

**JOINT COMMITTEE REPORT IN THE MATTER OF ORIGINAL  
APPLICATION NO.14/2020 (WZ) (MOHAN NANASAHEB KUDALE  
VERSUS PUNE MUNICIPAL CORPORATION & ORS) RELATED TO  
ANIMAL CARCASS PLANT, SOLID WASTE- MATERIAL RECOVERY  
FACILITY (MRFs) AT KESHAVNAGAR, MUNDHAWA, PUNE**

**1.0 BACKGROUND:**

1.1 Hon'ble National Green Tribunal, Principal Bench, New Delhi in the matter of OA No. 14/2020 (Mohan Nanasaheb Kudale vs. Pune Municipal Corporation & Ors) had passed order on 06.03.2020 as follows,

- *“ The applicant in this case alleges that the respondent no. 1, Pune Municipal Corporation, has been operating an incinerator plant for disposal of animal carcass on land bearing Survey Nos. 9 to 14/2 and Plot Nos. 272 to 275 situated at Keshavnagar, Mundhwa, Pune without obtaining prior Environmental Clearance as required under the EIA Notification 2006.*
  
- *In the meanwhile, we direct the MoEF&CC, Regional Office at Nagpur, the Maharashtra State Pollution Control Board and the Collector, Pune District to jointly inspect the unit in question, verify on the factual allegations contained in the Original Application and to submit a report.”*

Copy of Hon'ble NGT order dated 06.03.2020 is annexed as **Annexure-I**.

1.2 In compliance with aforesaid order joint committee had been constituted with following members:

- a. Shri. Suresh Kumar Adapa, Scientist 'D', IRO, MoEF&CC, Nagpur
- b. Dr. J.B. Sangewar, Regional Officer, RO, Maharashtra Pollution Control Board (MPCB), Pune

c. Shri. Santosh Deshmukh, Sub Divisional Officer (SDO), Collector Office, Pune

The three-member Joint Committee visited the site in question on 01.10.2020 and submitted detail report to Hon'ble NGT on 21.10.2020.

1.3 Based on the aforesaid report, Hon'ble NGT passed an order on 30.09.2021 and in compliance with order, MPCB submitted affidavit on 25.11.2021 mentioning that PMC has installed animal carcass incineration plant, solid waste segregation plant in the area without obtaining permission from The Collector, Pune for change in the purpose of usage of land. MPCB further issued letter to The District Collector, Pune and to The Commissioner, Pune Municipal Corporation (PMC), Pune on 18.11.2021 and requested to submit compliance report before the Hon'ble NGT.

1.4 Further, vide order dated 26.11.2021, Hon'ble NGT directed MPCB to carry out inspection of the said plant as well as RDF plant and file additional report as it was alleged that pollution being caused or already caused on account of operation of both plants. In compliance with order dated 26.11.2021, MPCB submitted affidavit on 14.01.2022 mentioning that-

- Animal carcass incineration plant was not in operation.
- There are two solid waste processing plant located adjacent to carcass plant. Both were found in operation for Material Recovery Facility (MRF) only.

1.5 In further hearing on 17.01.2022, Hon'ble NGT has passed order as follows: -

*"11 Accordingly, we constitute a seven-member Joint Committee comprising of Secretaries, Urban Development Department, Environment Department and*

*Revenue Department, Maharashtra, Secretary, Veterinary and Animal Husbandry, CPCB, Member Secretary, State PCB and the Collector Pune to examine whether the present location is suitable for the plants in question. Is there any other alternative for the same. If not, whether continuing the plants will be compliant with the applicable norms and conditions subject to which the same can be allowed. Nodal agency for coordination and compliance will be the Secretary, Environment and Member Secretary, State PCB. The Committee may undertake site visit and ensure preparation of firm action plan on siting and operation of Incinerator, Cattle Sheds and operation of MRF in accordance with the Rules, including obtaining clearances and availability of public grievance redressal mechanism. The Joint Committee may meet within one month and deliberate upon the issue. Proceedings of the Committee may be finalized within three months. All stake holders are at liberty to make representations to the Committee within two weeks, through the State PCB.*

Thus, as per aforesaid order dated 17.01.2022, the committee was directed to examine whether the present location is suitable for the plants in question. Is there any other alternative for the same If not, whether continuing the plants will be compliant with the applicable norms and conditions subject to which the same can be allowed.

Further, it was directed to undertake site visit and ensure preparation of firm action plan on siting and operation of Incinerator, Cattle Sheds and operation of MRF in accordance with the Rules, including obtaining clearances and availability of public grievance redressal mechanism.

In compliance with aforesaid order dated 17.01.2022, Environment & Climate Change Department, Government of Maharashtra, Mumbai vide circular dated 13.07.2022, constituted committee of seven members as below-

- I. Principal Secretary, Revenue Department.
- II. Principal Secretary, Environment and Climate Change Department.
- III. Principal Secretary, Urban Development Department.
- IV. Principal Secretary, Animal Husbandry Department.
- V. Member Secretary, Central Pollution Control Board.
- VI. District Collector, Pune.
- VII. Member Secretary, Maharashtra Pollution Control Board.

Copy of the circular issued by Environment and Climate Change Department, Govt of Maharashtra dated 13.07.2022 is attached herewith as **Annexure-II**.

Accordingly, visit of joint committee scheduled on 18.07.2022 at 12.00 Hrs to the site in question. Shri Pratik Bharne, Scientist- E, Representative of Member Secretary, Central Pollution Control Board (CPCB) carried out visit to the site on 16.07.2022 along with MPCB Pune Officials due to prescheduled visit under another Hon'ble NGT matter.

Following, representatives of committee members were present during the visit on 18.07.2022: -

Sr. No.	Name of Representative	Department
01	Shri Santoshkumar Deshmukh, SDO, Havali, District Collector, Pune	Representative of Principal Secretary, Revenue Department and District Collector, Pune.
02	Shri. Sanjay Sandanshiv Scientist-II-cum-Under Secretary	Representative of Principal Secretary, Environment and

	(Technical)	Climate Change department
03	Dr. Ashish Bharti Medical Health Officer, Pune Municipal Corporation	Representative of Principal Secretary, Urban Development Department
04	Dr. Shitalkumar Mukane District Deputy Commissioner Animal Husbandry	Representative of Principal Secretary, Animal Husbandry Department
05	Shri Shankar Waghmare, Regional Officer, MPCB, Pune & Shri Pratap Jagtap Sub Regional Officer, MPCB, Pune-	Representative of Member Secretary, Maharashtra Pollution Control Board.

Dr. Sarika Funde, Chief Veterinary Officer and Other officials/staffs from Pune Municipal Corporation (PMC), Representatives of Solid Waste Processing Plants (MRF) were also present during the visit.

## **2.0 DETAILS OF SITE- ANIMAL CARCASS INCINERATION PLANT, SOLID WASTE MATERIAL RECOVERY FACILITIES ( MRF-2) AND CATTEL SHED**

### **2.1 ANIMAL CARCASS INCINERATION PLANT-**

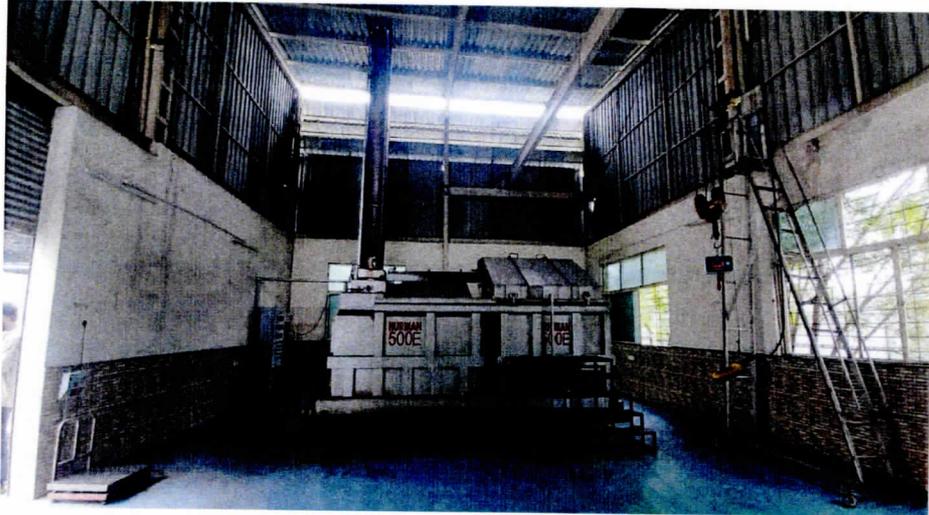
Animal Carcass Incineration Plant is established by PMC in the year 2012-2013. The plot area is 10000.0 sq.ft (TBUA-1800.0 sq.ft). The Incinerator is having two chambers i.e. First chamber where dead animal is unloaded with the help of Crain and having cover and four burners to achieve temperature of 1200°C and Second chamber is with one burner (to achieve 600°C) to burn/treat flue gases/particulate emissions generated during the incineration in

First Chamber. The reported residence time of flue gas is 2 seconds in second chamber.

The capacity of plant is 500 Kg/Hr. Fuel used is Diesel (High Speed Diesel) - 240 Liters per cycle and the time required per cycle is one hour. The size of Incinerator is (length-6.06 meter x width-2.71 Meter x height 3.9 meter). The stack of 10 meter height is provided without any Stack Monitoring Facility (SMF). The incinerator is not provided with any Air Pollution Control System (APCS). The incinerator is having system for removal of ash from bottom and same is disposed through MSW landfill site. The Design Manual/Technical Manual of the Incinerator is provided at **Annexure-III**.

MPCB has granted Consent to Operate (CTO) for the said facility. The CTO was valid up to 31.01.2021. PMC has applied for renewal of CTO which is under process at MPCB.

The said incinerator is operated in 2020-2021 and total no. of 45 big animals and near about 1200 small animals have been incinerated. Presently the said plant is not in operation. The photograph of plant is provided as below-



## 2.2 Material Recovery Facilities (MRFs) for Dry Solid Waste-

There are two Material Recovery Facilities (MRF) plants for dry waste having capacity of 50 MT per day and 100 MT per day at Survey no. 9 to 14/2, and Survey No. 9 to 14 Keshavnagar, Mundhwa, Pune, respectively. 50 MT per day capacity plant is opposite to carcass plant and another 100 MT per day capacity plant is at a distance of about 93 meters away from the carcass plant. Dry waste collected from houses/commercial complexes brought to these facilities for segregation of recyclable material and disposal of inerts to sanitary landfill facility. The process broadly involve manual segregation, mechanical segregation, shredding, magnetic separation etc.

The MPCB has granted Authorization to 50 MT/D capacity MRF plant, and application for Authorization for 100 MT/D capacity is in process.

The locations of these plants are shown in **Image-01, 02** and their distances from River, Residential complexes etc are shown in **Image-03**.

