BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
.....
ORIGINAL APPLICATION No. 52/2015/EZ

IN THE MATTER OF:

1. **Qamaruddin Gazi,**
   Son of Late Makbul Gazi of Village- Bithari (Paschimpara),
   Post office- Bithari,
   Police Station, Swarupnagar,
   District- 24 Parganas (North), Pin- 743286.

.....Applicant

V e r s u s

1. **Chief Secretary,**
   Government of West Bengal,
   Office at 'Nabanna' HRBC Bhaban, 325,
   Sart Chatterjee Road, Howrah- 711102.

2. **West Bengal Pollution Control Board,**
   service through the Chairman,
   "Paribesh Bhaban", 10A, Block LA, Sector- III, Salt Lake City,
   Kolkata 700098.

3. **The Member Secretary,**
   the West Bengal Pollution Control Board
   "Paribesh Bhaban", 10A, Block LA, Sector- III, Salt Lake City,
   Kolkata 700098.

4. **The Block Development Officer, Swarupnagar Block,**
   Village- Choto Mirjapur, Post Office- Charghat,
   Police Station- Swarupnagar,
   District- North 24 Parganas,
   Pin- 743286.

5. **The Office-in-Charge,**
   Swarupnagar Police Station,
   North 24 Parganas, Pin - 743286.
6. **Abul Hossain Mondal,**
   Son of Late Nachimuddin Mondal of Village & Post- Bithari (Paschimpara),
   Police Station- Swarupnagar,
   District- North 24 Parganas, Pin- 743286.

7. **Atiar Mondal,**
   Son of Abul Hossain Mondal of Village + Post- Bithari (Paschimpara),
   Police Station- Swarupnagar,
   District- North 24 Parganas, Pin- 743286.

8. **Pradhan of Bithari Hakimpra Gram Panchayat,**
   PO- Bithari,
   Police Station- Swarupnagar,
   District- North 24 Parganas, Pin- 743286

.....Respondents

COUNSEL FOR APPLICANT:

Mr. Alokesh Goswami, Advocate

COUNSEL FOR RESPONDENTS:

Mr. Sudip Kumar Dutta, Advocate, Respondent No.1, 4 & 5

Mr. Sibojyoti Chakraborty, Advocate, Respondent No. 2 & 3

JUDGMENT

PRESENT:
Hon'ble Mr. Justice Pratap Kumar Ray, Judicial Member
Hon'ble Prof. (Dr.) P. C. Mishra, Expert Member

Reserved On 18th January, 2016

Pronounced On 16th February, 2016

---

1. Whether the Judgment is allowed to be published on the net? Yes
2. Whether the Judgment is allowed to be published in the NGT Reporter? Yes

JUSTICE PRATAP KUMAR RAY (JUDICIAL MEMBER)

1. In the instant original application a very vital issue within domain of public interest regarding environmental pollution and injury to the human health, particularly to the people living nearby a poultry farm established in a residential area has been raised. Admittedly, the applicant herein has no consent to

establish and consent to operate to run the poultry farm in a residential area. It is an admitted fact that there is no guideline framed by the West Bengal State Pollution Control Board relating to establishment of poultry farm in a particular site though as per management regime it is an industry of green nature. But having regard to the impact on human body, particularly the health hazards and nuisance from the odour as well as pollution of the air and water from the wastes as generated in a poultry farm is concerned, the issue is to be dealt with exhaustively. The detailed averment made in the application has been set out in the subsequent paragraphs wherefrom it would appear that the issue of health hazard due to emission of ammonia gas as generated from the waste materials of the poultry farm including the generation of other gases causing discomfort to the neighbourhood people due to emission of hydrogen sulphide, skatole, indole, amines and mercaptans and other sulphur containing gases is required to be addressed.

2. Regarding health hazard and other issues on the environmental pollution the different research works were made. Before adverting to the factual matrix of case as pleaded in this original application, some of them have been referred to for effective adjudication of said point.

"Poultry Farm Odour:

(a) Odour Perception:

Responses to odours vary and non-poultry farmers legitimately experience symptoms such as headaches, stomach cramps and other disorders due to odours even though family members and staff at the poultry farm do not experience similar symptoms. In general, people have highly variable responses to odours.

(b) Source and composition of odours from poultry Farms:

Waste management systems can generally be classified as aerobic or anaerobic. Aerobic systems exist where there is adequate oxygen available during waste decomposition while anaerobic systems exist where there is inadequate oxygen available. Most poultry farms decompose waste in an aerobic condition, however, wet areas can become anaerobic. The smell of aerobic poultry manure comes largely from ammonia. Most people can detect ammonia in the air in the neighbourhood of 15 to 25 parts per million (PPM). However, when manure decomposes anaerobically, hydrogen sulphide, skatole, indole, amines and mercaptans and other sulphur containing gases are produced. Some of these chemicals are offensive and can be detected at levels over one million times less concentrated than for ammonia. Odours generated in anaerobic conditions tend to generate more complaints and are usually perceived to be more unhealthy than odours from aerobic conditions.

Odours vary with the birds' diet, the method of manure storage, the method of spreading and the age of the manure. Moisture buildup caused by leaking water or poorly insulated houses can lead to wet litter, and more ammonia and other odorous gas release. Ambient temperature, relative humidity, litter pH and method of litter management also affect litter ammonia concentration.

(c) <u>Dust as an odour carrier</u>

High dust levels contribute to odours. Odours, particularly carbonyl compounds and phenols, are carried by airborne particles. Odourants on dust particles are many times greater than found in an equal volume of air with no dust. When litter is double cycled, as is sometimes practiced in the broiler industry during summer, odour containing dust and feather emissions to the environment may be higher. An important step to control odours is to control dust emissions from the barn, (see Management of Dust in Broiler Operations, BCMAFF, Dec 1999).

