Protection) Act 1986.</li> </ul>

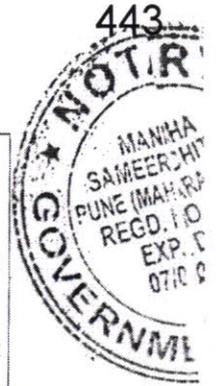


			<ul style="list-style-type: none"> <li>The location, structural design etc. of the incinerator shall be as per the guidelines of <b>Biomedical Waste Rules, 2016</b>, published by CPCB under <b>Guidelines for Bio-medical Waste Incinerator, 2017</b>.</li> <li>A skilled person shall be designated to operate and maintain the incinerator.</li> </ul>
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It is further humbly stated that the Standards for incineration is provided in Schedule II (C) of the Solid. Waste Management Rules, 2016, and is represented as under

**Schedule II (C): Standards for incineration:** The Emission from incinerators /thermal technologies in Solid Waste treatment/disposal facility shall meet the following standards, namely

Parameter	Emission Standard		
	(1)	(2)	(3)
Particulates	50 mg/Nm <sup>3</sup>		Standard refers to half hourly average value
HCl	50 mg/Nm <sup>3</sup>		Standard refers to half hourly average value
SO <sub>2</sub>	200 mg/Nm <sup>3</sup>		Standard refers to half hourly average value
CO	100 mg/Nm <sup>3</sup>		Standard refers to half hourly average value
	50 mg/Nm <sup>3</sup>		Standard refers to daily average value
Total Organic Carbon	20 mg/Nm <sup>3</sup>		Standard refers to half hourly average value
HF	4 mg/Nm <sup>3</sup>		Standard refers to half hourly average value
NO <sub>x</sub> (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	400 mg/Nm <sup>3</sup>		Standard refers to half hourly average value



<b>Total dioxins and furans</b>	0.1 ng TEQ/Nm <sup>3</sup>	Standard refers to 6-8 hours sampling. Please refer guidelines for 17 concerned congeners for toxic equivalence values to arrive at total toxic equivalence
<b>Cd + Th + their compounds</b>	0.05 mg/Nm <sup>3</sup>	Standard refers to sampling time anywhere between 30 minutes and 8 hours.
<b>Hg and its compounds</b>	0.05 mg/Nm <sup>3</sup>	Standard refers to sampling time anywhere between 30 minutes and 8 hours
<b>Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V + their compounds</b>	0.5 mg/Nm <sup>3</sup>	Standard refers to sampling time anywhere between 30 minutes and 8 hours
<b>Note.- All values corrected to 11% oxygen on a dry basis</b>		

*Note:*

- a. Suitably designed pollution control devices shall be installed or retrofitted with the incinerator to achieve the above emission limits..
- b. Waste to be incinerated shall not be chemically treated with any chlorinated disinfectants.
- c. Incineration of chlorinated plastics shall be phased out within two years.
- d. if the concentration of toxic metals in incineration ash exceeds the limits specified in the Hazardous and Other Waste (Management and Trans boundary Movement) Rules, 2016, as amended from time to time, the ash shall be sent to the hazardous waste treatment, storage and disposal facility.
- e. Only low sulphur fuel like LDO, LSHS, Diesel, bio-mass, coal, LNG, CNG, RDF and bio-gas shall be used as fuel in the incinerator.
- f. The CO<sub>2</sub> concentration in tail gas shall not be more than 7%
- g. All the facilities in twin chamber incinerators shall be designed to achieve a minimum temperature of 950°C in secondary combustion chamber and with a gas residence time in secondary combustion chamber not less than 2 (two) seconds.



- h. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, as to achieve total Organic Carbon (TOC) content in the slag and bottom ash less than 3%, or the loss on ignition is less than 5% of the dry weight.
- i. Odour from sites shall be managed as per guidelines of CPCB issued from time to time
4. That the averments made in Para A under the heading "GROUNDS" are about the duties of respondents to follow the standards of incineration given in the SWM Rules, 2016. It is humbly submitted that violations, if any, under the concerned Acts/Rules are to be dealt by the respective Agency as stipulated under such Acts/Rules.
5. That the averments made in Para B under the heading "GROUNDS" are about the enforcement & implementation of SWM Rules, 2016 by every State and Union Territory in compliance to the Hon'ble NGT judgment in OA no. 606/2018 and the same is matter of records.
6. That the averments made in Para C to G under the heading "GROUNDS" are about the various grounds for filing the present original application w.r.t. violation of SWM Rules, 2016, release of harmful gases, temperature of incinerator, standards for incinerators as stated in e-tender which is in violation of guidelines framed by CPCB. It is humbly submitted that the same have already been mentioned/commented in the above paras of this affidavit by this Answering Respondent and need no further comments by this Answering Respondent.
7. That the averments made under the heading "LIMITATION AND JURISDICTION" (Paras 1 to 4) are about limitations and jurisdiction of the Hon'ble NGT for filing the present original application by the Applicant, and need no comments from this Answering Respondent.
8. That the averments made under the heading "INTERIM RELIEF" (Para A) and under the heading "PRAYER" (Paras 1 and 2) are about the interim relief and various prayers as submitted by the Applicant, and need no comments from this Answering Respondent.

That in light of the above submissions, it is respectfully prayed that this Answering Respondent No. 5 i.e. CPCB shall abide by any order or directions passed by this Hon'ble Tribunal.

  
DEPONENT

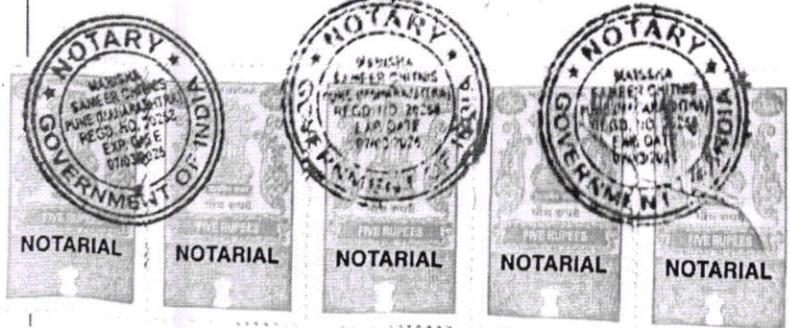
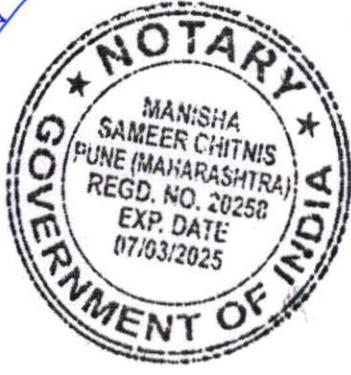
**VERIFICATION**

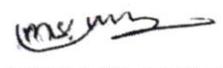
Verified at Pune on this 19th day of April, 2023 that the contents of the above affidavit are true and correct to the best of my knowledge and belief and nothing has been concealed therein.

  
DEPONENT - Respondent No. 5

  
COUNSEL for Respondent No. 5

भरत कुमार शर्मा / Bharat Kumar Sharma  
क्षेत्रीय निदेशक / Regional Director  
केंद्रीय प्रदूषण नियंत्रण बोर्ड  
Central Pollution Control Board  
क्षेत्रीय निदेशालय, पुणे / Regional Directorate, Pune  
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Sr. No. 110, Hirabai Dhankude Hall, Baner Road, Baner, Pune-411045



  
MANISHA SAMEER CHITNIS  
NOTARY  
GOVERNMENT OF INDIA  
19 APR 2023