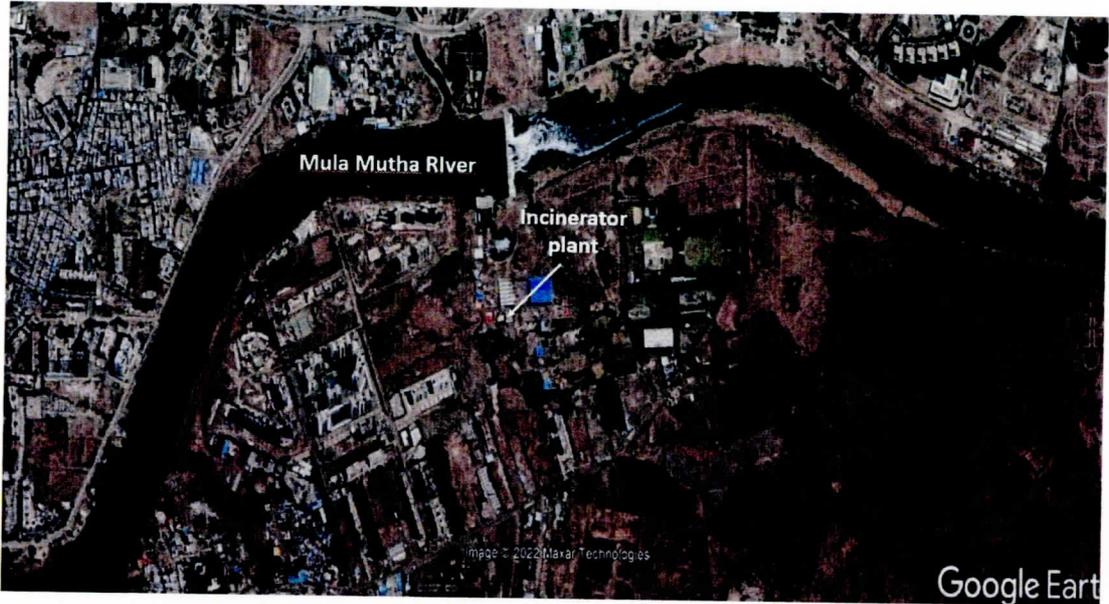


Image-01



Image-02

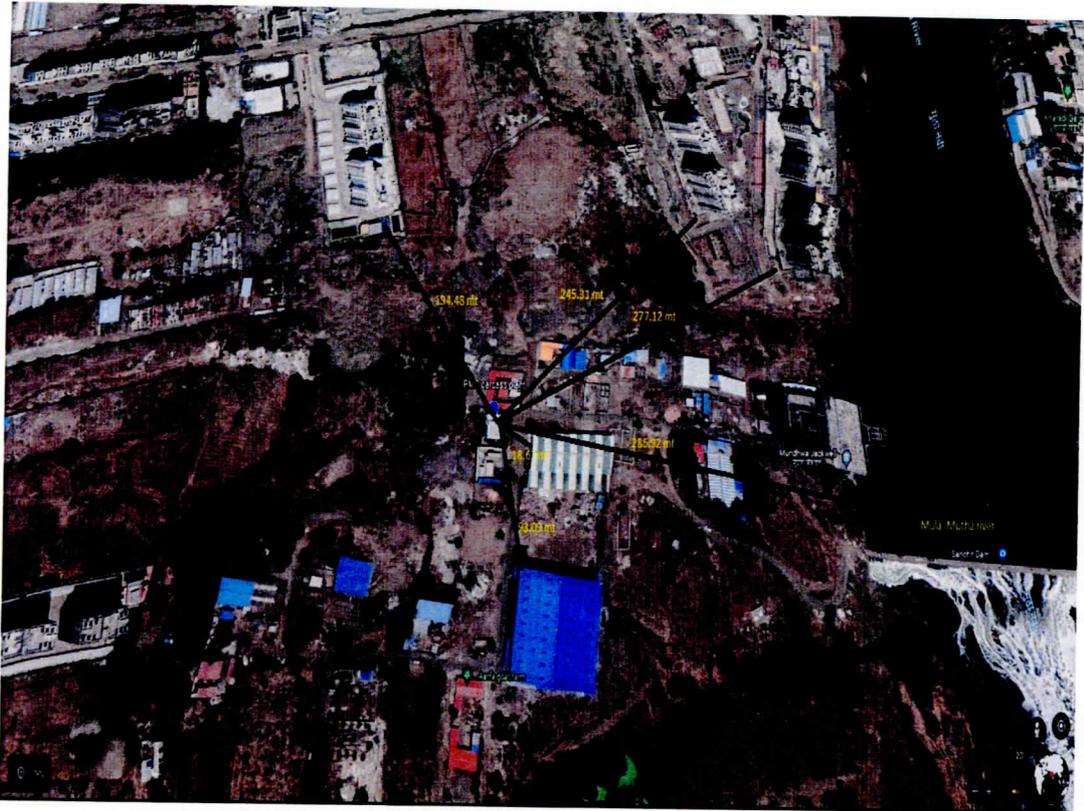


Image-03

### 3.0 OBSERVATIONS & FINDINGS

- 3.1 As informed by PMC vide letter dated 11.01.2022, the land of area 58 Hectare 57R (Survey No. 6 and 9 to 14/2) handed over by Collector Office, Government of Maharashtra to Pune Municipal Corporation in 1983 for the shifting of cattle sheds from PMC area. The 7/12 of said land is in the name of PMC.
- 3.2 PMC has prepared the layout on above area on 23.08.2006 for the use of land/area for different purposes like settlement of pottery, cattle shed (*tabelas*), slum rehabilitation, water tank, lime *bhatti*, animal hospital, pig farm etc. and

submitted for approval to District Collector, Pune. However, till date Pune Municipal Corporation has not received any sanction/approval to use the said land for different purposes from Collector Office.

3.3 Considering the need, PMC has started the use of said land for different purposes than originally permitted i.e. for cattle sheds. Copy of the PMC letter dated 11.01.2022 is attached herewith and annexed as **Annexure- IV**.

3.4 As per Maharashtra Municipal Corporation (MMC) Act, 1949, it is the duty of the Commissioner to remove the carcasses of all animals dying within the City. The relevant Sub-section-1, Section- 309, section is reproduced below—*“Removal of carcasses of dead animals. - (1) It shall be the duty of the Commissioner to provide for the removal of the carcasses of all animals dying within the City.”*

Accordingly, Pune Municipal Corporation has installed, Animal Carcass Incineration Plant in the year 2013 at Survey No. 9 to 14/2 and Plot No. 272 to 275 is situated at Keshavnagar, Mundhwa, Pune, Taluka – Haveli, District – Pune, Maharashtra.

3.5 At present, it was observed that residential complexes are under construction in west, northwest, west south-west direction and nearest residential complex is coming at a distance of @ about 194 meter and Mula-Mutha river is @ about 286 meter away from the Animal Carcass Incineration plant. However, these construction projects were started after the establishment of Animal Carcass Incineration plant and cattle sheds.

3.6 Animal Carcass Incineration Plant is surrounded by cattle sheds and two MRF facilities of Pune Municipal Corporation.

3.7 PMC vide their letter dated 18.07.2022 informed that till date 107 cattle sheds shifted to above area. These cattle sheds are adjacent to Mulha- Mutha river. Few Cattle sheds are within the distance of 200 m from river against the criteria for distance of 200 m and few cattle sheds are within the distance of 100 m from human habitation against the criteria for distance of 100 m as specified in revised CPCB guidelines for environmental management dairy farms and gaushala. Further, no school/college and Hospital are within the periphery of 100 meters. There is no any treatment and disposal system for liquid and solid waste generated from cattle sheds. There is proposal of STP for this area including cattle sheds as informed by PMC. The siting criteria of cattle sheds are not meeting w.r.t distance from river and human habitation in the present cattle sheds which are established before the revised CPCB Guidelines for the Environmental Management of Dairy Farms and Gaushalas issued in July 2021. Copy of the PMC letter dated 18.07.2022 is attached herewith and annexed as **Annexure- V**

Also, the land for cattle sheds are reserved by Pune Municipal Corporation and submitted layout plan for approval in past to Government of Maharashtra before aforesaid CPCB guideline (July 2021). Copy of the aforesaid Guideline for the Environmental Management of Dairy Farms and Gaushalas is attached herewith as **Annexure-VI**

3.8 During visit, animal carcass incineration plant was not found in operation. It is informed by official of PMC that same was not in operation since one year whereas two MRF plants were found operational.

3.9 As mentioned in the Guideline on Carcass Disposal prepared by CPCB in the year 2020, there are four current practices of Carcass Disposal-

- I. Carcass Utilization Plant (Flaying, Rendering etc),
- II. Incineration plant
- III. Deep Burial and
- IV. Other methods-Pyre Burning, Composting etc

Further, Guidelines also include environmental issues associated with these practices, control measures, role of concerned agencies etc. The copy of aforesaid Guidelines is provided at **Annexure-VI**. The distance criteria is not mentioned in the said guidelines i.e. distance from human habitation, water bodies, etc. However, the guidelines include the requirement of buffer zone and green belt to be provided around the Carcass disposal facility to minimize the impact of the carcass disposal, total disposal of dead animals by way of recovery of parts and material of dead animal and remaining disposal by incineration. The Environmental issues of Incineration and measures to be taken for incinerations are provided as below-

**Environmental issues of Incineration: -**

Environmental issues related to incineration are emission of flue gases causing air pollution and disposal of remaining solid waste.

**Measures to be taken for Incineration: -**

- i. Complete combustion of carcasses to be ensured.
- ii. Air pollution control devices should be installed and the emission from incinerators should comply the General Emission Standards mentioned

under Standard for incineration section in SWM Rules,2016

- (a) Carcasses should be utilized by adopting rendering process or incineration and priority may be given to carcass utilization plant which are run by adopting rendering process at all the major towns to process the dead animal carcasses in a scientific manner.

By considering the above, the existing incineration plant is required to fulfill the measures to be taken as mentioned in guidelines issued by CPCB. The other practice- Carcass Utilization practices are also having Environmental issues related to carcass rendering process are odour as well as trade effluent generated from various process steps followed for rendering, solid/hazardous waste generated from the Effluent Treatment plant (ETP), and requires more land and associated infrastructure etc and whereas PMC has already installed incineration plant. Therefore, committee is of the opinion that Incineration plant for Animal Carcass may be continued with measures as specified in CPCB Guideline without rendering activity.

#### **4.0 CONCLUSION:**

Total area - 58 H. 57 R (Survey. No. 6 and 9 to 14/2) handed over by Collector Office, Government of Maharashtra to Pune Municipal Corporation in 1983 for the shifting of cattle sheds from PMC area. Pune Municipal Corporation has prepared the layout on above area on 23.08.2006 for the use of land for different purposes like settlement of pottery, Cattle Sheds (*tabelas*), slum rehabilitation, water tank, lime Bhatti, animal hospital, pig farm, etc. and submitted for approval to District Collector, Pune.

As per Sub-section-1 of Section- 309 under the Maharashtra Municipal Corporation (MMC) Act, 1949, it is the duty of the Commissioner to provide for the removal of the carcasses of all animals dying within the City. Accordingly, PMC has installed animal Carcass incineration plant in the year 2013 at Keshavnagar, Mundhwa, Pune. The said plant is @ 200 meters away from nearest under construction residential complex and @ 300 meters away from Mula-Mutha River.

Animal Carcass Incineration plant (500 kg/Hr, Fuel-Diesel)) is established with two chambers i.e. First chamber where dead animal is unloaded having cover and four burners to achieve temperature of 1200<sup>0</sup>C and Second chamber is with one burner (to achieve 600<sup>0</sup>C) to burn/treat flue gases/particulate emissions generated during the incineration in First Chamber.

The incinerator is not provided with Air Pollution Control System (APCS) and Stack Monitoring Facility (SMF). There is no any generation of trade effluent from the animal carcass incineration plant. There is no standard operating procedure observed or displayed at Carcass incineration plant. Maharashtra Pollution Control Board has granted the consent to said plant which is valid up to 31.01.2021 and applied for further renewal. By considering the CPCB Guideline, the existing incineration plant is required to fulfill the measures to be taken w.r.t. air pollution control system. The other practice- Carcass Utilization (rendering) is also having Environmental issues related to carcass rendering process are odour as well as trade effluent generated from various process steps followed for rendering, solid/hazardous waste generation from the Effluent Treatment plant (ETP), and requires more land and associated infrastructure etc. and whereas PMC has already installed incineration plant. Therefore, committee is of the opinion that Incineration plant for Animal Carcass may be continued with measures as specified in CPCB Guideline.

There are two MRF plants in existence for dry solid waste in two different closed sheds adjacent to Carcass Incineration Plant within the periphery of 100 Meters. Dry waste collected from houses/commercial complexes brought to these facilities for segregation of recyclable material and disposal of inerts to sanitary landfill facility. The process broadly involve manual segregation, mechanical segregation, shredding, magnetic separation etc.

PMC vide letter dated 18/07/2022 informed that till date 107 cattle sheds shifted to above area. However, joint committee noticed that few Cattle sheds are within the distance of 200 m and 100 m from river and human habitation respectively as against the criteria for distances specified in revised CPCB Guidelines for Environmental Management Dairy Farms and Gaushala. Further, no school/college and Hospital are within the periphery of 100 meters. There is no any treatment and disposal system for liquid and solid waste generated from cattle sheds.

The siting criteria of cattle sheds are not meeting w.r.t. distance from river and human habitation in the present cattle sheds which are established before the revised CPCB Guidelines for the Environmental Management of Dairy Farms and Gaushalas (July 2021). Also, the lands for cattle sheds are reserved by PMC and submitted layout plan for approval in past to Collector Officer Pune before aforesaid revised CPCB guidelines issued in July 2021.

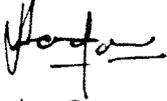
## **5.0 RECOMMENDATIONS: -**

- 5.1 Pune Municipal Corporation should obtain approval from competent authority for change in land use immediately for Survey No. 6 and 9 to 14/2, Keshawnagar, Mundhwa, Pune.

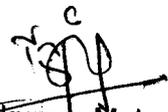
- 5.2 PMC should follow the applicable CPCB guidelines on carcass disposal (2020) including measures for transportation of carcass to disposal site and incineration plant.
- 5.3 PMC should provide Air Pollution Control System (APCS) and stack monitoring facility to Animal Carcass Incineration Plant. The aforesaid APCS and Incineration System should meet emissions norms as mentioned in CPCB Guideline for Carcass Disposal i.e. norms specified for Solid Waste Incinerators in SWM Rules, 2016. MPCB should grant the CTO accordingly, as consent to establish and 01<sup>st</sup> consent to operate was issued prior to CPCB guidelines (November 2020).
- 5.4 Cattle sheds which are not following distance criteria as specified in revised CPCB Guidelines for the Environmental Management of Dairy Farms and Gaushalas (July 2021) may be immediately shifted to other locations within the specified land for cattle shed. Even though the guidelines issued after establishment of cattle sheds, the Cattle sheds should apply for CTE/CTO to MPCB and MPCB to issue CTE only if these cattle sheds and associated facilities meet aforesaid revised CPCB guidelines including STP.
- 5.5 Though, there is no distance criteria for buffer Zone in the Guideline for Carcass Disposal (2020), for MRF facilities for dry solid waste and cattle sheds (dairy farm & Guashalas), PMC shall develop green belt of 10 m along the periphery of the earmarked site/land for cattle sheds, Carcass Plant, MRFs and other facilities so as to minimize cumulative effect of these facilities in the surroundings. The said 10 m green belt has been referred in the part of buffer zone specified for solid waste processing and disposal facilities as per CPCB guideline. However, these aforesaid facilities/plants does not fall under any of the Solid waste processing & disposal facilities.

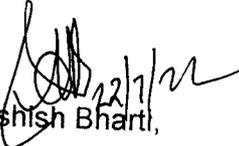
- 5.6 Pune Municipal Corporation should carried out the survey of cattle sheds and implement the revised guidelines issued by CPCB including common collection, treatment and disposal for the solid waste and liquid waste generated from cattle sheds.
- 5.7 PMC and operators of existing MRF plants should take necessary precautions so as to avoid any smell nuisance to nearby areas.

  
Santoshkumar <sup>19/07</sup>/<sub>2022</sub>  
Deshmukh, SDO, Haveli,  
District Collector, Pune

  
Sanjay Sandanshiv,  
Scientist-II, Secretary  
(Technical),  
Environment and  
Climate Change  
department, GOM,  
Mumbai

  
Pratik Bharne,  
Scientist- E, Central  
Pollution Control Board

  
Dr. Shitalkumar Mukane,  
District Deputy  
Commissioner,  
Animal Husbandry  
Department

  
Dr. Ashish Bharti,  
Medical Heath Officer,  
Pune Municipal  
Corporation

  
Shankar Waghmare,  
Regional Officer,  
MPC Board, Pune

Date:- 19.07.2022

Place: Pune.

Item No. 05

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
(Through Video Conferencing)**

Original Application No. 14/2020 (WZ)

Mohan Nanasahab Kudale

Applicant(s)

Versus

Pune Municipal Corporation & Ors.