Old litter tends to release more odour containing dust than new litter, and older flocks produce more ammonia because of their higher total

protein consumption, hence there are higher volumes of nitrogen in the waste compared to that of younger flocks.

The highest levels of ammonia and odour containing dust occur during catching operations. It is not uncommon for ammonia to reach 40 to 50 PPM in the barn during catching, litter removal and cleaning the poultry house. Litter rototilling, which is sometimes done to mix faecel matters, spilled food and spilled water into the litter results in especially high concentrations of airborne dusts and gases.

(d) <u>Impact of High Odour Levels on Poultry</u>

In general, high levels of ammonia or odours from anaerobic conditions can lead to respiratory infections in all poultry, and lower feed intake, lower weight gain and poorer feed efficiency in broilers. Ammonia has negative effects on laying capacity and egg quality in layers. Field monitoring of air quality in turkey barns has shown that increased dust and ammonia are associated with greater processing condemnations from air sacculitis."

3. There is environmental impact relating to running of industry for poultry production. The relevant paragraphs of an article on Environmental Impacts of Poultry Production written by **Shashank Maheswari** are reproduced as below:-

" **Impacts on local and regional environment**

Local disturbances and landscape degradation are typical local negative amenities in the surroundings of poultry farms.

Pollution of soil and water with nutrients, pathogens and heavy metals is generally caused by poor manure-management and occurs where manure is stored. Manure is either recycled on cropland belonging to the animal farm or marketed.

Poultry facilities are a source of odor and attract flies, rodents and other pests that create local nuisances and carry disease. Odor emissions, caused by a large number of contributing compounds including ammonia (NH3), volatile organic compounds (VOCs), and hydrogen sulphide (H2S), from poultry farms adversely affect the life of people living in the vicinity.

Flies are an additional concern for residents living near poultry facilities. Research conducted by the Ohio Department of Health indicated that residences that were located in close proximity to poultry facilities (within half a mile) had 83 times the average number of flies and mosquitoes which can transmit diseases, such as cholera, dysentery, typhoid, malaria, filaria and dengue fever. Their presence is mainly related

to animal-feed management and especially to storage and losses from feeding systems.

Water pollution; pesticides used to control pests (e.g. parasites and disease vectors) and predators have been reported to cause pollution when they enter groundwater and surface water. Improper disposal of poultry carcasses can contribute to water-quality problems especially in areas prone to flooding or where there is a shallow water table.

The most significant environmental issue resulting from slaughterhouse operations is the discharge of wastewater into the environment. Like many other food-processing activities, the necessity for hygiene and quality control in meat processing results in high water usage and consequently high levels of wastewater generation, having high biochemical and chemical oxygen demand (BOD and COD) due to the presence of organic materials such as blood, fat, flesh, and excreta which in turn may lead to reduced levels of activity or even death of aquatic life. Residues of chemicals such as chlorine, used for washing and disinfection, as well as various pathogens including Salmonella and Campylobacter may also present in the water. In addition, process wastewater may contain high levels of nitrogen and phosphorus which may cause eutrophication of the affected water bodies.

Impacts on the global environment

Environmental impacts of poultry production are not always confined to specific areas; they also include impacts of a global dimension. Two issues are of relevance: the production of concentrate feed and greenhouse gas production related to energy use in animal production processes and in the transport of processed products.

The extraordinary performance of the poultry sector over the past three decades has partially been achieved through soaring use of concentrate feed, particularly cereals and soybean meal estimated that in 2004 the poultry sector utilized a total of 294 million tons of feed.

Intensification of feed production resulted in expansion of cropland at the expense of forested land (deforestation), pollution in water resources through pollution caused by the intensive use of mineral fertilizer, pesticides and herbicides to maintain high crop yields and it also contributes to air pollution from nitrogen fertilizer through the volatilization of ammonia.

Greenhouse gases emission got increased up. i.e.- Carbon dioxide, produced by the burning of fossil fuels during animal production, slaughter, transportation of processed and refrigerated products and importantly from deforestation. Nitrous oxide, produced from nitrogen fertilizer. FAO–IFA (2001) reported a 1 percent N2O-N (nitrogen in nitrous oxide).

Control

The magnitude of environmental impacts is highly dependent on production practices and especially on manure management practices. A number of techniques and different management practices are available to control the environmental effects mentioned above.

Odour and flies can be controlled by minimizing the surface of manure in contact with air – frequent collection of litter (once a week in dry seasons and twice a week in rainy seasons), closed storage (bags or closed sheds).

Water and food borne disease propagation can be prevented by: storing manure in closed buildings or bags – a storage system allows producers to hold manure until a convenient and optimum time for use storing poultry manure in closed buildings reduces the emissions of gaseous compounds to the air and the risk of environmental contamination as compared to the risk associated with leaving manure exposed.

Dead-bird management and disposal, which must comply with legally accepted practices including rendering, composing, incineration and burial; a contingency plan should be in place for disposal of large numbers of dead birds in the event of disease outbreaks; in addition, consideration should be given to impacts on the physical environment – e.g. burial pits should be at least 3 meters above the maximum groundwater table….."

