

Item No. 04

(Court No. 1)

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Original Application No. 320/2021

Gauri Maulekhi

Applicant

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 10.12.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Applicant: Mr. Raj Panjwani, Senior Advocate with Ms. Priyanka Bangari, Advocate

ORDER

1. Grievance in this application is against inadequacy of regulatory regime by way of Consent mechanism under the Water and the Air Acts to prevent degradation of environment on account of unregulated operation of poultry farms. The matter was earlier governed by Guidelines of the CPCB to all State PCBs/PCCs under the Water and the Air Acts dated 20.12.2015. The applicant approached this Tribunal pointing out the adverse impact of operation of unregulated operation of poultry farms on the environment. This Tribunal, after noting the pollution potential in running of the poultry farms, found the earlier guidelines issued by the CPCB, limiting the regulatory regime only to poultry farms handling more than one lakh birds at a single location, inadequate and need to revisit the same so as to extend such regulatory regime to poultry farms with more

than 5000 birds. Order of this Tribunal dated 16.09.2020 in OA No. 681/2017, *Gauri Maulekhi v. Union of India & Ors.*, is as follows:-

“16. On due consideration of the matter, we find substance in the submissions of the applicant. Sustainable development is part of right to life.¹ The State Authorities are under obligation to protect environment as per sustainable development concept. Responsibilities of the States to the environment are by Public Trust Doctrine². The Water Act, the Air Act, and the Environment (Protection) Act have been enacted in the wake of international conventions and override all other legislations. They create obligation on the regulatory authorities to enforce the environmental measures. There is no discretion to exempt the mandate of Water Act for activities having potential to cause water pollution³. It has not been disputed that the operation of poultry farms has potential to damage to the environment which needs to be regulated. Leaving out poultry farms below one lakh birds unregulated by the State PCB and merely requiring registration with the local bodies or treating them at par with the agricultural farms will be against the mandate of sustainable development, which principle is to be enforced by this Tribunal. Likewise, in view of pollution potential in operation of poultry farms except small ones, say upto 5000 birds cannot fall in the ‘Green’ category as has been done by the CPCB.

17. Accordingly, we allow this application and direct the CPCB to revisit the guidelines for categorizing the poultry farms as green category and exempting their regulation under the Air Act, Water Act and the EP Act. The CPCB may issue fresh appropriate orders within three months and in if no further order is issued, all the State PCBs/PCCs will require enforcement of consent mechanism under the above Acts after 01.01.2021 for all poultry farms above 5000 birds in the same manner as is being done for farms having more than one lac birds.”

2. In pursuance of above, CPCB undertook study of the environment issues in th context of processes involved in the operation of the poultry farms and need to regulate the same. Accordingly, revised guidelines were issued in March, 2021 vide letter dated 2.4.2021, inter alia, as follows:

“6.0 Environmental Issues in Poultry Farms

¹ (1996) 5 SCC 647 *Vellore Citizens’ Welfare Forum v. UOI*

² 1997 (1) SCC 388 *M.C. Mehta v. Kamal Nath*

³ (1999) 2 SCC 718 & (2001) 2 SCC 62 *A.P. Pollution Control Board v. Prof. M.V. Nayudu (Retd.) & Ors.*

The environmental issues associated with poultry farms are as follows:

- i. Solid waste (litter, dead birds & hatchery waste)
- ii. Air Emissions : Odour due to Gaseous emission (NH₃& H₂S)& dust generation
- iii. Breeding of flies, rodents, etc.

6.1 Solid Waste

In poultry farms, the major source of solid generation are as under:

- i. Poultry droppings/Manure/Litter
- ii. Dead Birds &
- iii. Hatchery Waste

6.1.1 Poultry Droppings/Litter/manure

Two types of waste are produced by poultry farms depending on the rearing system adopted.

- Poultry litter – Waste from deep litter systems includes, different kinds of litter materials like rice husk, saw dust, groundnut hulls, wood shavings and dried leaves along with birds droppings.
- Poultry droppings – Excreta collected under the cages, spilled feed and feathers.