Respondent(s)

Date of hearing: 06.03.2020

**CORAM: HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER  
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER**

For Applicant(s): Mr. Saurabh Kulkarni Advocate

**ORDER**

1. The applicant in this case alleges that the respondent no. 1, Pune Municipal Corporation, has been operating an incinerator plant for disposal of animal carcass on land bearing Survey Nos. 9 to 14/2 and Plot Nos. 272 to 275 situated at Keshavnagar, Mundhwa, Pune without obtaining prior Environmental Clearance as required under the EIA Notification 2006.
2. Heard.
3. Issue notice returnable in three weeks.

4. The Applicant to furnish requisites within one week from hence.
5. In the meanwhile, we direct the MoEF&CC, Regional Office at Nagpur, the Maharashtra State Pollution Control Board and the Collector, Pune District to jointly inspect the unit in question, verify on the factual allegations contained in the Original Application and to submit a report.
6. In the event, the allegations are found to be correct, appropriate action in accordance with law be instituted against the respondent no. 1 and an action taken report be filed in this regard at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) before the next date.
7. Copies of this order and set of papers be handed over to the Regional Office, MoEF&CC at Nagpur by the applicant for compliance.
8. List on 23.04.2020.

S.P. Wangdi, JM

Dr. Satyawan Singh Garbyal, EM

March 06, 2020  
Original Application No. 14/2020 (WZ)  
R

मा. राष्ट्रीय हरित लवाद यांचेकडे मोहन नानासाहेब कुदळे यांनी दाखल केलेली मूळ अर्ज क्र. १४/२०२० मध्ये मा. लवादाने दिनांक ११/०७/२०२२ रोजी पारित केलेल्या आदेशानुसार समिती गठीत करण्याबाबत..

महाराष्ट्र शासन

पर्यावरण व वातावरणीय बदल विभाग

१५ वा मजला, नवीन प्रशासकीय इमारत,

मंत्रालय, मुंबई - ४०० ०३२.

शा.परिपत्रक क्रमांक - एनजीटी २०२२/प्र.क्र. ७१/तां.क.१

दिनांक : १३ जुलै, २०२२.

वाचा :- मा. राष्ट्रीय हरित लवाद (विशेष खडपीठ), यांच्याकडे दाखल मूळ याचिका क्र. १४/२०२० या प्रकरणी मा. लवादाने दिनांक ११/०७/२०२२ रोजी पारित केलेले आदेश.

प्रस्तावना :-

सदरहू दाखल मूळ अर्ज हा सर्व्हे क्र.९ ते १४/२ आणि प्लॉट क्र.२७२ ते २७५, केशव नगर, मुंडवा, पुणे येथे मृत जनावरांच्या विल्हेवाटीसंदर्भात incinerator पर्यावरणीय अनुमती शिवाय कार्यान्वित असल्याबाबत मोहन नानासाहेब कुदळे यांनी मा. राष्ट्रीय हरित लवाद, पुणे यांचेकडे मूळ अर्ज क्र. १४/२०२० दाखल केले आहे. सदर प्रकरणी मा. लवादाने तक्रारीची दखल घेऊन केंद्रिय पर्यावरण व वातावरणीय बदल विभागाच्या नागपूर क्षेत्रीय कार्यालय, महाराष्ट्र प्रदूषण नियंत्रण मंडळ व जिल्हाधिकारी, पुणे यांनी संयुक्त स्थळहपाहणी करून तक्रारीबाबत वस्तुनिष्ठ अहवाल सादर करण्याच्या सूचना दिनांक ०६ मार्च, २०२०च्या आदेशान्वये दिल्या होत्या. त्याअनुषंगाने संयुक्त समितीने दिनांक २१ ऑक्टोबर, २०२० रोजी अहवाल मा. राष्ट्रीय हरित लवादास सादर केला. सदर प्रकरणी मा. राष्ट्रीय हरित लवादाने सद्यस्थितीदर्शक अहवाल सादर करण्याकरिता समिती गठीत करण्याची बाब शासनाच्या विचाराधीन होती.

शासन परिपत्रक -

पुणे महानगरपालिकेने सर्व्हे क्र.९ ते १४/२ आणि प्लॉट क्र.२७२ ते २७५, केशव नगर, मुंडवा, पुणे येथे मृत जनावरांच्या विल्हेवाटीसंदर्भात incinerator पर्यावरणीय अनुमती शिवाय कार्यान्वित असल्याबाबत मोहन नानासाहेब कुदळे यांनी मा. राष्ट्रीय हरित लवाद, पुणे यांचेकडे मूळ अर्ज क्र. १४/२०२० दाखल केले आहे. सदर प्रकरणी मा. लवादाने तक्रारीची दखल घेऊन केंद्रिय पर्यावरण व

वातावरणीय बदल विभागाच्या नागपूर क्षेत्रीय कार्यालय, महाराष्ट्र प्रदूषण नियंत्रण मंडळ व जिल्हाधिकारी, पुणे यांनी संयुक्त स्थळहपाहणी करून तक्रारीबाबत वस्तुनिष्ठ अहवाल सादर करण्याच्या सूचना दिनांक ०६ मार्च, २०२०च्या आदेशान्वये दिल्या होत्या. त्या अनुषंगाने संयुक्त समितीने दिनांक २१ ऑक्टोबर, २०२० रोजी अहवाल मा. राष्ट्रीय हरित लवादास सादर केला. सदर प्रकरणी मा. लवादाने दिनांक ११/०७/२०२२ रोजी पारित केलेल्या आदेशानुसार कार्यवाही करून मा. राष्ट्रीय हरित लवादाकडे सद्यस्थितीदर्शक अहवाल सादर करण्याकरिता खालीलप्रमाणे समिती गठीत करण्यात येत आहे.

१.	अ.मु.सचिव, (महसूल) महसूल व वन विभाग	सदस्य
२.	प्रधान सचिव, पर्यावरण व वातावरणीय बदल विभाग	सदस्य
३.	प्रधान सचिव, नगर विकास विभाग	सदस्य
४.	प्रधान सचिव (पशुसंवर्धन) कृषि व पदुम विभाग.	सदस्य
५.	सदस्य सचिव, केंद्रिय प्रदूषण नियंत्रण मंडळ	सदस्य
६.	जिल्हाधिकारी, पुणे	सदस्य
७.	सदस्य सचिव, महाराष्ट्र प्रदूषण नियंत्रण मंडळ, सायन	समन्वयक

मा. राष्ट्रीय हरित लवादाने दिलेल्या निर्देशानुसार समन्वयक म्हणून सदस्य सचिव, महाराष्ट्र प्रदूषण नियंत्रण मंडळ, मुंबई यांनी सदर समितीच्या सदस्यांमध्ये समन्वय साधून समितीने केलेल्या कार्यवाहीचा अहवाल तसेच सद्यस्थितीदर्शक अहवाल विहित मुदतीत मा. राष्ट्रीय हरित लवादास सादर करण्याबाबत आवश्यक ती खबरदारी घ्यावी.



(चंद्रकांत विभूते)

उपसचिव तथा शा.श्रे-१, महाराष्ट्र शासन

प्रत :-

१. प्रधान सचिव, पर्यावरण व वातावरणीय बदल विभाग, मंत्रालय मुंबई-३२.
२. प्रधान सचिव, (नवि-२) नगर विकास विभाग, मंत्रालय मुंबई-३२.
३. अपर मुख्य सचिव, (महसूल) महसूल व वन विभाग, मंत्रालय मुंबई-३२.
४. प्रधान सचिव (पशुसंवर्धन) कृषि व पदुम विभाग, मंत्रालय मुंबई-३२.
५. जिल्हाधिकारी, जिल्हा-पुणे.
६. सदस्य सचिव, केंद्रिय प्रदूषण नियंत्रण मंडळ, नवी दिल्ली.
७. सदस्य सचिव, महाराष्ट्र प्रदूषण नियंत्रण मंडळ, सायन मुंबई-२२
८. शा.श्रे.१ तथा उप सचिव (तां.क.१) पर्यावरण व वातावरणीय बदल विभाग, मंत्रालय मुंबई-३२.
९. निवड नस्ती. (तां.क.१)

Translated copy of Circular dt. 13/07/22

Hon. National Green Tribunal has passed order dated 11/07/2022 in the original application filed by Mohan Nanasahab Kudale with the Original application no. 14/2020 regarding the constitution of the committee..

**Government of Maharashtra  
Department of Environment and Climate Change  
15th Floor, New Administrative Building,  
Mantralaya, Mumbai 400 032.  
Gov. Circular No. NGT 2022/L.No.71 /T. 1  
Dated : 13th July, 2022,**

Read:- Hon. National Green Tribunal (Principal Bench), original application no. 14/2020 in this case Hon. Tribunal has passed order dated 11/07/2022.

Introduction:

Mohan Nanasahab Kudale has filed the original application no. 14/2020 to Hon'ble National Green Tribunal, Pune regarding disposal of dead animals in Survey No. 9 to 14/2 and Plot No. 272 to 275, Keshav Nagar, Mundwa, Pune without environmental clearance. In the said case Hon. The Tribunal took cognizance of the complaint and directed the Nagpur Regional Office of the Central Environment and Climate Change Department, Maharashtra Pollution Control Board and the Collector, Pune to conduct a joint site inspection and submit an objective report on the complaint by order dated March 06, 2020. Accordingly, the Joint Committee on October 21, 2020, Submitted report to Hon. National Green Tribunal. In the said case, forming a committee to submit a status report by the National Green Tribunal was under the consideration of the government.

Government circular-

The original application no. 14/2020 has been filed at Hon'ble National Green Tribunal, Pune by Mr. Mohan Nanasahab Kudale against Pune Municipal Corporation Survey No. 9 to 14/2 and Plot No. 272 to 275, Keshav Nagar, Mundhwa, regarding the disposal of dead animals, Incinerator operating without environmental clearance in Pune. In the said case Hon. Tribunal took cognizance of the complaint and the Central Environment and Climate Change Department, Regional Office, Nagpur, Maharashtra Pollution Control Board and The Collector, Pune was instructed to conduct a joint inspection and submit an objective report on the complaint vide order dated March 06, 2020. Accordingly, the Joint Committee Submitted report on October 21, 2020, to Hon. National Green Tribunal. In the said matter, as per the order passed by the Tribunal dated 11/07/2022, the following committee is being constituted to submit a progress report to the Hon'ble National Green Tribunal.

1	Secretary, (Revenue) Revenue and Forest Department	Member
2	Principal Secretary, Environment and Climate Change Department	Member
3	Principal Secretary, Urban Development Department	Member
4	Principal Secretary Animal Husbandry, Department.	Member
5	Member Secretary, Central Pollution Control Board	Member
6	The District Collector, Pune	Member
7	Member Secretary, Maharashtra Pollution Control Board,	Coordinator

According to the instructions given by the hon'ble National Green Tribunal, the Member Secretary, Maharashtra Pollution Control Board, Mumbai, as the coordinator, coordinated the members of the said committee and submitted the progress report of the committee within the prescribed time frame. Necessary precautions should be taken regarding submission to Hon'ble National Green Tribunal.

Deputy Secretary and Scientist-1,  
Government of Maharashtra

Copy to:-

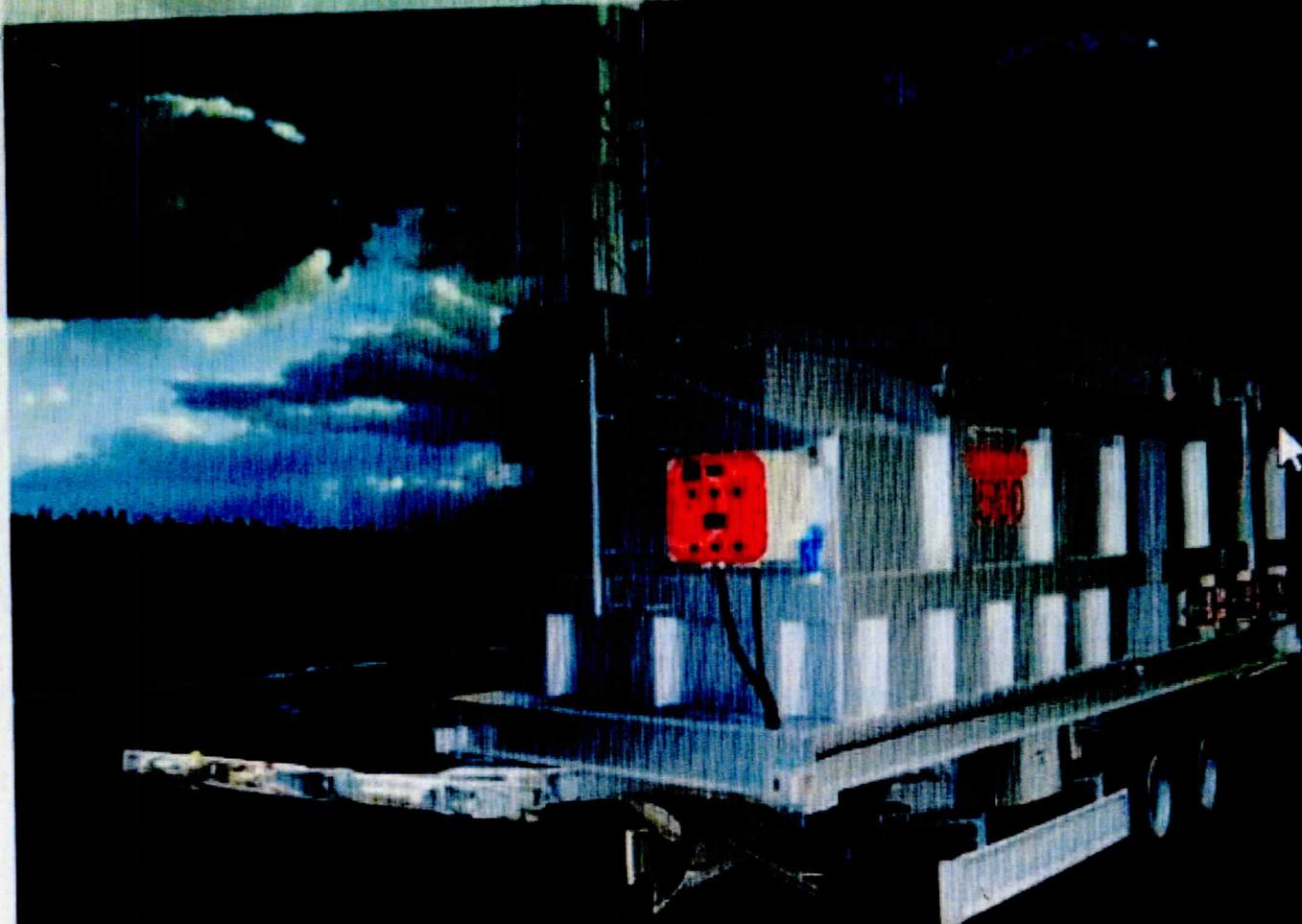
1. Principal Secretary, Department of Environment and Climate Change, Mantralay Mumbai-32
2. Principal Secretary (Navi-2) Urban Development Department, Mantralay of Mumbai-32.
3. Additional Chief Secretary, (Revenue) Department of Revenue and Forests, Mantralay Mumbai-32.
4. Principal Secretary, Animal Husbandry) Department, Mantralay Mumbai-32.
5. The Collector, District-Pune.
6. Member Secretary, Central Pollution Control Board, New Delhi.
7. Member Secretary, Maharashtra Pollution Control Board, Sion Mumbai- 22
8. Scientist Grade-1 and Deputy Secretary (T.A.1) Environment and Environment, Mantralay Mumbai-32
9. Master file. (T.- 1)