(e) <u>The statutory provision with reference to the poultry farm industry and pollutant materials</u>

Under Section 2(a) of the **Air (Prevention and Control of Pollution) Act, 1974** the air pollutants are defined as follows:-

"Sec. 2

(a) "air pollution" means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment;

(b) "air pollution" means the presence in the atmosphere of any air pollutant; "

4. On bare reading of the said provision it appears that if a solid, liquid and gas causes injury to the human being it comes under the purview of definition of air pollutant. Having regard to the environmental impact of poultry production and the emission of different gases from the waste material of the poultry farm it is clear that the emission of the ammonia gas as generated from the management of the poultry manure under aerobic condition may cause discomfort of living of persons at nearby area due to presence of ammonia gas in the area from the aforesaid litter. It is further

revealed that when the manure decomposes anaerobically, hydrogen sulphide, skatole, indole, amines etc. are produced. Some of these chemicals are very offensive and odours generated in anaerobic conditions cause the environment more unhealthy than the odours generated from the management of the wastes following the aerobic condition. The presence of ammonia and other sulphur containing gases in the area tend to cause injury to the human being in their comfort living. The poultry facilities are the source of odours and attract flies, rodents and other pests that create local nuisances and carry disease. The odour emission caused by a large number of contributing compounds including ammonia, volatile organic compounds(VOCs), and hydrogen sulphide from poultry farms adversely affect the life of people living in the vicinity. Having regard to those emissions the **Air (Prevention and Control of Pollution) Act, 1981** is clearly applicable for regulatory measure regarding management and regulation of site of poultry farms.

5. **The Water (Prevention and Control of Pollution) Act, 1974** has defined the word 'pollution' under Section 2, clause (e) of the said Act which reads as such:-

"Section 2. Definitions.- In this Act, unless the context otherwise requires.

** *** **

(e) "**pollutio**n" means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms; "

Said statute stipulates that contamination of the water or alteration of the physical, chemical and biological properties of the water for discharging any liquid, solid and gases substance into the water may likely to create nuisance and such water becomes harmful or injurious to public health and safety. Thus it comes under the scanner of the said statutory provision for appropriate remedy.

6. The poultry farms use pesticides to control pest (parasites and disease vectors) and predators which cause pollution when they enter ground water and surface water. Improper disposal of poultry carcasses can contribute to water quality problems especially in areas prone to flooding or where there is a shallow water table.

"(f)Slaughter House and its impact to environment:-

If in a poultry farm there is a slaughter house to sell meat it further causes water pollution due to discharge of waste water into the environment and it may also cause injury to human health. The waste water as generated having high biochemical and chemical oxygen demand (BOD and COD) due to the presence of organic materials such as blood, fat, flesh, and excreta which may lead to reduce levels of activity or even death of aquatic life. The residues of chemicals such as chlorine, used for washing and disinfection as well as various pathogens including salmonella and campylobacter may also present in the water. Waste water may contain high levels of nitrogen and phosphorus which may cause eutrophication of the affected water bodies. Having regard to the aforesaid discussion it is clear that the existence of poultry farm in a residential area also creates nuisance.

(g)Health Hazard due to presence of Poultry farm in Residential Area

Flies are additional concern for residents living near poultry farms as quoted above under the Environmental Impacts column. It appears that a research work was conducted by the Ohio department of Health indicated that residences that were located in close proximity to poultry facilities (within half a mile) had 83 times the average number of flies and mosquitoes which can transmit diseases, such as cholera, dysentery, typhoid, malaria, filarial and dengue fever. Their presence is mainly related to animal-feed management and especially to storage and losses from feeding system.

Constitutional provisions relating to environment

(a) Article 21 of the Constitution of India which is under "chapter II fundamental right of the citizen" provides protection of life and personal liberty by using the language that no person shall be deprived of his life or personal liberty except according to procedure established by law. The word "life" of Article 21 was decoded by several judgments of the Apex Court extending the horizon of meaning of word 'life' by which different rights were derived/emanated and elevated to the status of fundamental right. By several judgments of the Apex Court it is held that the pollution free environment is the basic fundamental right emanated from Article 21 of the Constitution of India. It has been further held by the Apex Court that the environment which causes discomfort in the living of the human being is also an element of breach of the fundamental right of the citizen under Article 21 of the Constitution of India. The different judgments decoding the meaning

of word 'life' applying environmental jurisprudence passed by the Apex Court being the law of the land on application of Article 141 of Constitution of India are highlighted herein below:-

1. In the case of **Union Carbide Corporation and Ors. Vs. Union of India and Ors,** 1991(4) SCC 584 the Apex Court held that every citizen has a right to enjoy healthy environment as a fundamental right.

2. In the case of **Chhetriya Pardushan Mukti Sangharsh Samiti Vs. State of U.P. and Ors.,** 1990 (4) SCC 449 the Apex Court held that right to have the enjoyment of quality of life and living is within the constitutional ambit under Article 21 of the Constitution of India and is a basic fundamental right.

3. In the case of **Subhash Kumar Vs. State of Bihar and Ors.,** 1991 (1)SCC 598 the Apex Court extended the meaning of the word life of Article 21 further by holding that right of enjoyment of pollution free water and air for full enjoyment of life is within the extended meaning of Article 21 of the Constitution of India.

4. In the case of **Milkmen Colony Vikas Samiti Vs. State of Rajasthan and Ors.,** 2007(2) SCC 413 the Apex Court declared that right to life referred to in the provision of Article 21 of the Constitution of India includes the right to have hygienic, clean and safe environment free from stray cattle and animals in urban areas.

5. In the case of **Nagar Nigam, Meerut Vs. Al Faheem Meat Exports(P) Ltd.and Ors.,** 2006 (13) SCC 382 the Apex Court held that public hygiene is also within the right to life under Article 21 of the Constitution.

6. Clean and decent environment is fundamental right in terms of Article 21 of the Constitution of India as declared by the Apex Court in the case of **Virender Gaur and Ors. Vs. State of Haryana and Ors.,** 1995(2) SCC 577 and in the case of **N.D. Jayal and Anr. Vs. Union of India and Ors.,** 2004 (9) SCC 362. In the case of N.D. Jayal (supra) the Apex Court held that enjoyment of life and attainment including their right to live with human dignity encompasses within its ambit the protection and preservation of environment as ecological balance free from pollution of air and water – clean and healthy environment is fundamental right.