Estimation of litter generation in poultry

Details	Approx feed/day in gm	Approx water/day in ml	Litter generation/day/bird	Litter generation/5k birds/day	Litter generation /25 k birds/day	Litter generation /1.0 lacs birds
One bird (Layer house)	120-150	360-450	On avg. Basis 40 gm litter generated	200 Kg on wet basis	01 T on wet basis	04 T on wet basis 3.2 T on One bird dry basis
One bird (Broiler house)	150-180	450-550				

Calculated on 20% moisture in litter.

In the layer farms the average poultry litter generated per bird/day estimated is 30 to 40 grams (Calculated on 20% moisture in litter). On average basis litter contains 20% to 40% of moisture. Poultry farms having 5000, 25,000 and 1,00,000 lacs birds generates approx. 0.2 T, 1 T and 4 T litter/day respectively on wet basis.

In case of Layer and Breeding farms, excreta is collected just below the bird cages directly on ground, made of stone slabs or concrete or impermeable compacted clay. Litter is collected and kept dry by maintaining good ventilation and free air flow to undergo aerobic

composting. Once in four to six months, the manure is removed & sold.

In Broiler farm excreta is collected in bed made up of agro residue (rice husk, saw dust, groundnut hulls, wood shavings, and dried leaves) itself. Once in a day or two days the bed is scratched for mixing of litter. Once the chicken is sold for meat, the bed (rice husk, saw dust, groundnut hulls, wood shavings, and dried leaves) is removed once the cycle of 42 to 45 days gets over along with the excreta and sold as manure. The shed is washed and lime is applied as disinfectant and allows the area for quarantine period.

6.1.2 Dead Birds:

Death of the birds in poultry farms is a common phenomenon and their disposal is an issue. Open burning of dead bird is one of the common methods of disposing, especially among small-scale poultry operator. In this disposal method, dead birds are either fully burned at relatively high temperatures using different fuels causing atmospheric pollution and odour nuisance or buried in the burial pit in the premises.

6.1.3 Hatchery Waste:

Hatchery is important part of poultry industry and also produces large quantity of solid waste which comprises egg shells, unhatched eggs, dead embryos and chickens and a viscous liquid from eggs. Hatchery waste is disposed through open burning or through rendering plant to convert hatchery waste to poultry or pet feed.

6.2 Odour due to Gaseous emission

The main issues in the Poultry are gaseous emission viz Ammonia (NH₃), Hydrogen Sulphide (H₂S) & VOCs which is emanated from the excreta generated from the birds. The odour is produced due to anaerobic conditions in the litter occurs due to its storage at one place for longer period.

The general practice is to maintain good ventilation and free air flow to control odour & gaseous emissions i.e. Ammonia, Hydrogen Sulphide, VOCs to avoid the nuisances. Further, open burning of dead birds is one of the common methods, especially among small-scale poultry operator causing air emissions.

From the field study it is observed that litter is removed from the floor in layer farms once in six months in the Southern states whereas litter is removed twice in six months in Northern states due to climatic conditions.

6.3 Feed Mill Dust

Poultry farms may also install feed mills for preparation of feed for birds. It involves mixing and grinding of various ingredients of feed. The process results in dust emissions. The feed mill operations are typically located inside the mill buildings. Dust extraction systems

are generally used to collect the dust and to improve the shop floor environment.

6.4 Water runoff & Waste water generation

Water in poultry farms is used for drinking of birds, in coolers/curtain cooling/roof sprinkling during the summer and for cleaning sheds and equipment in between batch replacement.

As such there is no process waste water generation from the poultry farming. However, wastewater is generated only during the cleaning operations in between batch replacements once in a year in case of layer farms, which is collected in holding tank and is utilized in the gardening.

Whereas in broiler farm the cycle is of 42 to 45 days and after completion of every cycle, the floor is washed with water and disinfection of the shed is carried out. Here also the wastewater generated from floor washing is utilized on land within the poultry premises. In breeder farm, one cycle is about 55 weeks sheds are cleaned and washed with water only after completion of the cycle. In hatchery operation, regular mopping and washing floor is carried out.