# HURIKAN<sup>TM</sup>

EMERGENCY INCINERATION UNIT



waste  
spectrum



## HURIKAN 500E

### advanced mobile incineration systems

HURIKAN 500E emergency incineration systems are exceptionally sturdy, highly mobile, high-capacity units designed for use wherever large volumes of waste needs to be incinerated quickly. They have been specifically developed to swiftly and easily incinerate a wide range of material, including carcasses resulting from catastrophic events (such as oil spillages, earth-quakes and typhoons) or outbreaks of disease (such as Avian Flu, Foot & Mouth disease, BSE and Swine Fever), medical waste and contraband (such as illegal drugs). The HURIKAN 500E is a large capacity EU ABPR compliant mobile incinerator.

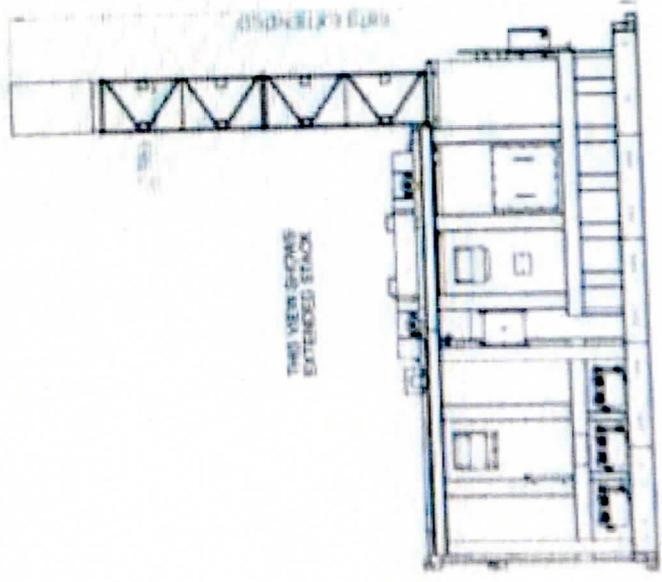
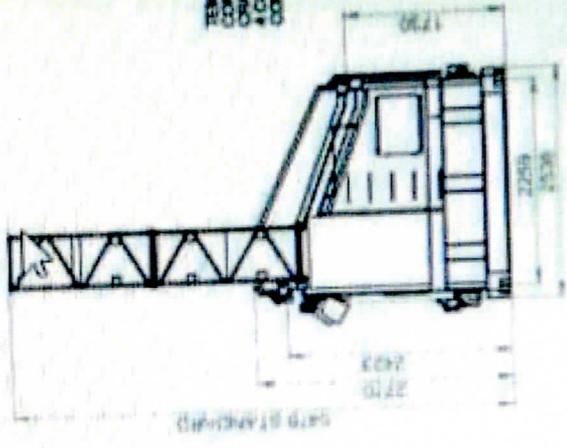
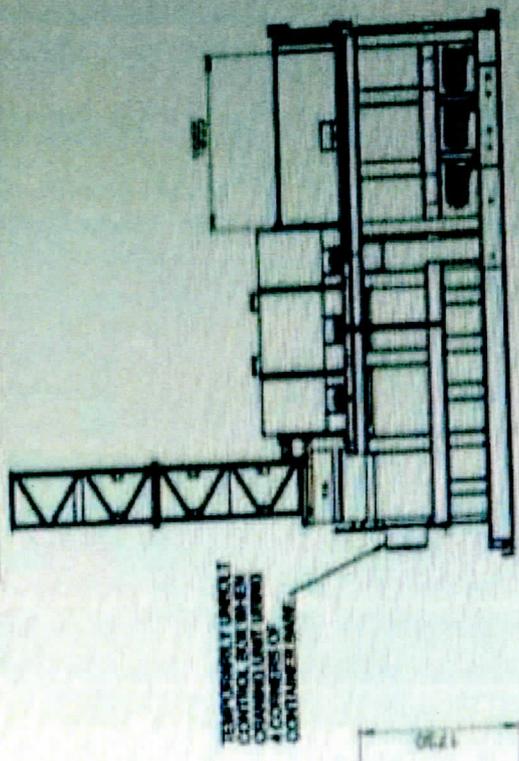
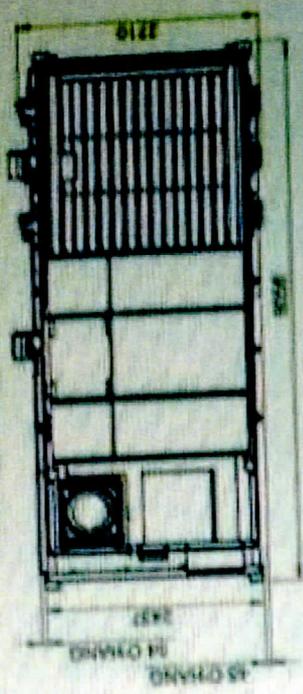
[www.HURIKANincinerators.com](http://www.HURIKANincinerators.com)

# HURIKAN 500E

**HURIKAN™**  
 EMERGENCY INCINERATION UNIT  
[www.HURIKANIncinerators.com](http://www.HURIKANIncinerators.com)



EMERGENCY INCINERATION UNIT  
 STRUCTURE (COURTESY OF HURRIKAN)



# HURIKAN 500E

## technical specifications

### Model:

HURIKAN 500E Emergency Incineration Unit

### Waste Type:

Whole animal carcasses remains or animal carcass waste, medical and organic waste.

### Construction:

Mild steel welded fabrication consisting of sheet steel and structural section supports and bradings. Articulated trailer supplied in compliance with the country of destination.

### Lining:

#### Primary chamber

Consists of a monolithic high grade refractory concrete with high grade insulation backing, typical hot face temperature linings from 1300°C. Utilising a refractory hearth for continuous ash removal.

#### Secondary Chamber

Consists of high density, low thermal mass refractory ceramic fibre with an innovative low emissivity protective coating.

### Burners:

Fully automatic, high efficiency burners with electronic ignition, flame recognition and combustion control devices fitted.

### Process monitoring:

The standard control incorporates digital display for both primary and secondary chamber temperatures throughout each cycle. Cycle position is also displayed on control LCD display screens.

### Optional Extras

- Temperature data recording equipment
- Fuel tank
- Portable Generator – petrol or diesel fuelled
- Emission Monitoring Equipment
- Extended stack

### Compliance:

EU Animal by-product regulation ABPR 1069/2009, UK Animal by-products regulation 2005. Secondary chamber gas residence time >2 seconds @ 850°C.

### Electrical supply:

230VAC, single phase, 50Hz, 16A minimum, mains or generator supplied. Waste-Spectrum offer optional petrol or diesel fuelled generators if required.

### Loading & Ash removal:

One large top access sliding door for mechanical top loading of waste. A full refractory hearth enables the ash to drop through into the de-ashing area. This enables continuous incineration.

### Exterior finish:

Multi-coat high quality, high temperature Aluminium

### Control

Control system is a programmable logic controller (PLC) with a touch screen panel. The PLC is responsible for powering the full incineration cycle, monitoring chamber temperatures, controlling ash removal and controlling the fuel supply.

The control system is fully automatic and can be operated with a remote control. The control system is also capable of being operated manually.

### Fuel

Diesel or petrol and the optional LPG also available.

### Specifications:

Primary Chamber Burn Rate	1.95m <sup>3</sup> 3 tonnes
Load Capacity	7.50kg/m <sup>2</sup>
Load Method	Top

### Typical Dimensions:

Overall Length	6.06m
Overall Width	2.71m
Overall Height	
in transit	3.94m
in operation	
(with standard stack)	6.6m
(with optional extended stack)	8.20m
Weight	11.7 tonnes

Based on the standard value of waste drum. Specifications subject to change for continuous improvement.

# HURIKAN™

## EMERGENCY INCINERATION UNIT

[www.HURIKANincinerators.com](http://www.HURIKANincinerators.com)



## Features

- Easy operation, full training provided
- Mechanical or manual loading possible
- Top loading design with easily moveable slide Open/ Close lid. Its simplicity offers effortless operation
- Market leading unique hearth bar technology allows for fast and complete incineration
- Pulse fired burners, above and below hearth

maximises throughput with 3 burners in the main chamber; 1 above hearth & 2 below hearth

- High Capacity up to 300kg / hr burn rate enables fast disposal of waste
- Ash doors, as standard, allows fast and efficient ash removal whilst in operation removing downtime
- Temperature controlled pulse fired burners for optimal efficiency
- Low thermal mass linings for minimal heat loss
- PLC timer controls with automatic burner shut off function and rapid ignition pulse fired burners for low running costs
- Can be loaded whilst in operation maximising the inherent thermal efficiency of our monolithic lining
- A stainless steel, single skin exhaust stack is supplied as standard
- Available as a static or \*\*mobile system
- Electrical Supply – Static unit works on a single phase 16 Amp 230 volt supply, fitted with a 3 pin round Euro plug. \*\*Mobile unit powered by generator

## Specifications

Specification	Metric	Unit	Hurikan 500
Burn Rate		Up to kg/hr	500
Front / Top Load			Top
Static Operational Dimensions (LxWxH)	m		6.1 x 2.8 x 5.6
Mobile Operational Dimensions (L x W x H)	m		12.4 x 2.8 x 5.2
External Height - Static	mm inc. Stack		5615
External Height - Static	mm ex. Stack		2784
Weight	Tonne		12.2
Mobile Weight	Tonne		17.7
Concrete Pad Size (L x W)	m		8.0 x 6.0
Fuel Consumption	Diesel - LPH		22 - 31
Fuel Consumption	LPG - LPH		32 - 46
Fuel Consumption	Nat Gas m <sup>3</sup> /h		22 - 31
Hearth Bars			Yes
Load Door Width	mm		1955
Load Door Height/Depth	mm		1680
Door Opening (W x H)	mm		1955 x 1880
Chamber Size (LxWxH)	m		2.0 x 1.9 x (1.5 - 2.2)
Chamber Actual Volume	m <sup>3</sup>		5.3
Chamber Load Volume	m <sup>3</sup>		3.13
Chamber Load Capacity	kg		1720
Std Stack Diameter	inch		0.36mm
No. Main Burners			4
No. Secondary Burners			1
Burner Output kW	kW		517
Electric Consumption	kW		1

Specification - Imperial	Unit	Hurikan 500
Burn Rate	Up to lbs/hr	1103
Operational Dimensions (LxWxH)	Feet	19.9 x 9.2 x 18.4
External Height	inch inc. stack	221.06
External Height	inch ex. stack	109.61
Weight	lbs	26897
Mobile Weight	lbs	39022
Chamber Actual Volume	ft <sup>3</sup>	187.17
Chamber Load Volume	ft <sup>3</sup>	110.38
Chamber Load Capacity	lbm	1627
Burner Output	Btu	1794077
Fuel Consumption	Diesel US GPH	9.8 - 8.2
Fuel Consumption	LPG US GPH	77 - 12.2
Fuel Consumption	Nat Gas Btu/h	774 - 1094

Ask about our custom built solutions

For more information contact:

+44 (0)1905 362 100

www.wastaspectrum.com

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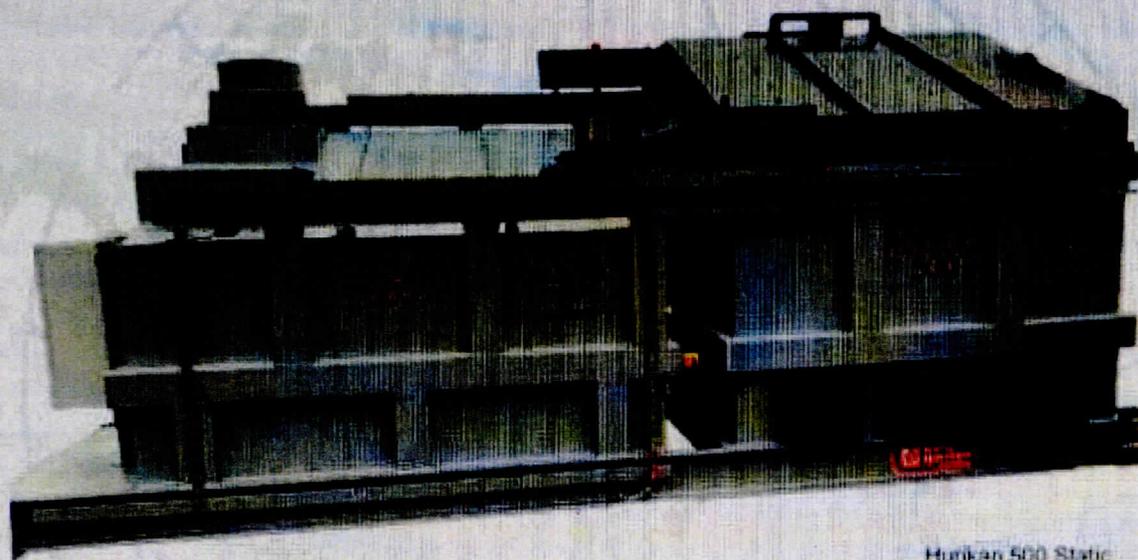
# Hurikan 500



The Hurikan 500 is a DEFRA 'Type Approved' top loading incinerator ideal for managing the disposal of animal carcasses and abattoir waste. All models in the Hurikan Range are supplied with integral secondary chambers and fully conform to EU By-Products Regulation (ABPR) (EC) No 142/2011.