7. Under Article 48A of the Constitution of India it is the responsibility of the State and its agencies to provide protection and improvement of environment and safeguarding the forest and wild life. In view of the constitutional provision and its mandate, the State of W.B. and also the State PCB, who is an authority under Article 12 of the Constitution of India is liable to frame necessary guidelines relating as siting and the management mechanism of the poultry farm so that no poultry farm is established in West Bengal in a residential area causing environmental hazard as discussed above to the people living nearby area.

(h)<u>Siting Guideline of other States:-</u>

The Haryana Government Environmental Department on the basis of the direction from the Punjab and Haryana High Court passed in the case of CWP No. 16436 of 2011 under cause title **Vijay Bansal Advocate Vs. State of Haryana** and on considering the obligation under Article 48A of the Constitution of India has issued direction relating to the management,

establishment and other procedural issues for establishment of poultry farm etc. In exercise of the powers delegated under section 5 of the **Environment (Protection) Act, 1986** read with Rule 4 of the **Environment (Protection) Rules, 1986.** The directions as issued by the Haryana Government, Environmental Department reads as such:-

"HARYANA GOVERNMENT

ENVIRONMENT DEPARTMENT

O R D E R

Whereas in the matter of CWP No. 16436 of 2011 titled Vijay Bansal Advocate v/s State of Haryana, the Hon'ble Punjab & Haryana High court has passed orders dated 05.09.2011 and directed to address the problem of pollution from Poultry Farms

And whereas article 48-A of the Constitution of India inter alia envisages that State shall endeavour to protect the environment;

And whereas, unscientific upkeep practices by poultry farms cause pollution problem and have detrimental effect on the environment;

And whereas the good poultry management practices should precisely aim at minimization of waste from alt farm operations by selecting appropriate technologies and by implementing them with increased awareness and willingness. The potential pollutants that are generated by intensive poultry farming primarily include solid, liquid and air emissions Solid Wastes include litter, dead birds, spoiled / spilled feed and hatchery wastes, The liquid wastes comprise mainly unutilized water, wash water and rain water, which comes in contact with poultry operations. Air emissions include gases, dust and noise. An environmental management aims at limiting these emissions release by adopting a suitable comprehensive strategy.

And whereas the Central Pollution Control Board has framed guidelines for poultry farms and the State Govt. on recommendation by Haryana State Pollution Control Board has decided to issue direction under section 5 of the Environment (Protection) Act, 1986 based on these guidelines"

And whereas clause (a) of sub rule (3) of Rule 4 of the Environment (Protection) Rules, 1g86, provides that a person, officer or authority to whom any direction is sought to be issued shall be served with a copy of the proposed direction and shall be given an opportunity of not less than fifteen days from the date of service of a notice to file with the objections, if any, to the issue of the proposed directions.

And whereas objections were invited from all stakeholders and public at large in respect of proposed directions to address the problem of pollution from poultry farms hatcheries. Two objections were received in response to the notice issued in this regard which were duly considered by the Govt.

Now, therefore, in exercise of the powers delegated under section 5 of the Environment (Protection) Act, 1980 (29 of 1986), read with rule 4 of the Environment (Protection) Rules, 1986, the State Govt. hereby issues following directions to address the problem of pollution from poultry farms I hatcheries:-

Directions:

I All Poultry Farms shall be set up as per following Siting Criteria:-

1. The poultry farm shall not be located within;

- . 500 meters from residential zone
- . 200 meters from major water course
- . 1000 meters from any major drinking water reservoir on catchment side
- . '100 meters from any drinking water source like wells, summer storage tanks,
- tanks
- . 500 meters from nearby poultry, dairy or another livestock enterprisers or

  Industry

2. The poultry sheds shall not be located within;

- . 20 meters from farm boundary
- . 200 meters from public roads
- . 20 meters from other sheds on the same farm
- . 100 meters from any other dwelling on the same property.

3. The poultry sheds shall be positioned;

- " on East to West direction
- . at least 2 meters above the water table
- r at least 0.5 meters above ground level

4. The poultry farm shall raise green belt all around the farm with minimum of two rows spaced apart of not more than 3 meters,.

5 The poultry farm shall be fenced with barbed wire / linked mesh upto a height of 1. 5 meters with appropriately secured entrance and outlet.

6 No open burning or indiscriminate dumping of any dead birds feathers / offal's, unused material like litter / empty gunnies / containers etc. shall be adopted within or outside the farm premises.

7. Proper drainage / outlet for collection and discharge shall be provided for storm runoff / discharges from the farm.

8 No obstruction shall be created for any water course within the farm or outside the farm boundary.

ll All Poultry Farm shall adopt following method for Manure Storage and Management:-

1 The litter / manure storage dumps shall be minimum 2 meters above the water table and of sufficient size based on the type and number of birds handled. it's base should be constructed with stone slabs or concrete or impermeable compacted clay.

2 The litter/ manure storage dumps shall have a 25 meters buffer strip all around to keep out of wet areas/ drainage discharges.

3 The dry manure dump shall be covered with permanent roof or with plastic / similar material to prevent air emissions and the precipitation falling on it.

lll To minimization of odour / gaseous pollution problem, the poultry farms shall ensure for/to;

1. Proper ventilation and free flow of air over manure collection points to keep it dry.

2. Protect manure from unwanted pests, pesticides.

3. Protect manure from run off water and cover it to avoid dust and odours in storage pits

4. Design construct, operate and maintain waste storage facilities to contain all manure, litter and washings"

5 Collect carcasses promptly on regular basis and dispose them appropriately without damaging the environment,

lV All Poultry Farm shall dispose dead birds by adopting one or more of the following methods:-

(a) Dead Birds Disposal – Burial

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

2. The dead birds burial pit shall be of 3 to 4 meters in depth and 0.8 lo 1.2 meters diameter and located above minimum of 3 meters from the ground water table.