6.5 Other issues:

Breeding of flies, rodents, etc and use of antibiotics in feed are the other issues in poultry farms. Antibiotics used in feed grade are known as **Non therapeutic antibiotics**, which is a cause of concern, as it is used in both the layer and broiler farm. Other use of antibiotics in poultry farms are for disease control, which are known as **therapeutic antibiotics**.

7.0 Environmental Guidelines for Poultry Farms:

CPCB has framed the guidelines for Poultry Farms in the year 2015. Following are the revised Guidelines in compliance to Hon'ble NGT order applicable for poultry farms having capacity above 5 000 birds .

7.1 Management of solid wastes (Solid Wastes contains Manure/litter, Hatchery Debris and Dead Birds)

7.1.1 Poultry droppings (Layer/Breeder farms)

- Droppings should be kept as dry as possible to avoid its anaerobic decomposition resulting in odour. Proper ventilation and free air flow should be maintained to keep the manure in dry condition.
- Dropping should be removed at regular interval (quarterly) from the floor & stored in scientifically developed storage facilities for further processing and utilization.

- *The poultry droppings/litter may be further converted into compost by adopting proper techniques by engaging expert institutes for its further use in the agricultural fields.*
- *A conveyor belt removal system may be used to avoid the accumulation of droppings from caged layers.*

7.1.2 Poultry litter (Broiler Farms)

- *In broiler farms, birds are grown on floor laid with bedding material like rice husk, saw dust, etc, the excreta is discharged by the birds on the bedding material itself. The bed should be frequently scratched for mixing of litter.*
- *The bedding material along with excreta should be kept dry as possible.*
- *The litter along with the bedding material should be removed at regular interval & stored in scientifically developed storage facilities for further processing and utilization.*
- *Litter may be further converted into compost by adopting proper techniques by engaging expert institutes for its further use in the agricultural fields.*

7.1.3 Litter/Manure handling and storage

- *The litter removed from the Broiler/Layer/Breeder farms should be stored at a place in a covered shed having impervious flooring. The stored litter should be kept dry as far as possible. The litter may be further converted into compost by adopting proper techniques by engaging expert institutes for its further use in the agricultural fields.*

7.1.4 Hatchery Waste

- *The waste from hatchery which includes egg shells, unhatched eggs and liquid generated from hatchery may be collected scientifically and converted to poultry feeds in a rendering plant.*
- *The hatchery waste may be mixed with soyabean and extruded to pet food*

7.1.5 Dead Birds Disposal

The dead birds arising from day to day farm activity should be separated from other live birds promptly and should be stored in closed containers and disposed off within 24 hours by following any of the disposal methods.

A) Burial Method:

- *The dead bird burial pit should be of 3 to 4 m in depth and 0.8 to 1.2 m diameter and located above minimum of 3 m from the ground water table.*
- *The dead bird burial pit should be provided with a vermin/fly proof cover madeup of wooden / metal / concrete having a central operable lid of proper size for day to day dropping of carcasses.*
- *When the pit is full, lime as disinfectant should be used and a compacted soil cover of 0.5 m should be provided with the top of the covered soil well above the ground level.*
- *The distance between any two burial pits should not be less than 1 m.*

B) Incineration

- *The incinerator should be located in down wind direction to the poultry houses and populated areas.*
- *The incinerator capacity should be of sufficient size such that no un-burnt carcasses are left in a day's operation.*
- *The guide lines and standards prescribed under Bio-Medical Waste (Management and Handling) Rules, 1998 should be followed for erection and operation of the incinerator*

7.2 Air Emission (Includes gaseous emission, Odour and Dust)

7.2.1 Minimization of odour/gaseous pollution problem

Proper ventilation and free flow of air should be ensured over manure collection points to keep it dry • Provision of a well-designed ventilation system and extractors should be made to attenuate odour nuisances. • Removal of dead birds should be prompt. • Regular disinfection of farm should be carried out . • The farm premises should be kept clean and tidy at all times with good housekeeping. • Plantation around poultry farms should be done to reduce the odour nuisances. • The manure should be protected from runoff water so as to reduce the possibility of odour nuisance. • Litter should be regularly removed and stored in the well-designed storage pit