Designed, engineered and manufactured at our Worcester production facility in the UK the Hurikan 500 is built using our market leading unique hearth bar technology. With above and below hearth burners this model is capable of managing high capacity throughputs of a wide range of organic waste material.

The Hurikan 500 is available as a static or mobile unit and with a burn rate of up to 500kg per hour this model provides an excellent solution for on farm use where a rapid biosecure disposal solution is required.



Hurikan 500 Static

## Machine Construction

Integral to each model in the Hurikan Range is the unique Waste Spectrum monolithic casting system:

- Ensures maximum strength and reliability in comparison to bricked linings
- Materials expand and contract at the same rate as opposed to bricks and mortar
- Prevents animal fats penetrating the lining which prolongs the life of the incinerator
- Insulating board is used to reduce heat loss
- Maintains an even working temperature for the refractory
- Our Stainless Anchor System maintains the integrity of the lining

## Ideally Suited For:

- A wide range of animal carcasses
- Abattoir waste



With a burn rate of up to 500kg per hour, this model can dispose of 10,000 chickens per day.



Easy to open sliding lid providing clear access for mechanical or manual loading.

For more information contact:

+44 (0)1905 362 100

[www.wastespectrum.com](http://www.wastespectrum.com)

Follow us on:



# HURIKAN 500E

## advanced mobile incineration system

*Why choose the HURIKAN 500E?*

### Large load capacity

The HURIKAN 500E is an unrivalled force in the incineration of large volumes of waste. It can process a wide range of material, including carcasses resulting from catastrophic events (such as oil spillages, earth-quakes and typhoons) or outbreaks of disease (such as Avian Flu, Foot & Mouth disease, BSE and Swine Fever), medical waste and contraband (such as illegal drugs). It is a large capacity, highly manoeuvrable EU ABPR 1069/2009 compliant mobile incinerator and will incinerate continuously, making use of our unique de-ashing system.

### Fast burn rate

The HURIKAN 500E's 500kg per hour burn rate\* ensures that a single unit can incinerate around 10,000 chickens a day (with an average weight of 1.2kg).

\*based upon the calorific value of waste stream.

### Unique mobility

It can be quickly towed and manoeuvred into awkward sites and its rapid incineration rates mean that it can resolve problems quickly.

### Rapid deployment

The HURIKAN 500E can be operational within two hours, providing for the swift containment of disease, and saving unnecessary labour and waste transport costs.

### Simple to use

With automatic burn cycles and a large, but easily moveable slide on/off loading door, its simplicity offers effortless operation, despite its size.

### Robust construction

Built with high quality materials, the HURIKAN 500E offers reliable service when it is needed the most, designed to cope with the intensive nature of mobile incineration.

### Legislation compliance

The HURIKAN 150 is fully EU legislation ABPR 1069/2009 compliant and for efficiency and cleaner emissions.

### Why use mobile incineration?

Mobile incinerators are the most efficient way of processing bulk waste in remote or varied locations. It is also quickest way to effectively contain outbreak of disease and epidemics. Bio-security is assured by moving the incinerator rather than the diseased carcasses.

### For more information contact:

E: [sales@WasteSpectrum.com](mailto:sales@WasteSpectrum.com)

T: +44(0)1905 362100

F: +44(0)1905 362101

or visit us at:

[www.WasteSpectrum.com](http://www.WasteSpectrum.com)



Mobile trailer-based ABPR 1069-2009 compliant HURIKAN 500E, shown above and on front cover, with optional extended stack.

### Key Specifications at a glance

Overall Length	6.06m
Overall Width	2.71m
Overall Height	
in transit	3.94m
in operation	
(with standard stack)	6.6m
(with optional extended stack)	8.20m

Weight 11.7 tonnes

Burn Rate\* < 500kg/hr

\*based upon the calorific value of waste stream

Specifications subject to change for continuous improvement

# HURIKAN™

## EMERGENCY INCINERATION UNIT

[www.HURIKANincinerators.com](http://www.HURIKANincinerators.com)



waste  
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By post

घनकचरा व्यवस्थापन विभाग  
पुणे महानगरपालिका  
जा.क्र. घ.क.व्य.का/४५९९  
दि. ११-०९-२०२१.

मा. विभागीय अधिकारी,  
महाराष्ट्र प्रदूषण नियंत्रण मंडळ,  
विभागीय कार्यालय,  
जोग सेंटर, तिसरा मजला, वाकडेवाडी,  
पुणे-४११००३

20/12-FTS-0150

यांजकडेस..

विषय :- Compliance of order dated 17/09/2021 passed by Hon'ble NGT in  
Original Application No. 14/2020 (WZ) filed by Mohan N. Kudale v/s Pune  
Municipal Corpn. & Ors.

संदर्भ :- १. आपलेकडील पत्र MPCB/ROP/२११११८-FTS-०१७५ दि. १८/११/२०२१  
पत्र.  
२. घनकचरा व्यवस्थापन विभागाचे मा.मालमत्ता विभागास जा.क्र.घकव्यका/३९५५  
दि.०९/०१/२०२१ रोजीचे पत्र.  
३. मालमत्ता विभागाचे घनकचरा व्यवस्थापन विभागास आ.क्र.७८९८  
दि.१७/१२/२०२१ रोजीचे प्राप्त पत्र.

विषयांकित ठिकाणच्या इन्सिनरेटर बाबत मे. राष्ट्रीय हरित लवादामध्ये दावा दाखल आहे. त्या अनुषंगाने स्थापित कमिटीमार्फत मुंडवा स.नं. ९ ते १४ येथे सुरु असलेल्या घनकचरा प्रकल्पाबाबत माहिती घेण्यात आली होती. त्या अनुषंगाने खात्यामार्फत सदर जागेमध्ये विषयांकित ठिकाणीच्या प्रकल्पाबाबत दाव्यामध्ये माहिती देण्यात आली होती. तथापि संदर्भांकित पत्रान्वये आपणामार्फत सदर ठिकाणच्या जागेच्या वापराबाबत मे. शासनाची परवानगी घेतली अगर कसे ? याबाबत माहिती मागविण्यात आली होती. सदर बाबीस अनुसरून घनकचरा व्यवस्थापन विभागाकडून मा.मालमत्ता व्यवस्थापन विभागाकडे संदर्भ क्र.२ अन्वये सदर जागा वापराच्या मान्यतेबाबत अद्ययावत स्थितीची माहिती मिळणेबाबत कळविण्यात आले होते. त्यानुषंगाने संदर्भ क्र.३ अन्वये मा. मालमत्ता विभागांमार्फत सदर जागेबाबतचा अहवाल घनकचरा व्यवस्थापन विभागास प्राप्त झाला आहे.

सोबत जोडलेल्या संदर्भ क्र.३ च्या मालमत्ता व्यवस्थापन विभागाच्या पत्रान्वये 'मोजे मुंडवा स.नं. ६ व ९ ते १४/२ येथील ५८ हेक्टर ५७ आर क्षेत्राची जागा शासनाने सन १९८३ मध्ये पुणे महानगरपालिकेस जनावरांचे गोठ्यांचे स्थलांतरणासाठी कब्जेहक्काची रक्कम भरून पुणे महानगरपालिकेस दिली होती. सदर जागेच्या ७/१२ सदरी पुणे महानगरपालिकेची नोंद आहे. तथापि स.नं. ६ मध्ये २२ हे. २९ आर व स.नं. ९ ते १४/२ मध्ये २७ हे. ८७ आर अशाप्रकारे एकूण ५० हे. १६ आर क्षेत्राची जमीन शासनाकडून पुणे मनपास

Table Need for  
14/11/21  
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मिळालेली आहे. त्यापैकी स.नं. ६ पैकी मालकी हक्काच्या वादातील क्षेत्र १ हे. २५ आर आणि झोपडपट्टी क्षेत्र १ हे. ११ आर असे एकूण २ हे. ३६ आर क्षेत्र पुणे मनपास वापरासाठी उपलब्ध नाही. मनपाकडे उपलब्ध असलेल्या जागेवर पुणे महानगरपालिकेने दि.२३/०८/२००६ रोजी ले-आउट तयार केला असून त्यामध्ये गुरांच्या गोठ्यासोबतच अन्य प्रयोजनासाठी जागा निश्चित केलेल्या आहेत. त्याचा तपशील पुढीलप्रमाणे

मुंबवा स.नं. ६ मधील क्षेत्र निश्चितीचा तपशील  
मोजणी व ताबापावतीप्रमाणे क्षेत्र २२ हे. २९ आर

अ.क्र.	प्रयोजन	क्षेत्र
१.	कुंभार व्यावसायिक	२ हे. ८५ आर
२.	ब्ल्यू क्रोस सोसायटी	१ हे. ०० आर
३.	कडबाकुट्टी	० हे. १९ आर
४.	रस्ते	४ हे. ३० आर
५.	पाण्याची टाकी	० हे. १० आर
६.	गोठे	४ हे. ०२ आर
७.	ओपन स्पेस (खुली जागा)	१ हे. ९३ आर
८.	नाला	४ हे. ०३ आर
९.	वादातील क्षेत्र	१ हे. २५ आर
१०.	झोपडपट्टी क्षेत्र	१ हे. ११ आर
११.	शिल्लक क्षेत्र	१ हे. ५१ आर
	एकूण	२२ हे. २९ आर

मुंबवा स.नं. ९ ते १४ मधील क्षेत्र निश्चितीचा तपशील  
मोजणी व ताबापावतीप्रमाणे क्षेत्र २७ हे. ८७ आर

अ.क्र.	प्रयोजन	क्षेत्र	पैकी जागा वाटप	शिल्लक क्षेत्र
१.	गुरांच्या गोठ्यासाठी	९ हे. ६७ आर	गोठ्यांसाठी ० हे २२.५० आर इन्सिनेटर ० हे. १०.०० आर घनकचरा व्यवस्थापन २ हे. ०० आर	७ हे. ३५.५० आर
२.	तांबट व्यावसायिक	२ हे. १८ आर	---	२ हे. १८ आर
३.	चुनाभट्टी	२ हे. ०० आर	जकवेल पंपिंगसाठी ० हे. ३७.३३ आर	१ हे. ६३.३३ आर
४.	कडबाकुट्टी	० हे. ४४ आर	---	० हे. ४४ आर
५.	जनावरांचा दवाखाना	० हे. ४६ आर	---	० हे. ४६ आर
६.	वराहपालन	६ हे. ०० आर	---	६ हे. ०० आर
७.	ओपन स्पेस ( खुली जागा )	१ हे. ६२ आर	---	१ हे. ६२ आर
८.	रोडसाठी	५ हे. ५० आर	---	५ हे. ५० आर
	एकूण	२७ हे. ८७ आर	२ हे. ६९.८३ आर	२५ हे. १८.८३ आर

सदर प्रकरणी गोठ्यांसह अन्य विविध प्रयोजनासाठी शासनाची मान्यता मिळणेकामी सन २००३ पासून सन २०१३ पर्यंत मा. जिल्हाधिकारी, पुणे व मे. महाराष्ट्र शासन यांचेकडे सातत्याने पुणे मनपाकडून विनंती करण्यात आली असून मा. जिल्हाधिकारी यांच्या दि. २०/०५/२००२ रोजीच्या अहवालावर मा. शासनाच आदेश होणेबाबत मा. अवर सचिव, महसूल व वन विभाग यांचेकडे पुनःश्च दि. १५/१०/२०१३ रोजी कळविण्यात आले आहे. तदनंतर सातत्याने पुणे मनपाकडून मा. जिल्हाधिकारी, पुणे व मा. अवर सचिव, महसूल व वन विभाग, महाराष्ट्र शासन यांचेकडे पत्रव्यवहार करून उक्त जमिनीची गोठ्यांसाठीची अट शिथिल करून अन्यः प्रयोजनासाठी शासनाची मान्यता मिळणेकामी विनंती केलेली आहे. संदर्भ क्र.३ अन्वये मा.मालमत्ता व्यवस्थापन विभागाच्या प्राप्त अभिप्रायानुसार पुणे महानगरपालिके मार्फत दि. २३/०८/२००६ रोजी तयार केलेल्या स.नं. ६ च्या ले-आउट मध्ये पुणे महानगरपालिकेने कुंभार व्यवसायिक ( क्षेत्र २ हे. ८५ आर ) ब्ल्यू क्रॉस सोसायटी ( १ हे. ०० आर), पाण्याची टाकी ( क्षेत्र १० आर) व कडबा कुट्टी ( क्षेत्र १ आर) असे एकूण ३ हे. ९६ आर क्षेत्र गोठ्याच्या व्यतिरिक्त प्रयोजनासाठी उपयोगात आणले आहे. ले-आउट अनुषंगाने रस्ते ( क्षेत्र ४ हे. ३० आर) व ओपन स्पेस ( क्षेत्र १ हे. ९३ आर ) असे एकूण ६ हे. २३ आर क्षेत्र सार्वजनिक सुविधासाठी उपयोगात आणले आहे. उर्वरित नाला ( क्षेत्र ४ हे. ३ आर), मालकी हक्काच्या वादातील ( क्षेत्र १ हे. २५ आर) झोपडपटीने अतिक्रमित ( क्षेत्र १ हे. १९ आर) असे एकूण ६ हे. ३९ आर क्षेत्र गोठ्यांसाठी उपयोगात आणता येत नाही.