3. The dead birds burial pit shall be provided with a vermin / fly proof cover made up of wooden I metal / concrete having a central operable lid of proper size for day to day dropping of carcasses.

4 When the pit is full, a compacted soil cover of 0.5 meters shall be provided with the top of the covered soil well above the ground level"

8. The distance between any two burial pits shall not be less than 1 meters.

(b) Dead Birds Disposal – Composting

Composting is a natural process of decaying dead birds under controlled conditions. The bacteria and fungi reduce the organic waste into a useful end product by this system Daily mortality rs collected and the carcasses are subsequently layered into the primary bin with used up litter, straw/husk and sprayed with water at a ratio of 1'.2.1.1:0.25 by weight respectively. To start with a layer of one feet of litter is spread in concrete floor then a layer of straw or paddy husk are added to aid in aeration and to supply adequate source of carbon. On this, a single layer of carcasses are placed and water is sprayed to maintain the required moisture. Finally, the layer of carcasses is covered with old manure. Subsequently layering of carcasses is repeated in a similar fashion. Once the pit is full, it is covered finally with a layer of used up litter and left it for composting. The temperature of compost increases rapidly to 60 to 70oC as bacterial action progresses. This phase is followed by a decrease in temperature after 14 to 21 days later. After composting, it can be safely stored until needed for land application.

All Poultry Farms shall setup composting facility as under:-

1. The composting facility shall not be located within 300 meters from the nearest
dwelling and 100 meters from any well or water course.
2. The capacity of the composting facility shall be sufficient to handle the average
mortalities on the farm.
3. The roof of the composting facility shall be permanent with bottom concreted'
4. The composting facility shall be secured with link mesh all around raised to a height of 1.5 meters above the ground level to avoid the predation by stray dogs etc.

(c) Dead Birds Disposal – incineration

1. The incinerator shall be located in down wind direction to the poultry houses and populated areas.

2 The incinerator capacity shall be of sufficient size such that no un-burnt carcasses are left in a day s operation.

4 The guidelines and standards prescribed under Bio-Medical Waste (Management & Handling) Rules, 1998 shall be followed for erection and operation of the incinerator.

V In case the poultry farms have installed Feed Mill then these shall ensure that;

1 Multi-clones shall be installed in the feed mill.

2. All the workers working in the feed mill should be provided with dust masks.

Vl Waste Water Discharge

1. The waste water generated from the cleaning operations (after each batch removal) shall be collected in appropriate holding tank and put to use in the green belt.

2. Process for treatment and disposal of effluent

a. improve drainage, reduce standing water and water ditches to control mosquitoes and flies. .;;

b Reduce water use and spills from drinking devices by preventing overflow or leakages and using calibrated, well-maintained self-watering devices;

c. installation of vegetative filters (reed filters) and surface water diversions to direct clean run offs around areas containing wastes will help in decreasing spread of pollutants.

d. Use of pressure pumps, hot water or steam in cleaning activities instead of cold water and plain water scrubs can tremendously improve sanitation and reduce the quantities of wash water effluents considerably.

e. implement buffer zones to surface water bodies, as appropriate to local conditions and requirements, and avoid land spreading of manure within these areas.

Vll Best Management Practices

Apart from the above code practice, the following Best Management Practices which facilitates for control of the generation or delivery of pollutants shall be followed by poultry farms thereby preventing environmental degradation:-

A Disposal of solid wastes

1. place primary importance to minimize waste generation in regular farm management schedule.
2. implement integrated pest control and management to control pests and limit pesticide use on farm.
3. Properly collect, sort, treat, transport and utilize the solid wastes
4. Always balance land application of manure to the nutritional requirements of soil and crop
5. Keep manure dry and avoid wet spots/ patches.
6. Store manure properly by following appropriate storage technologies like composting,
7. Reduce mortalities on farm by proper animal care and disease prevention program

8. Use reliable options for collection, storage, transport and disposal of dead birds.

9. Properly evaluate the effectiveness of pesticide and its potential environmental impacts before application.

10. Never use pesticide containers for any other use and should be properly disposed to an engineered land fill facility'

B. Gainful utilization and recovery of wastes

1. The products from the rendering plant can be used a pet food.

2. The pet food also can be made by extrusion of hatchery waste with soybean meal.

C. Efficient Feed Management Practices

1. Avoid exposure of feed and feed ingredients to rain, moisture, flies and pests,

2. Ensure proper storage of feed and its transport.

3. Avoid reuse of used feed bags.

4 Keep feeder equipment always clean and tidy.

5' Dispose property the waste feed with due consideration to bio-security and environment.

6. Properly balance the feed for meeting the precise nutritional requirements.

7. Avoid overages / excess nutrients

8 ' Match feed formulation to the specific nutritional requirements of birds like growth, production, breeding etc.

9. Balance properly the energy: protein, calcium: phosphorous, Methionine, Manganese: zinc: selenium ratios in the diet Lysine:

10. Use enzymes, amino acids and gut modifiers etc. for enhancing feed utilization and nutrient adsorption.

11 Ensure proper balancing and mixing of trace elements like vitamins. minerals, amino acids and other feed activities

l2 Accurate weighing and proper distribution of feed to avoid wastage.

l3 Always use quality, uncontaminated feed material

14. implement a comprehensive nutrient management plan for the entire farm.