7.2.2 Feed Mills

Feed mill and godown should be located on a well elevated ground preferably near the entrance to the farm and isolated from other poultry sheds. • Dust collector system should be installed in the feed mill. • Workers in the feed mill should be

provided with dust masks. • Provision for vehicle tyre dip should be made available at the entrance control gate. • Adequate fire and other accident safety provisions should be provided. • Interaction of feeds with wild birds, rodents, pests, flies etc, should be avoided as a measure of food safety and prevention of spread of diseases. • Spillages should be avoided to discourage habitation for pests and rodents. • Sanitation and cleanliness should be maintained as a routine to ensure quality and safety of feed grains • Antibiotics should not be mixed with feed or administered for non-therapeutic purposes without prescription for diseased birds

7.3 Waste water Management

The waste water generated from the cleaning operations (after each batch removal) should be collected in appropriate holding tank and put to use in the green belt. • Water use and spills from drinking devices should be reduced by preventing overflow or leakages and using calibrated, well-maintained self-watering devices; • The holding tanks should be provided to collect the wastewater generated from the floor cleaning from the layer / broiler farms and hatchery wastes

7.4 Others (Control of Flies, Rodents and Use of Antibiotics in feed)

Control of Flies: Proper treatment and disposal of manure, ventilation of sheds, control of temperature, good sanitation, swift repairs of leaks, avoidance of feed spills, prompt removal of broken eggs and dead birds should be ensured for control of flies in the poultry farms. The farm should have provisions of wire nettings, traps, fly-repellents, insecticides etc. • Control of Rodents: Methods for the control of rodents may include: i) Exclusion ii) Trapping Glue boards iv) Slow killing toxic baits v) Rapid killing toxic baits and Tracking powder. • Regulation for use of antibiotics comes under the purview of Department of animal husbandry and Ministry of Health and the Drug Controller General of India and need to be regulated as per the advisory/directions issued by Department of Animal Husbandry, Dairying and Fisheries and Ministry of Health and the Drug Controller General of India. Bureau of Indian Standards 1374: 2007, on poultry feed also specifies that the use of antibiotic growth promoters are not recommended in poultry feed, hence use of antibiotics should not be mixed with feed or administered for nontherapeutic purposes without prescription for diseased birds

7.5 Good House Keeping Practices in Poultry Farms

The following good management Practices should be practiced in Poultry Farms:

• Proper treatment and disposal of manure, ventilation of sheds, control of temperature, good sanitation, swift repairs of leaks, avoidance of feed spills, prompt removal of broken eggs and

dead birds should be provided for control of odour & flies. The farm should have provisions provision of wire nettings, traps, flyrepellents, insecticides etc. • Poultry farms should be well designed and constructed with proper fencing with barbed wires/link mesh/concrete walls upto 1.5 m height and above. • Green belt all around the farms should be provided with minimum of two rows spaced apart not more than 3 m. • It should be regularly cleaned and disinfected to maintain sanitary conditions, 69 14 • The nutritious meal should be provided to the birds for the their healthy growth. • Spillages of water and feed should be avoided. • Integrated pest control and management should be implement to control pests and limit pesticide use on farm. • Dead birds should be removed and disposed in a scientific way.

8.0 Siting Criteria

The siting criteria shall be applicable for the new establishments. The old establishments shall follow the environmental guidelines.

The poultry farm should not be located within

- 500 m from residential zone in order to avoid nuisance caused due to odour & flies
- 200 m from major water course like River, Lakes and canals and 100 m from any drinking water source like wells, summer storage tanks, in order to avoid contamination due to leakages/spillages, if any.
- 100 m from nearby poultry, dairy or another livestock enterprises or industry to prevent diseases to birds from the nearby livestock.
- 200 m from national Highway (NH) and 100 m from State Highway (SH) in order to avoid nuisance caused due to odour & flies
- The Poultry sheds should not be located within 10 m from farm boundary for cross ventilation and odour dispersion
- The Poultry sheds should be positioned on East to West direction to prevent direct sun shine falling on the birds inside the house