तसेच पुणे महानगरपालिकेच्या मुख्य सभा ठराव क्र.३०२ दि. १७/०८/२००१ च्या मान्यतेनुसार केलेल्या स.नं. ९ ते १४/२ च्या ले-आउट मध्ये गोठ्याव्यतिरिक्तच्या अन्य प्रयोजनासाठी तांबट व्यवसायिक ( क्षेत्र २ हे. १८ आर), चुनाभट्टी ( क्षेत्र २ हे. ०० आर), कडबाकुट्टी ( क्षेत्र ०० हे. ४४ आर), जनावरांचा दवाखाना ( क्षेत्र. ००, ४६ आर), वराह पालन ( क्षेत्र ०६ हे. ०० आर) असे एकूण ११ हे. ०८ आर क्षेत्र निश्चित केले असले तरी मा. शासनाची परवानगी प्राप्त न झाल्यामुळे या जागा सदर कारणासाठी पुणे महानगरपालिकेने उपयोगात आणलेल्या नाहीत. तथापि या ठिकाणी नागरी सुविधांची गरज लक्षात घेवून इन्सिनेरेटर ( क्षेत्र ०० हे. १० आर) व बायोगॅस ( क्षेत्र ०२ हे. ०० आर), जॅकवेल पंपिंग ( क्षेत्र ०० हे. ३७.३३. आर) असे एकूण २ हे. ४७.३३ आर इतके क्षेत्र दि. २३/०८/२००६ रोजी तयार केलेल्या ले-आउट नुसार अन्य प्रयोजनासाठी उपयोगात आणले आहे. सार्वजनिक हिताच्या दृष्टीने व नागरिकांच्या आरोग्याच्या दृष्टीने कचरा त्या भागातील कचरा जिरविणे आवश्यक होते. त्यानुषंगाने सदर ठिकाणी प्रकल्प उभारणेस मा. महापालिका आयुक्त ठराव क्र. ६/३६ दि. १८/०४/२००६ अन्वये मान्यता घेऊन माहे ऑगस्ट -२०१८ व माहे सप्टेंबर -२०१९ मध्ये सदर ठिकाणी दोन कचरा प्रक्रिया प्रकल्प उभारण्यात आले आहे.

मा.स.कळावे,

*Ajeet Deshmukh*  
(अजित देशमुख) 11/1/22

उप आयुक्त

घनकचरा व्यवस्थापन  
पुणे महानगरपालिका

सोबत:- ~~मा.~~ मालमत्ता व्यवस्थापन विभागाचा अभिप्राय.

Translated copy

Solid Waste Management Department  
Pune Municipal Corporation  
Outward No. SWM/4599  
Date: 11/01/2022

Hon'ble Regional Officer  
Maharashtra Pollution Control Board  
Regional Office  
Jog Center, 3rd floor, Wakdewadi,  
Pune - 411003

Subject: Compliance of order dated 17/09/2021 passed by Hon'ble NGT in Original Application No. 14/2020 (WZ) filed by Mohan N. Kudale v/s Pune Municipal Corpn. &Ors.

- Reference: 1. Your letter number MPCB/ROP/211118-FTS-0175 dated 18/11/2021
2. SWM Department letter to Estate Department, Outward No. SWM/3955 dated 09/01/2021
3. Estate Department letter to SWM department, Inward No. 7898 dated 17/12/2021

In reference to the incinerator at the subject site, a claim has been filed in National Green Tribunal (NGT). In regard to the same, the constituted committee has taken an update about the Solid Waste processing plant located at Mundhwa, survey No. 9 to 14. In that context, information about the project in the subject site was given in the claim by the department. However, it is to be clarified as to how was the permission taken from the Government for the utilization of the said project site in context to the referred letter. Information was sought regarding this matter. Pursuant to the said matter, the Solid Waste Management Department informed the Property Management Department under reference no. 2 about getting the updated status information regarding the approval of the use of the said site. In this regard, under reference No. 3, Solid waste management department has received the proposal of the said site from the Property Management Department.

As per the attached document, reference no. 3, by the Property Management Department, the land of 3 'Moje Mundhwa Sr.No. 6 and 9 to 14/2 land of 58 hectares 57 R was given by the government to Pune Municipal Corporation in the year 1983 by paying 'possession amount' to Pune Municipal Corporation for shifting of cattle sheds. Pune Municipal Corporation has the record 7/12 of the said site. Thus, Pune Municipal Corporation has received 22 Ha 29 R in S. no 6 and 27Ha 87R in S. No 9 to 14/2 which totals to 50Ha 16R from the Government. Out of S.No. 6 the area under ownership disputes is 1 Ha 25 R and

slum area is 1 Ha 11R which totals up to 2 Ha 36 R area that is not available for Pune Municipal Corporation. On the area available with Pune Municipal Corporation, a layout has been prepared on 23/08/2006 which is utilized for cattle shed and other purposes. The details are as follows

MundhwaSr.No. 6 Area 22Ha 29R

Sr. No	Purpose	Area
1	Potter Business	2 Ha. 85 R
2	Blue cross society	1 Ha.00 R
3	Kadbakutty	0 Ha. 19 R
4	Road	4 Ha. 30 R
5	Water Tank	0 Ha. 10 R
6	Cowshed	4 Ha. 02 R
7	Open Space	1 Ha. 93 R
8	Drain	4 Ha. 03 R
9	In dispute Area	1 Ha. 25 R
10	Slum Area	1 Ha. 11 R
11	Remaining Area	1 Ha.51 R
<b>Total</b>		<b>22 Ha. 29 R</b>

MundhwaS.No. 9 to 14 details of area determination as per count and receipt of area  
27 Ha 87 R

Sr. No	Purpose	Area	Allocation of Space	Remaining Area
1	For Cowshed	9 Ha.67 R	For Cow shed 0 Ha.22.50 R Incinerator 0 Ha.10.00 R SWM 2 Ha. 00 R	7 Ha. 35.50 R
2	Copper Business	2 Ha.18 R	-	2 Ha. 18 R
3	Lime klin	2 Ha.0 R	Jack well Pumping 0 Ha.37.33 R	1 Ha. 63.33 R
4	Kadbakutty	0 Ha.44 R	-	0 Ha. 44 R
5	Vet Hospital	0 Ha.46 R	-	0 Ha.46 R
6	Bull Rearing	6 Ha.00 R	-	6 Ha.00 R
7	Open space	1 Ha.62 R	-	1 Ha.62 R
8	For Road	5 Ha.50 R	-	5 Ha. 50 R
<b>Total</b>		<b>27 Ha.87 R</b>	<b>2 Ha. 69.83 R</b>	<b>25 Ha.18.83 R</b>

In the said case, Pune Municipal Corporation has been requesting Hon. Collector, Pune and Maharashtra Government for approval of cowsheds and other various purposes from the year 2003 to the year 2013 as per thereport dated 20/05/2002 by Hon. Collector, regarding the order of the government, Hon. Secretary, Revenue and Forest Department have been informed on 15/10/2013. Post the communication from the Pune Municipal Corporation to Hon. Collector, Pune and Hon. Secretary, Revenue and Forest Department, Government of Maharashtra has been requested to relax the condition of the said land for cowsheds and get approval from the Government for other purposes. As per reference no.3 and the feedback received from the Property Management Department, the layout prepared by Pune Municipal Corporation in S.No 6, PMC has designated a total of 3 ha as Pottery (Area 2 Ha. 85R) and Blue Cross Society (1 Ha. 00R), Water Tank (Area 10R) and KadabaKutti (Area 1R) on 23/08/2006. 96 R area is utilized for purposes other than cowshed. According to the layout, roads (area 4 ha. 30 r) and open space (area 1 ha. 93 r) which is a total of 6 ha. 23R area has been utilized for public facilities. Remaining area is nala (area 4ha, 3r), disputed ownership (area 1ha, 25r) encroached by slums (area 1ha, 19r) that totals up to 6 ha. 39R area cannot be utilized for cowsheds.

As per the approvals by Pune Municipal Corporation's Main Meeting Resolution No. 302 dated 17/08/2001 in the layout of S. No. 9 to 14/2 for purposes other than cowshed (Area 2 Ha. 18 R), Chunabhatti (Area 2 Ha.R), Kadbakutty (Area 00 Ha.44 R), Animal Hospital (Area 00 Ha.46 R), Boar Farming (Area 06 Ha.00 R) that totals to 11 Ha.08 R has been determined. However, due to the non-receipt of permission from the Government, these sites have not been utilized by the Pune Municipal Corporation for the said purpose. Thus, in the interest of public and health of the citizens, (00 ha.37.33.r) and Biogas (area 2 Ha 00R), jackwell pumping (00 Ha 37.33R) which is a total area of 2 ha.47.33 R has been utilized for other purpose as per layout prepared on 23/08/2006. In the interest of public, it is imperative to process the waste in the area. In this context, approval was given by Hon'ble Municipal Commissioner vide Resolution No. 6/36 dated 18/04/2006 to construct waste processing plants at the said site. Thus, in August-2018 and September-2019, two waste processing plants have been set up.

Thanks & Regards.

Deputy Commissioner  
Soild Waste Management  
Pune Municipal Corporation



**Pune Municipal Corporation  
Health Department**

Outward No:-HVT0/1/313

Date :- 18/07/2022

To,  
The Sub-Regional Officer - 1  
Maharashtra Pollution Control Board  
Jog Center, Pune Mumbai Road  
Pune-411003.

*Handwritten notes:*  
S.No. 19/17/2022  
12/07/19-17/07/19

**Sub: Information about incinerator plant at Mundhwa-Keshavnagar Survey No. 9 to 14/2**

Ref;-Circular issued by Env.Dept. GoM in OA 14/2020 Mohan kudale VS PMC

Sir,

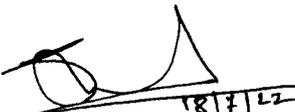
With reference to above subject following detailed Information about incinerator plant at Mundhwa-Keshavnagar Survey No. 9 to 14/2 is submitted for your necessary perusal.

**Information about incinerator plant at Mundhwa-Keshavnagar Survey No. 9 to 14/2**

Sr.No.	Information about incinerator plant at Mundhwa-Keshavnagar Survey No. 9 to 14/2	
1.	Details of dates of installation, quantities of wastes handled year wise since the inception	<ul style="list-style-type: none"> <li>In 2012 after following all required Tendering conditions M. Sara Traders was selected to run the Unit at Mundhwa-Keshavnagar as per order dated-21/09/2012.</li> <li>The Incineration plant was set up in the year 2013.</li> <li>As per Tender conditions the contractor was required to procure the incinerator. Incinerator was imported by Sara Traders from England (made in Europe 2013) and it is an advance technology for disposal of dead animals.</li> <li>After the construction of this plant, it has not been commissioned till June 2020 due to a civil writ petition in the Mumbai High Court.</li> <li>The incinerator plant has been operational since July 2020 after the approval of the Municipal Commissioner. A total of 45 big animals and near about 1200 small animals have been disposed of in this plant till date.</li> </ul>
2.	Details of incinerator plant. (S.no.6 to 9 /14/2)	<p>AREA (90 ACRES)</p> <ul style="list-style-type: none"> <li>Plot no. 272-275. (incinerator plant)</li> <li>Plot area - 10,000 sq ft. and civil construction about 18.00 sq ft. (built up area)</li> <li>Height of Compound - Incinerator plant is surrounded by 8ft tall compound wall</li> <li>Plant is 300m away from river and 400m away from locality</li> <li>There are also 20 trees planted in the plant premises.</li> </ul>
3.	"Change Of Use"	<ul style="list-style-type: none"> <li>The land was allotted to PMC to develop cattle shed by Hon. Collector, Pune</li> <li>PMC applied to Hon. Collector Office for Change of Use as per letter dated 28/06/2016 and the same is being followed up.</li> </ul>

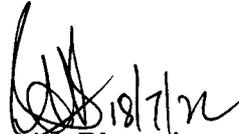
4.	Requirement of incinerator plant	<ul style="list-style-type: none"> <li>• Disposal of dead animals is the responsibility of Pune Municipal Corporation under MMC act 1949 section 309 (1,2,3).</li> <li>• The development plan has reservation for the disposal of dead animals in the Pune Municipal Corporation at survey no.57. However Hadapsar survey No. 57 has not yet been handed over to Pune Municipal Corporation. Hence it becomes imperative for PMC to develop incineration plant elsewhere in the locality.</li> <li>• As per allotment from Hon. Collector, Pune PMC shifted cattle sheds from city area to Survey No. 6 to 9/14/2. Till date 107 cattle shed shifted to keshav nagar-mundhwa.</li> <li>• For the cattle shed requirement of incinerator is must for the disposal of dead animals.</li> <li>• As per the Govt. notification, Urban Development Dept. No.PMC-2020/C.R 322/UD-22,dated 23rd December 2020, 34 villages have been included in area of the city of Pune Municipal Corporation. This has led to increase in the number of dead animals also, thereby emphasizing the need for development of an incinerator plant for disposal of dead animals.</li> <li>• PMC already has two incineration plants 700 kg/8 hrs and 400 kg/8 hrs which are not sufficient to cater to the city's needs.( Daily on an average 10 to 12 large animals and 40 to 45 small dead animals carcasses are received for incineration).</li> <li>• If a facility such as mentioned above is not operationalised and not functional in PMC there can be increase in various types of pollution leading to hazardous conditions for citizens of Pune which would seriously affect their health.</li> </ul>
5.	Details of operating procedures of incinerator plant.	<ul style="list-style-type: none"> <li>• The Corporation has appointed another contractor to pick up the dead animals 24x7 in Pune who is responsible to transport the carcasses to incinerator.</li> <li>• At the incinerator plant the main door of the incinerator plant is opened and the dead animals are dumped in the Primary Chamber.</li> <li>• The primary chamber consists of a monolithic high grade refractory concrete with high grade insulation backing, typical hot face temperature linings from 1300 degrees Celsius. The burning of the dead animals takes place in the primary chamber and secondary chamber.</li> <li>• The secondary chamber consists of high density low thermal mass refractory ceramic fibre with an innovative low emissivity protective coating. Secondary gas residence time &gt; 2seconds @ 850 degrees Celsius. The smoke produced in the secondary chamber is burned.</li> <li>• Burners are fully automatic, high efficiency burners with electronic ignition, flame recognition and combustion control devices fitted.</li> <li>• There is a standard control with a digital display for both chambers throughout each cycle.</li> <li>• In addition to the above there are temperature data recording equipments, fuel tank, portable generator, emission monitoring equipment and an extended stack. The unit requires 230VAC 50Hz single phase electric supply.</li> <li>• The capacity of this plant is 2000 kg and the burn rate is &lt;500 kg /</li> </ul>