15. Maintain records for feed issues and consumption of water and feed on dairy basis.

16. Provide good quality drinking water

17. Deliver safe water to birds without exposure to contaminants _ nipple system is best compared to open dispenses.

18. ,Avoid spillage or leakage of water cjn the farm Best Pest management practices

1. Use predators to control of pests.

2 If pesticides are used then follow the correct doses, methods of application and proper disposal of used containers.

3 Take proper precaution to protect human, animal and environmental health before pesticide application.

4. consider rotating the generic contents of pesticide to avoid build up of resistance in the target pest.

5. Avoid use of pesticides that fall under Hazardous class.

6. Always follow label guidelines for dose application and safety precautions while mixing and transfer. Application of pesticides should be undertaken by trained persons in well ventilated and well it areas"

7 Avoid contamination of feed, water and other road material including their equipment with pesticides.

8. Store pesticides always in their original container at exclusively dedicated place and kept under lock and key.

E General sanitation and hygiene

1 Design and construct ail poultry structures to keep out pests.

2 Use mechanical controls in preference to chemical controls to kill or repel pests on the farm.

3. Use good house keeping practices in feed godown, mills, sheds and other facilities to limit food sources and habitat for pests.

i. The feed mill and godown shall be located on a well elevated ground preferably near the entrance to the farm and isolated from other poultry sheds.

ii It shall have a separate entrance and exit without crisscrossing the internal poultry farm roads.

iii' Provision for vehicle tire dip shall be made available at the entrance control gate.

iv. Floor of the feed mill and godown shall be concrete, damp proof, rodent/vermin proof and raised above the ground level by a minimum of 2 feet.

v. shall have adequate fire and other accident safety provisions.

vi. All feed ingredients shall be stored on pallets or platforms to facilitate easy detection of leakage and to prevent absorption of moisture from the ground.

vii. Avoid pest infestation of stored feed ingredients by frequent inspection and following prompt interventions.

viii Never store pesticides and other poisonous materials in feed plants or feed making premises.

ix Provide exclusive storage facility within feed plant for feed additives like vitamins,

minerals etc.,

x. Always store finished feed in covered containers and try to deliver to sheds for distributions to birds in specially made closed delivery trucks avoiding baggage and its reuse.

xi. Never store finished feed in sheds for more than the current days requirement.

xii. Prevent interaction of feeds with wild birds, rodents, pests, flies etc. as a measure of food safety and prevention of spread of diseases

xiii. Avoid spillage to limit wastage and discourage habitation for pests and rodents.

xiv. Observe sanitation and cleanliness as routine to ensure quality and safety of feed grains

xv, Ensure safe and healthy working atmosphere for personal by providing protective equipment and proper training to persons involved in specific jobs.

xvi. Keep and maintain proper inventory of men, materials and jobs performed in detail.

4 The loading and unloading operations shall be limited to day time.

5. Vegetative noise barriers shall be considered along the periphery of the farm.

6. Establishment of sound bio-security protocols (specific to location, structural and operational) will minimize the potential for the spread of pathogens.

7. The bio-security protocols shall be uninterrupted and included for the entire poultry operation that control animals, feed equipment, transport, personal, visitors, stray animals, migratory bird, rodents etc.

8. workers on multiple age group farms shall always work with youngest birds first before attending the other groups.

9. As far as possible follow an all-in-all out system and single age group limit the disease spread.

10. Training of workers for the specific jobs, recording and monitoring each of the process application on the farm will help in achieving desired results.

11. .Emerging technologies that benefit the environment shall be reviewed and useful technologies shall be adopted as a part of resource management policy on a continuous basis.

12. The policy that includes ideal land-crop livestock food relationship with environmental protection and public health shall be nurtured and practiced vigorously.

VIII Administrative mechanism

1. 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 shall be got registered with local bodies.

2. The poultry farms which are handling 1 lac or more birds at a given time in single location shall approach Haryana State Pollution Control Board to obtain necessary consent under water Act, 1974 and Air Act, 1981 "

3. The new poultry / hatchery farms will comply with the directions from the date of its issuance.

4. The existing poultry farms will comply with all the directions for prevention & control of pollution from the poultry farms/ hatcheries, except siting parameters, within go days from the date of issue of directions. However, the existing poultry farms/ hatcheries having birds more than 1 lac will install the double chambered incinerators as per CPCB guidelines issued under Bio-Medical waste (Management & Handling) Rules, 1998 for the proper and scientific disposal of dead animals/ other Bio-medical Waste etc. arising from poultry/ hatchery farms.

4. The poultry farms may install common incinerator instead of installing individual incinerator.

Dated, Chandigarh the
27-5-2013

Dr. Avtar Singh
Principal Secretary to Government,
Haryana, Environment Department"

7. Having regard to the aforesaid environmental issue as discussed relating to the environmental impact due to operation of the poultry farm in a residential area, pleadings made in the present original application and other features are discussed below:-

8. This instant application was filed under section 18(1) read with Section 14 & 15 of the National Green Tribunal Act 2010 (in short NGT Act) by one villager, namely Qamruddin Gazi of Bithari (Paschimapara) in District 24 Parganas (North) against two private respondents, Abul Hossain Mondal (Respondent No. 6) and Atiar Mondal (Respondent No. 7) alleging running of a poultry farm illegally adjacent to the dwelling house of the applicant thereby

contributing to a unhygienic environment in the locality for which people suffer from respiratory problems and other ailments. Further submission of the applicant is that the poultry farm is established by the two private respondents on Dag No. 4424/4425 in J.L. No. 50 at Mouza Bithari illegally and unlawfully without complying to the guidelines as fixed by the Department of Animal Husbandry and Veterinary services of Govt. of West Bengal and in spite of several appeal to the private respondents to shift the poultry farm and application to local authorities, no step has been taken to relocate the poultry farm and people in the locality continue to suffer. The petitioner also filed a case under 133 of Criminal Procedure Code 1973 being mis. case No. 1037/2015 before Sub-divisional Magistrate (Executive), Basirhat which is pending.