9.0 Administrative mechanism

- The hatcheries of any size which are performing this exclusive operation, feed mills of any capacity and the commercial poultry farms which are handling more than 5,000 birds at a given time on any single location need to obtain consent to operate under the provisions of environmental law.
- The poultry farms which are handling more than 5000 birds at a given time in single location need to approach State Pollution Control Board to obtain necessary Consent for Operation under Air Act, 1981.
- The regulatory mechanism shall be applicable in phase manner as per the details given below:

- i) *Poultry Farms above 50,000: guidelines shall be applicable from the date of issue of guidelines.*
- ii) *Poultry farms above 25,000 to 50000: guidelines shall be applicable after one year from the date of issue of guidelines.*
- iii) *Poultry farms above 5,000 to 25000: guidelines shall be applicable after two year from the date of issue of guidelines.”*

3. The applicant raised objections and suggested further strengthening of mechanism and reducing timelines. The CPCB thereafter issued revised Guidelines in August, 2021, extending the consent mechanism to poultry farms handling more than 25000 birds and exempting others as follows:

“8.0 Regulatory/ Monitoring Mechanism for Poultry Farms

- ***SPCBs/PCCs shall upload Environmental Guidelines on their website.***
- ***Guidelines shall be applicable to all the category of Poultry Farms.***
- ***Poultry Farms handling birds above 25,000 at single location will have to obtain consent to establish (CTE) and consent for operate (CTO) under the Water Act, 1974 & Air Act 1981 from State Pollution Control Board/Pollution Control Committee.***
- ***The Poultry Farms are categorized under “Green” Category, therefore validity of consent will be 15 yrs.***
- ***Animal Husbandry Department of the State/Districts to assist the poultry farms for implementation of Guidelines.”***

4. Only reason for the above change from Guidelines proposed in August, 2021 is that poultry farms upto 25000 birds are small and in unorganized sector. The said observations in the guidelines are quoted below:

“4.0 Classification of Poultry Farms

Backyard poultry is typically owned by small and marginal farmer and comprises of few birds, largely for self-consumption and very small quantities get commercially sold. The poultry farming practiced by the rural and tribal farmers under free range or backyard or semi-intensive systems is usually referred to as rural poultry farming.

Based on the number of handling of birds, Poultry farms may be classified into three categories.

Small (5,000-25,000 bird)

Medium (above 25,000-1,00,000 birds).

Large (above 1,00,000 birds)

The poultry farms under small category are in un-organized sector run by economically weaker farmers and are of rural background”

5. We have heard Mr. Raj Panjwani, Senior Advocate, who submitted that there is no justification for exempting poultry farms below 25000 birds even after this Tribunal held that all poultry farms above 5000 birds were required to be brought under the consent mechanism and even after proposing such regulation in March 2021 guidelines, based on expert study, as noted earlier. Observation that poultry farms with less than 25000 birds are run by small farmers in unorganized sector is untenable and against the Precautionary Principle of environmental law, as already held by this Tribunal vide order dated 16.09.2020, referred to above, that regulation of all poultry farms beyond 5000 birds is necessary. To this extent, decision of CPCB being against the decision of this Tribunal and against precautionary principle. A person running poultry farm of more than 5000 birds cannot be said to be small farmer nor their pollution potential left unregulated. At best some time can be given for regulation in phased manner as proposed in March, 2021 proposed Guidelines. Accordingly, we direct that while the impugned guidelines be immediately enforced, all poultry farms above 5000 birds will also be covered by the said guidelines latest from 1.1.2023. The siting criteria should apply to all consents/renewals hereafter for the above size of the poultry farms. CPCB

may issue revised guidelines to all the State PCBs/PCCs in terms of the above order within one month.

The application is disposed of.

A copy of this order be forwarded to CPCB by e-mail for compliance.

It is made clear that if CPCB is aggrieved by this order, it will be at liberty to move this Tribunal.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Dr. Nagin Nanda, EM

December 10, 2021
OA No. 320/2021
AVT