		<p>hr. A generator has been set up to maintain the temperature of the primary chamber and secondary chamber in case of power outage.</p> <ul style="list-style-type: none"> <li>It is planned to supply the ash generated from the plant to the trees or to the farm.</li> </ul>
6.	<p>MMC Act 1949 section 309 (1,2,3) Disposal of carcasses of animals.</p>	<p>Removal of carcasses of dead animals. - (1) It shall be the duty of the Commissioner to provide for the removal of the carcasses of all animals dying within the City.</p> <p>(2) The occupier of any premises in or upon which any animal shall die or in or upon which the carcass of any animal shall be found, and the person having the charge of any animal which dies in the street or in any open place, shall, within three hours after the death of such animal or, if the death occurs at night, within three hours after sunrise, report the death of such animal at the nearest office of the municipal health department.</p> <p>(3) For every carcass removed by municipal agency, a fee for the removal of such amount as shall be fixed by the Commissioner shall be paid by the owner of the animal or; if the owner is not known, by the occupier of the premises in or upon which, or by the person in whose charge, the said animal died.</p>
7.	<p>Details of Consent to Establish, Consent to Operate of incinerator plant</p>	<p>It was mandatory for M / s Sara Traders (Contractor) to get all the licenses as per condition 6 (S) of the agreement. Application has already been made to the Board (with - Portal copy of MPCB)</p> <p>PMC received Consent to Operate from MPCB on 12.07.2017, renewed on 30.06.2018, after that application was submitted for consent which wasn't received due to NGT case for one year. After that as per Hon. High Court orders MPCB granted permission for the period 20.01.2020 to 31.01.2021. A renewal application was submitted to MPCB on 15.01.2021 which is yet to be approved.</p>
8.	<p>Details of stack height, fuel pattern, stack monitoring reports of the incinerator plant</p>	<p>With standard stack- 6.6 Meter, minimum stack height 11 meters from ground</p> <p>Fuel is Diesel 35 second fuel oil, 240 litres/day</p> <p>25 litres of diesel per hour stack monitoring reports will be done every 3 months</p>



18/7/22

**Dr. Sarika Funde**  
**Chief Veterinary Officer (Incharge)**  
**Pune Municipal Corporation**



**Dr. Ashish Bharati**  
**Medical Officer of Health**  
**Pune Municipal Corporation**

# **“Guidelines for Environmental Management of Dairy Farms and Gaushalas”**



**Central Pollution Control Board**  
(Ministry of Environment, Forest and Climate Change, Govt. of India)  
**Parivesh Bhawan, East Arjun Nagar**  
**Delhi-110032**

Revised  
(July 2021)

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## 1. Background

India ranks first among world's milk producing Nations since 1998 and has largest bovine population in the World. Dairying has become an important secondary source of income for millions of rural families and has assumed most important role in providing employment and income opportunities particularly for marginal farmers.

Dairy farms are establishment which in-house milching animals to produce milk for distribution or supplying milk to milk processing plants (other than own consumption).

Gaushalas are establishment which in-house weak, sick, injured, handicapped and abandoned homeless cattle/cows to rehabilitate them. Different terminology is used for Gaushalas in different states like Gosadans, Pinjrapole, etc.

As per 20<sup>th</sup> Livestock Census carried out by Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture and Farmers Welfare, in 2019, state-wise total population of bovine by sex and in urban & rural area is as follow:

Sl. No.	State/UT	Male Bovine	Female Bovine	Total Bovine in Rural Area	Total Bovine in Urban Area	Total Bovine
1.	A & N Islands	10,899	29,239	37,916	2,222	40,138
2.	Andhra Pradesh	15,73,589	92,45,997	1,03,97,667	4,21,919	1,08,19,586
3.	Arunachal Pradesh	3,06,246	4,13,583	7,03,018	16,811	7,19,829
4.	Assam	33,77,705	79,53,249	1,11,05,707	2,25,247	1,13,30,954
5.	Bihar	18,15,419	2,13,02,355	2,23,53,630	7,64,144	2,31,17,774
6.	Chandigarh	3,370	22,247	8,927	16,690	25,617
7.	Chhattisgarh	52,00,444	59,58,232	1,07,13,966	4,44,710	1,11,58,676
8.	Dadar & Nagar Haveli	27,015	13,718	39,223	1,510	40,733
9.	Daman & Diu	587	1,627	1,637	577	2,214
10.	Delhi	34,868	2,13,707	2,39,796	8,779	2,48,575
11.	Goa	18,081	69,373	78,940	8,514	87,454
12.	Gujarat	25,20,220	1,76,56,667	1,93,89,940	7,86,947	2,01,76,887
13.	Haryana	7,48,898	55,47,807	58,27,031	4,69,674	62,96,705
14.	Himachal Pradesh	4,99,630	19,76,892	24,47,638	28,884	24,76,522
15.	Jammu & Kashmir	5,45,636	27,10,666	31,55,710	1,00,592	32,56,302
16.	Jharkhand	51,33,373	74,39,992	1,21,84,691	3,88,674	1,25,73,365
17.	Karnataka	20,39,509	94,14,055	1,08,00,819	6,52,745	1,14,53,564
18.	Kerala	2,07,111	12,36,389	13,15,665	1,27,835	14,43,500
19.	Lakshadweep	785	1,724	2,509	0	2,509
20.	Madhya Pradesh	71,00,049	2,19,57,910	2,76,69,875	13,88,084	2,90,57,959
21.	Maharashtra	53,06,297	1,42,89,699	1,88,97,723	6,98,273	1,95,95,996
22.	Manipur	87,062	1,82,699	2,37,699	32,062	2,69,761
23.	Meghalaya	3,53,580	5,65,704	9,11,065	8,219	9,19,284
24.	Mizoram	15,775	35,992	38,434	13,333	51,767
25.	Nagaland	59,057	58,016	1,09,716	7,357	1,17,073
26.	Odisha	42,66,720	60,95,574	1,00,34,984	3,27,310	1,03,62,294
27.	Puducherry	4,695	69,684	57,322	17,057	74,379

28.	Punjab	3,47,572	61,99,835	60,99,440	4,47,967	65,47,407
29.	Rajasthan	30,06,285	2,46,24,661	2,65,18,272	11,12,674	2,76,30,946
30.	Sikkim	36,209	1,18,164	1,51,972	2,401	1,54,373
31.	Tamil Nadu	8,14,996	92,22,459	89,12,712	11,24,743	1,00,37,455
32.	Telangana	19,09,034	65,49,811	81,46,252	3,12,593	84,58,845
33.	Tripura	1,24,505	6,21,657	7,08,228	37,934	7,46,162
34.	Uttar Pradesh	45,52,599	4,74,83,827	4,95,30,075	25,06,351	5,20,36,426
35.	Uttarakhand	5,50,595	21,67,900	25,34,526	1,83,969	27,18,495
36.	West Bengal	44,35,306	1,52,73,592	1,91,76,146	5,32,752	1,97,08,898
	<b>All India</b>	<b>5,70,33,721</b>	<b>24,67,24,703</b>	<b>29,05,38,871</b>	<b>1,32,19,553</b>	<b>30,37,58,424</b>

## 2. Categorization of Dairy Farms and Gaushalas

Dairy Farms/Gaushalas are categorised on basis of nos. of bovine animals in a Dairy/Gaushala located in urban, peri-urban & rural area.

### 2.1 Dairy Farms

According to inventory received from SPCBs/PCCs and it is analysed that 60-70% Dairy Farms are having upto 25 animals, 15-20% Dairy Farms are having upto 100 animals and 15-20% Dairy Farms are having more than 100 animals. Therefore, they have been categorized as small, medium & large Dairy farm, respectively. It has been analysed that 5-10%, 5-10% and 80-90% Dairy Farms located in urban, peri-urban & rural area, respectively.

### 2.2 Gaushalas

Similarly, inventory received from SPCBs/PCCs for Gaushalas and it is analysed that 15-20% Gaushalas having upto 100 animals and 80-85% Gaushalas having more than 100 animals. Therefore, Gaushala having upto 100 animals, 1000 animals & more than 1000 animals can be categorized as small, medium & large Gaushala, respectively. It has been analysed that 50-55%, 5-10% and 35-45% Gaushalas located in urban, peri-urban & rural area, respectively.

## 3. Environmental Issues in Dairy Farms and Gaushalas

Major environmental issues of Dairy farms and Gaushalas are related to disposal of dung and urinal wastewater. Poor handling & disposal of dung and wastewater causes water pollution & odour problem. A Bovine animal, on an average, weigh 400 kg and discharges 15-20 kg/day of dung and 12-14 litres/day of urine. Solid wastes produced from Dairy farms and Gaushalas are bovine dung, feed residue, etc. which are organic and non-hazardous in nature but requires proper handling and disposal.

### 3.1 Dairy Farms

#### 3.1.1 Urban & Peri-urban Area

Majority of Dairy Farms are in clusters. Issue of disposal of dung & wastewater from Dairy farms is predominant in urban & peri-urban area where it is discharged in drains, leading to clogging, which ultimately reach to and pollute rivers. These clogged drains become

breeding ground for mosquitoes creating health hazards and odour nuisance. Wastewater is generated from floor cleaning, bathing of animals, urine, etc. and disposed of without treatment into drains. Dung produces many gases/compounds such as carbon dioxide, ammonia, hydrogen sulphide, methane, etc. which emitted into atmosphere and responsible for odour.

### **3.1.2 Rural Area**

Dairy farms located in rural area are run by small & marginal farmers which produces milk for self-consumption and excess sell in local market. Dung being utilized as a manure in field. Problem arises when dung is stored for very long time and create odour. Wastewater generated majorly from urine which is generally disposed of without treatment into land due to unpaved floor or goes to nearby drain.

## **3.2 Gaushalas**

### **3.2.1 Urban & Peri-urban Area**

Dung is generally stored for very long time and creating odour issues. Sometimes, it finds its way to drains also. Dung is utilised as a manure in field and also in making dung wood/dung cakes. Wastewater is generated from floor cleaning, bathing of animals, urine, etc. Bathing of animal is done occasionally & floor cleaning is done mechanically. The urine usually discharges in drain without any treatment. However, it is also utilized for medicinal uses. Therefore, wastewater generated per bovine animal from Gaushalas is comparatively lower than Dairy Farms.

### **3.2.2 Rural Area**

Dung is being utilised as a manure in field and also used as fuel for domestic purpose. Problem arises when it stored for very long time and creating odour issues. Wastewater is generated from floor cleaning, bathing of animals, urine, etc. Bathing of animal is done occasionally & floor cleaning is done mechanically. The urine usually discharges in drain without any treatment. However, it is also utilized for medicinal uses.

## **4. Methods for Disposal/Utilisation of Dung**

Disposal of bovine dung is biggest challenge in dairy farms and gaushalas. However, bovine dung, if effectively utilised, can be a resource of manure & energy. Bovine dung may be used for many purposes i.e. for combustion (dung wood) or for producing biogas or as soil conditioner or as fertilizers or as material for wall plastering, etc. Following methods for disposal/utilisation of solid wastes (dung) may be adopted:

- a. **Composting/Vermicomposting**: Composting is a manure management practice to reduce impact on the environment. Composting is biological decomposition and stabilization of organic material. The process produces a final product that is stable, free of pathogens, reduced odours and can be applied on land as manure. Vermicomposting is method of preparing compost with use of earthworms that enriches soil quality by improving its physicochemical and biological properties. It is becoming popular as a major component of organic farming system.

- b. Biogas/Compressed biogas (CBG) production: Biogas plants are best way to handle dung waste. Biogas is generated in process of biodegradation of organic materials under anaerobic conditions which may be utilised for cooking and power generation. Biogas plant generated digested organic manure for crops. Biogas can be processed and filled in cylinders. Bio-gas may be further purified to remove hydrogen sulphide (H<sub>2</sub>S), carbon dioxide (CO<sub>2</sub>) & water vapour and compressed (known as Compressed Bio Gas, CBG) which has methane (CH<sub>4</sub>) content of more than 90% as per BIS standard IS 16087:2016. CBG has calorific value and other properties similar to CNG and hence can be utilized as green renewable fuel as replacement of CNG in automotive, industrial and commercial areas.
- c. Manufacture of dung wood or dung cake to be used as fuel: Bovine dung can be used as fuel as a replacement of firewood. Bovine dung can be dewatered and converted to value added products such as logs, powder etc. by mechanized/semi-mechanized machines.

Following options for disposal/utilization of dung may be adopted by Dairy Farms and Gaushalas:

Sl. No.	Dairy Farms/ Gaushalas	Methods for Disposal/Utilization of Dung
1.	Small Dairy Farms	<ul style="list-style-type: none"> <li>• Composting/vermicomposting, or</li> <li>• Manufacture of dung wood/dung cake, or</li> <li>• Combination of both</li> </ul>
2.	Medium Dairy Farms	<ul style="list-style-type: none"> <li>• Combination of any of three methods for disposal/utilization of dung</li> </ul>
3.	Large Dairy Farms	<ul style="list-style-type: none"> <li>• Biogas/compressed biogas production or</li> <li>• Combination with any of remaining method</li> </ul>
4.	Dairy Farms in Rural Area	<ul style="list-style-type: none"> <li>• Composting/vermicomposting, or</li> <li>• Manufacture of dung wood/dung cake</li> </ul>
5.	Dairy Farms in Cluster	<ul style="list-style-type: none"> <li>• Common Biogas/compressed biogas production, and</li> <li>• Any of remaining method at individual level</li> </ul>
6.	Small & Medium Gaushalas	<ul style="list-style-type: none"> <li>• Combination of any of three methods for disposal/utilization of dung</li> </ul>
7.	Large Gaushalas	<ul style="list-style-type: none"> <li>• Biogas/compressed biogas production or</li> <li>• Combination with any of remaining method</li> </ul>

## 5. Guidelines for Waste Management in Dairy Farms

Following guidelines are framed for management of wastes from Dairy farms. These guidelines are applicable to establishment which are discharging their wastes into environment. These establishments shall also follow existing laws, rules, guidelines, directions and standard operating procedures issued by different organizations.