9. The application was heard on 29th July 2015 by the Tribunal and being satisfied on the pleading made by the applicant we directed the State Pollution Control Board (in short PCB) to submit a status report. The Pradhan of Bithari Hakimpara Gram Panchayat was also directed to submit the status report on the issue.

10. The State Pollution Control Board, the Respondents No. 2 & 3 would submit on affidavit that the poultry farm of Respondent No. 6 & 7 has not obtained any permission from the

State Board and accordingly directed Mr. Abul Hossain Mondal, the Respondent No. 6 not to establish and operate any poultry farm in the land in question without prior permission from the Board failing which appropriate regulatory action will be taken (vide letter Dated 07.09.2015).

11. In compliance to the order passed by the Hon'ble Tribunal, the Office-in-Charge, Swarupnagar police station caused a local enquiry and would submit an affidavit that the poultry farm of the private respondents established on Dag No. 4428 in Mouza Bithari adjacent to the boundary wall of the applicant after obtaining trade license from the local Bithari Gram Panchayet and didn't obtain any certificate or permission from Pollution Control Board. The fact was noted in General Diary vide Swarupnagar Police station G.D.E No. 720 dated 12.09.15 and a prayer was made before the Learned Additional Chief Judicial Magistrate at Basirhat to pass necessary order to submit prosecution against Respondent No. 6 & 7 under proper section of law. He would further submit that Assistant Sub-Inspector, after endorsement of M.P. No. 1037/15 under Section 133 of Code of Criminal Procedure, enquired in to the case and submitted a report before Ld. SDEM, Basirhat, vide D.R. No- 3142 dated 04.06.15. During the

enquiry the Assistant Inspector found only the structure of the farm without any birds.

12. On a subsequent enquiry on 06.10.2015, the Officer-in-Charge, Swarupnagar Police station found about 50-60 live birds and the private respondents failed to produce the permission letter from PCB. Thus it is clear that despite the notice of the Pollution Control Board, the private respondents continued to operate the poultry farm illegally.

13. Having regard to the position, on 13th October 2015, State PCB was directed to take action in accordance with law and submit a compliance report on the next date fixed. The Superintendent of Police, North 24 Parganas was also directed to take necessary action on the issue. The Ld. Advocate appearing for State Pollution Control Board as well as State respondents submitted on 12th November 2015 that poultry farm is now closed.

14. Admittedly the poultry farm had obtained license from the local Panchayet but no consent certificate was obtained from the State Pollution Control Board. As per the Consent Administration Rule of the State PCB, the poultry farm, a Green Category unit, requires previous Consent to Establish and Consent to Operate certificate from PCB under the Water (Prevention &

Control of Pollution) Act 1974 and the Air (Prevention & Control of Pollution) Act 1981 for operating a poultry farm. The PCB considers the application for consent based on locations and while granting consent stipulates the conditions to adhere to the guidelines of Department of Animal Husbandry and Veterinary Services as well as some other conditions to control and prevent air & water pollution. Thus the said poultry unit operating without consent from the PCB has breached the said Acts, which is illegal in the eyes of law.

15. Regarding establishment of the poultry farm in a residential area and issue of consent to operate and the site management and site guidelines, already a judgment has been delivered on 23rd December, 2015 in OA No. 23/2014/EZ **(Dipak Mondal- vs - Pollution Control Appellate Authority, West Bengal & Ors)** by one of us viz. Prof. Dr. P.C. Mishra, Expert Member where I was a member of the Bench. The relevant paragraphs as referred to there are quoted herein below for proper adjudication of the issues which is very vital as at the present moment, in the West Bengal there is no such norms, guidelines relating to the site for establishment of poultry farm. :-

> ”We have examined the documents available on record. The Central Pollution Control Board has prepared a consolidated list of industrial activities falling under Red, Orange and Green category

based on their pollution potential and circulated to SPCBs with a direction to adopt it. The WBPCB adopted the said list where the 'poultry, hatchery, piggery' comes under green category due to its least pollution potential in comparison to red and orange categories. However, as per the rules framed by WBPCB, consideration of siting for the 'Poultry, hatchery & Piggery' activity will be location specific and will be decided by the Board. In addition to this the unit shall also follow a guideline of Animal Husbandry & Veterinary Services, in order to control the health and hygiene conditions, which is reproduced below :

" GUIDELINES FOR ESTABLISHMENT OF POULTRY FARMS (BOTH LAYRY AND POULTRY) IN RURAL & URBAN AREAS OF WEST BENGAL COVERING POLLUTION CONTROL MEASURES :

1. Space requirement :Bird should not be maintained in overcrowded conditions.

Proper floor – Space is an essential criteria for managing poultry farm. An average floor space requirement is mentioned below :-

Age Group	**Layer Farming**		**Broiler Farming**
	Deep Litter System	Cage System	
0 – 4 weeks	0.125 – 0.50 Sft/Chick		0.25 – 0.50 Sft/Chick
5 - 8 weeks	0.50 – 1.00 Sft/Chick		1.00 Sft/Chick
9 -17 weeks	1.00 – 1.50 Sft/Bird		
Above 17 weeks	2.00 Sft/Bird	1.00 Sft/Bird	

2. Litter Condition/Management : Litter should be made with dry straw and/or dry saw dust. The thickness of litter should be 2' to 6' and the litter should always be dry. In case of soaking with water, the wet

litter should immediately be removed and replace with dry straw and/or saw-dust mixed with dry line.

3. Disposal of Spoiled Eggs : the spoiled eggs should be disposed off in a pit with a depth of 2'6'' to 8'0" with an average radius of 3.0" depending upon the volume of spoiled eggs. Lime or bleaching power should be spread over the spoiled eggs before covering the pit.
4. Disposal of dead birds/fowls etc, : Dead birds should be disposed off in a pit with depth of 3'0" to 8'0" with an average radius of 3'0" depending upon the volume of dead birds. Lime or bleaching power should be spread over the dead birds before covering the pit.
5. Disposal of used litter : The litter should be removed and disposed off in a manure pit or cultivable land in an isolated place. The litter may also be disposed/destroyed by burning. After removal of the litter, the shed should be washed and cleaned with phenyl solution. Fumigation is also advocated, particularly after any outbreak of epidemics. Before introducing new litter, total shed area should be spread with lime.
6. Other Sanitation & Hygienic measures :
   i. Outside area attached with the poultry shed should be washed with phenyl solution.
   ii. Utensils like Feeding through, water trey etc. should be washed with detergent solution.
   iii. Dry lime should be spread over in an surrounding area of the poultry shed on regular basis.

Sd/-

Director of Animal Husbandry &
Vety. Services, West Bengal"

16. In Dipak Mondal (supra) the following directions were passed :

"26. In our considered view there must be some codified rules/conditions for siting such Poultry and hatchery units and should not be left to the whim of the State Pollution Control Board. We have also examined the order dt. 29.5.2013 issued by the Haryana Government, Environment Department addressing the Pollution problems from Poultry Farms by way of prescribing siting criteria, Methods for manure storage & Management, addressing odour and gaseous pollution problem, dead bird disposal, waste water

discharge, solid waste disposal etc. Considering all the aspects discussed above, we hereby issue the following directions in respect of the Poultry and Hatchery units/Farms which falls under green category :

a. All Poultry and Hatchery Units shall be set up as per the following siting criteria :

“

1. The poultry farm shall not be located within:
    - 500 meters from residential zone
    - 200 meters from major water course
    - 1000 meters from any major drinking water reservoir or catchment side.
    - 100 meters from any drinking water source like wells, summer storage tanks, tanks
    - 500 meters from nearby poultry, dairy or another livestock enterprises or industry.
2. The poultry sheds shall not be located within :
    - 20 meters from farm boundary
    - 200 meters from public roads
    - 20 meters from other sheds on the same farm
    - 100 meters from any other dwelling on the same property
3. The poultry sheds shall be positioned:
    - On East to West direction
    - At least 2 meters above the water table
    - At least 0.5 meters above ground level
4. The poultry farm shall raise green belt all around the farm with minimum of two rows spaced apart or not

more than 3 meters.

5. The poultry farm shall be fenced with barbed wire/linked mesh upto a height of 1.5 meters with appropriately secured entrance and outlet.

6. No open burning or indiscriminate dumping of any dead birds/feathers/offal's unused material like litter/empty gunnies/containers etc. Shall be adopted within or outside the farm premises.

7. Proper drainage/outlet for collection and discharge shall be provided for storm runoff/discharges from the farm.

8. No obstruction shall be created for any water course within the farm or outside the farm boundary."

b. The guidelines of Animal husbandry and Veterinary Services, Govt. of WB for establishment of poultry farm be strictly followed.

c. The consent to establish be granted to the units who satisfies the above siting criteria and subject to other general and specific conditions.

d. The consent to operate shall be granted after causing inspection and enquiry to the satisfaction of the PCB that the unit has complied or intend to comply within specific period to the general and specific conditions and/or guidelines of AHVS without making any compromise with siting criteria.

27. We hereby constitute a committee consisting of Director, Animal Husbandry & Veterinary Services, Head of Regional Office, CPCB, Kolkata & Member Secretary, State PCB (as Member-Convener) to frame guidelines for siting

criteria and management of waste and pollution generated from 'poultry, hatchery' in the light of the present order and the guidelines issued by the Haryana Government for consideration and implementation in the state of West Bengal within three months. Till such guidelines are approved by the Government for implementation consent be granted as per our direction at paragraph 26."

17. Having regard to the aforesaid findings and observations as also keeping in view the decision in **Dipak Mondal (supra**) as quoted above, the following directions are passed.

18. Accordingly, we direct that the interim order passed by us, against Respondent No. 6 & 7 to stop their poultry farm business, will continue till Consent to Establish and Consent to Operate is granted by the State Pollution Control Board. The Superintendent of Police, North 24 Parganas is directed to implement the order of the Tribunal relating to closure of the poultry farm till consent is granted by the PCB. The PCB shall consider the application of the private respondents, if filed, for grant of consent in terms of direction issued in O.A. No. 24/2014/EZ **(Dipak Mondal Vs. Pollution Control Appellate Authority West Bengal & Ors**) pronounced on 23.12.2015 read with our findings above on framing appropriate 'Site Guidelines'. Site guidelines to be framed and notification as per law be published by six months.

19. Thus original application is allowed and disposed of. Cost of Rs.10,000/- to be paid by the respondent Nos. 6 & 7 @ Rs. 5000/- by each respondent to the applicant who has filed this O.A. towards cost of litigation by two months. Compliance report be

filed by said respondents within 2 months and State PCB by 8 months in this Tribunal.

Having regard to greater public interest, State Pollution Control Board is directed to circulate this order to all D.L. & L.R.O. of respective districts of West Bengal who are delegatees of PCB, the District Magistrates of respective districts of West Bengal for implementation and taking action against poultry farms which are situated in area on breach of direction passed in paragraph 26 of Dipak Mondal (supra) by way of issuance of closure order in accordance with law and against those who have no 'consent to operate' from State PCB. Action taken report be filed by six months to the registry of this Tribunal. Arrangement be made by PCB to telecast the gist of this order to make the people aware regarding health hazard and pollution from 'Poultry farm'.

.....

Justice Pratap Kumar Ray,JM

.....

Prof. (Dr) P.C. Mishra,EM

Kolkata

February, 2016