## **5.1 Guidelines for Waste Management in Dairy Farms located in Urban & Peri-urban Area**

### **5.1.1 Solid Waste Management**

Guidelines to be followed for management of solid wastes are as under:

- i. Dung from floor of shed should be collected at regular interval, so as to keep floor clean. Surrounding areas should also be cleaned regularly to prevent obnoxious smell in area.
- ii. Premises and its surrounding areas should be properly sanitized and disinfected, e.g. by sprinkling crushed lime.
- iii. Dung & fodder residue etc. should not be washed into drains in order to avoid clogging of drains. Local bodies/corporations/SPCBs should ensure that untreated wastes are not discharged outside premises.
- iv. Collected solid wastes should be stored properly for its utilization.
- v. Small Dairy Farms may adopt dung for manufacture of dung wood/dung cake or composting/vermicomposting or combination of both methods for disposal/utilization of solid wastes. In case of cluster, biogas/compressed biogas production may be adopted for disposal/utilization of solid wastes in association with entrepreneurs or local dairy farmers association. Local bodies/corporations/SPCBs should facilitate Dairy farmers/entrepreneurs/NGOs in setting up of individual or common utilization facilities.
- vi. Medium & Large Dairy Farms may adopt a combination of disposal/utilization methods like manufacturing of dung wood or biogas generation or vermicomposting. However, Large Dairy Farms may setup biogas/compressed biogas production facility either by themselves or in association with entrepreneurs.
- vii. Domestic hazardous wastes (vaccines, vials, medicines, syringes, etc.) should be disposed as per provisions of "Solid Waste Management Rules, 2016". If they have their own medical facilities then wastes should be disposed as per provisions of "Bio-medical Waste Management Rules, 2016".

### **5.1.2 Wastewater Management**

Guidelines for management of wastewater are as follow:

- i. Water should be judiciously used for bathing of bovines and other services including floor cleaning to contain wastewater quantity to 100 litres/day/bovine.
- ii. Adequate infrastructure should be provided to ensure proper handling, treatment and disposal of wastewater. They may set-up individual or common treatment facilities where in cluster. Local bodies/corporations/SPCBs should facilitate Dairy farmers/entrepreneurs/NGOs in setting up of individual or common treatment facilities.
- iii. Wastewater should be adequately treated so as to meet standards as prescribed by SPCBs/PCCs.
- iv. Flooring of shed should be properly paved (impervious) with a wastewater collection system. However, floor should not be slippery in order to ensure safety of animals.

### 5.1.3 Air Quality Management

Guidelines for management of air quality/emissions are as follow:

- i. Animal housing should be ventilated allowing sufficient supply of fresh air to remove humidity, dissipate heat and prevent build-up of gases such as methane, carbon dioxide, ammonia, etc.
- ii. Good housekeeping practices like maintaining proper sanitary conditions, protecting dung from unwanted pests/insects should be followed in order to minimize odour nuisance.
- iii. Floor, feeding, water and air spaces available for each animal should be adequate for standing, resting, loafing, movement, feeding, watering and ventilation. Space requirements should be provided as per Bureau of Indian Standards (BIS) (refer BIS: 12237-1987 given at Annexure-I).
- iv. It is suggested to obtain ration advisory for improving/modifying quality and dosage of feed/forage/supplements from any of agricultural institutes/departments like Krishi Vigyan Kendra, State Dairy Department, Animal Husbandry Department, NDRI, NDDDB, etc. in order to reduce enteric methane generations from livestock. It is beneficial to animal health/nutrition and reduced impact on environment.
- v. Plantation of trees or green belts, wherever feasible, to provide a barrier against the spread of foul smell or noise originating from them.

### 5.1.4 Siting Policy

Siting criteria will be applicable for new establishment. Existing establishments should take appropriate environmental friendly practices as per Guidelines. Dairy farm shall be setup as per siting policy/guidelines of local administration and may follow criteria as below:

- i. It should be located in area wherever permissible and atleast 100 meters away from residential dwellings, health centres/hospitals & schools in order to avoid odour problem,
- ii. Atleast 200 meters away from water spread area of major watercourses like Lake, canal and major drinking water sources,
- iii. Away from flood plain area of River and areas having shallow groundwater.
- iv. Atleast 5 meters of inter-se distance between two establishments (each establishment should provide 2.5 meters from each side) for ventilation should be provided and developed green belt.

## 5.2 Guidelines for Waste Management in Dairy Farms located in Rural Area

### 5.2.1 Solid Waste Management

- i. Dung should be collected & stored properly for its utilization. It should be used as compost in field or in making dung wood or vermi-compost. Biogas production may be practiced wherein cluster as a source of energy for rural area.

- ii. Dung & fodder residue should not be washed into drains in order to avoid clogging of drains and surrounding areas should also be cleaned regularly to prevent obnoxious smell in area.
- iii. Provisions of “Solid Waste Management Rules, 2016” should be followed for disposal of domestic hazardous wastes (vaccines, vials, medicines, syringes, etc.).

### **5.2.2 Wastewater Management**

- i. Water should be judiciously used to contain wastewater quantity to 100 litres/day/bovine.
- ii. Floor should be paved and wastewater should be collected and utilized for agriculture purpose. Floor should not be slippery in order to ensure safety of animals.
- iii. Wastewater should be adequately treated so as to meet standards as prescribed by SPCBs/PCCs.

### **5.2.3 Air Quality Management**

- i. Animal housing should be ventilated allowing sufficient supply of fresh air to remove humidity, dissipate heat and prevent build-up of gases.
- ii. Good housekeeping practices should be followed in order to minimize odour nuisance.
- iii. Floor, feeding, water and air spaces available for each animal should be adequate for standing, resting, loafing, movement, feeding, watering and ventilation. Space requirements should be provided as per Bureau of Indian Standards (BIS) (refer BIS: 11799-2005 given at **Annexure-II**).
- iv. It is suggested to obtain Ration advisory for improving/modifying quality and dosage of feed/forage/supplements from any of agricultural institutes/departments like Krishi Vigyan Kendra, State Dairy Department, Animal Husbandry Department, NDRI, NDDDB, etc. to reduce enteric methane generations from livestock.
- v. Plantation of trees or green belts, wherever feasible, to provide a barrier against spread of foul smell or noise originating from them.

### **5.2.4 Siting Policy**

Siting criteria will be applicable for new establishment. Existing establishments should take appropriate environmental friendly practices as per Guidelines. Dairy farm shall be setup as per siting policy/guidelines of local administration.

These should be located away from residential dwellings/hospitals/schools in order to avoid odour issue as per siting norms of local administration. It should be at least 100 meters away from water spread area of major drinking water sources in order to avoid contamination of water bodies. These should be away from flood plain areas of River and areas having shallow groundwater.

At least 5 meters of inter-se distance between two establishments for ventilation, this space of 5 meters (2.5 meters from each side from each unit) shall be developed for green belt.

## 6. Guidelines for Waste Management in Gaushalas

Following guidelines are framed for management of wastes from Gaushalas located in urban, peri-urban & rural area. These guidelines are applicable to establishment which are discharging their wastes into environment. These establishments shall also follow existing laws, rules, guidelines, directions and standard operating procedures issued by different organizations.

### 6.1 Solid Waste Management

Guidelines to be followed for management of solid wastes are as under:

- i. Dung from floor of shed should be collected at regular interval, so as to keep floor clean. Surrounding areas should also be cleaned regularly to prevent obnoxious smell in area.
- ii. Premises and its surrounding areas should be properly sanitized and disinfected, e.g. by sprinkling crushed lime.
- iii. Dung & fodder residue etc. should not be washed into drains in order to avoid clogging of drains. Local bodies/corporations/SPCBs should ensure that untreated wastes are not discharged outside premises.
- iv. Solid wastes should be stored properly for its utilization in dung wood manufacturing or biogas generation or vermicomposting. In case of small & medium scale Gaushalas, a combination any of methods may be adopted for utilization of dung wherein large scale Gaushalas may setup biogas generation facility at its own or in partnership with entrepreneurs.
- v. Domestic hazardous wastes (vaccines, vials, medicines, syringes, etc.) should be disposed as per provisions of "Solid Waste Management Rules, 2016". If they have their own medical facilities then the wastes should be disposed as per provisions of "Bio-medical Waste Management Rules, 2016".

### 6.2 Wastewater Management

Guidelines for management of wastewater are as follow:

- i. Water should be judiciously used for bathing of bovines and other services to contain wastewater quantity to 50 litres/day/bovine. (As water utilized by Gaushala is less in comparison to Dairy Farm due to occasional bathing & mechanized floor cleaning).
- ii. Adequate infrastructure should be set-up to ensure proper handling, treatment and disposal of wastewater. Local bodies/corporations/SPCBs should facilitate Gaushala owners/entrepreneurs/NGOs in setting up of treatment facilities.
- iii. Wastewater should be adequately treated so as to meet standards as prescribed by SPCBs/PCCs or utilized for various medicinal purpose.
- iv. Flooring of shed should be properly paved (impervious) with a wastewater collection system. However, floor should not be slippery in order to ensure safety of animals.

### 6.3 Air Quality Management

Guidelines for management of air quality/emissions are as follow:

- i. Animal housing should be ventilated allowing sufficient supply of fresh air to remove humidity, dissipate heat and prevent build-up of gases.
- ii. Good housekeeping practices like maintaining proper sanitary conditions, protecting dung from unwanted pests/insects should be followed in order to minimize odour nuisance.
- iii. Floor, feeding, water and air spaces available for each animal should be adequate for standing, resting, loafing, movement, feeding, watering and ventilation. Space requirements should be provided as per Bureau of Indian Standards (BIS) (refer BIS: 11942-1986 given at **Annexure-III**).
- iv. It is suggested to obtain Ration advisory for improving/modifying quality and dosage of feed/forage/supplements from any of agricultural institutes/departments like Krishi Vigyan Kendra, State Dairy Department, Animal Husbandry Department, NDRI, NDDDB, etc. to reduce enteric methane generations from livestock.
- v. Plantation of trees or green belts, wherever feasible, to provide a barrier against spread of foul smell or noise originating from them.

### 6.4 Siting Policy

Siting criteria will be applicable for new establishment. Existing establishments should take appropriate environmental friendly practices as per Guidelines. Gaushala shall be setup as per siting policy/guidelines of local administration.

These should be located atleast 100 meters away from residential dwellings/schools/hospitals in order to avoid odour issue and away from the water spread area of major drinking water sources. These should be away from flood plain areas of River and areas having shallow groundwater. Atleast 5 meters of inter-se distance between two establishments for ventilation, this space of 5 meters (atleast 2.5 meters from each side from each unit) shall be developed for green belt.

## 7. Regulatory/ Monitoring Mechanism for Dairy Farms & Gaushalas

- i. Local authorities/corporations should carry out inventory of Dairy farms and Gaushalas located in their jurisdiction in inventory performa given at **Annexure-IV** and same should be updated & shared with concerned SPCB/PCC on annual basis (calendar year wise).
- ii. Local bodies/municipal corporations shall publish a public notice in newspapers and on their website for registration of Dairy farms and Gaushalas as per municipal laws. Registration may be done preferably through online mode and same may be displayed at their websites.
- iii. SPCBs/PCCs shall publish a public notice for Dairy farms & Gaushalas to obtain consent to establish and consent to operate under Water Act, 1974 as well as Air Act, 1981 as per the categorization of industries in Orange and Green Category, respectively.
- iv. SPCBs/PCCs/local bodies/municipal corporations shall upload Environmental Guidelines on their website and also circulate to all Dairy farms and Gaushalas.

- v. Concerned SPCBs/PCCs/local bodies/corporations should monitor dairy farms and gaushalas on regular basis to ensure proper disposal of bovine dung and wastewater to check compliance of environmental norms. SPCBs/PCCs will consider carrying capacity of surroundings while allowing a new establishment and laying down environmental norms.
- vi. SPCBs/PCCs shall carry out environmental audit of atleast 2 Dairy farms and 2 Gaushalas, randomly selected from each district of State/UT and submit compliance and action taken report to CPCB on half yearly basis.
- vii. SPCBs/PCCs shall submit status of compliance of guidelines by Dairy farms and Gaushalas located in their jurisdiction in form of report once in six months to CPCB for Audit purpose.
- viii. CPCB shall carry out environmental auditing of 4 Dairy farms and 4 Gaushalas in each State/UT, randomly selected based on information received from SPCBs/PCCs on annual basis.
- ix. In case of any violation of environmental norms under Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Environmental (Protect) Act, 1986 by Dairy farms and Gaushalas, concerned SPCBs/PCCs should impose environmental compensation as per CPCB methodology for "Environmental Compensation to be levied on Industrial Units", for damaging the environment and in order to stop polluting activity and initiate prosecution for repeatedly polluting units.
- x. SPCBs/PCCs should provide training and consultation to Gram Panchayat for implementation of guidelines in their jurisdiction. Gram Panchayat should ensure implementation of guidelines by Dairy farms and Gaushalas falling under their jurisdiction for handling and management of wastes.
- xi. Hands on practical trainings on environment/waste management & treatment technologies, scientific feeding for enteric methane reduction, waste to wealth management programme, etc. should be provided to Dairy & Gaushala workers/entrepreneurs by local bodies/SPCBs/PCCs on regular interval.

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