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KERALA STATE POLLUTION CONTROL BOARD
കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
Pattom P.O., Thiruvananthapuram – 695 004
പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004

KSPCB/406/2023-SEE-3 Date: 29/12/2023

Revised Standard operating Procedure for Swine (Pig) Farms

1. Pig Farms are categorized as Green.

2. If the number of adult animals is less than 5, such units may be exempted from consent purview. But such units shall have control measures like bio-gas plant, septic tank & soak pit system.

3. The distance criteria for pig farms is modified as follows:

No of Pigs	Min Distance to Residence (in m)	Setback (in m)
1-5	Exempted from Consent Purview	
6-15	50	According to the prevalent Building Rules
16-50	75	
>50	100	

4. Adult pigs are pigs with age 6 months &above.

5. One mother pig & its piglets may be considered as one adult pig.

6. Approximately, 25 l/day of waste water is generated per animal. Waste water is generated during cleaning, cooking, washing etc. The use of pressure washer, automatic drinker, feeding tref etc reduces the waste water generation. In such cases, the waste water generation may be taken as 15 l/pig/day.

7. Bio-gas plant, septic tank & soak pit system are the usual waste water treatment measures in pig farms. These facilities or more advanced proven facilities shall be provided in all the farms. Effluent Treatment Plant (ETP) may be insisted in sloppy terrains or in areas where there are genuine complaints on contamination of water bodies. In such cases, slurry and overflow from bio-gas plant may be connected to the ETP.

8. On an average 4kg dung is produced per adult animal per day.

9. Multiple bio-gas is preferable than single ones in swine farms housing large number of animals. Bio-gas generated shall be utilized or else facility for flaring shall be provided.

10. Windrow composting /compost pits of adequate capacity are essential in all pig farms. Cow dung & inoculums (trichoderma, EM solution etc) shall be used to speed up the composting process. In compost pits, usually food waste, excreta, agricultural waste etc are disposed. This gets converted to manure. The compost pit should have a cover to minimize odour nuisance. Some farms have collection tanks for collection of urine and floor washings. This is then pumped and utilized for cultivation of grass.

11. Deep burial pits shall be used for disposal of dead animals. Burial is a method in which carcass is buried in the ground. It is a common and oldest method of carcass disposal and requires thoughtful selection of site. The carcass is to be covered with slaked lime, bleaching powder and crystal salt to address environmental issues related to deep burial. The deep burial site should be relatively impermeable and the bottom of the deep burial pit shall be above the ground water table. As per CPCB guidelines for carcass disposal, the ground water table should be minimum six metres below the lower level of the deep burial pit. The pits should be distant from habitation and sited so that no contamination of surface or ground water occurs.

12. If food waste or poultry offal (chicken slaughter waste after segregation to be given as feed to pigs) are used as feed for pig, the same shall be processed in accordance with the guidelines of Animal Husbandry Department.

13. Waste shall be collected in air tight containers and transported in covered vehicles only. Carry bags (plastic/non-woven/compostable) shall not be used for carrying food waste to pig farms as the farmers do not have scientific facilities for collection, handling and disposal of carry bags as per the Solid Waste Management Rules, 2016.

14. Waste shall be collected within 24 hours of its generation. Waste more than 24 hours shall not be brought to the farm.

15. The unit shall submit the details of sources (address & phone number) from where the food waste is collected (as and when called for).

16. Log book shall be kept in all pig farms regarding the food waste collected each day & its source including the time of collection.

17. Separate enclosed area shall be provided for storage of food waste/feeds. This shall be verified at the time of inspection.

18. Foul smell from pig farms is due to decomposition of manure and urine resulting in generation of ammonia, methane and hydrogen sulphide & VOC's. Proper cleaning, disinfection & hygiene are essential to control foul smell from the unit.

19. In order to control odour, it has to be ensured that the roof has sufficient height from ground level. As the height of roof increases, so the speed of air movement increases. Funnel shaped roof with provision for dispersion of air at roof level (say draught fan) will help in minimizing odour.

20. If slaughtering of pigs is done in the farm, then the norms of slaughter houses will also be applicable.

21. The ratio of fecal coliform(FC) to fecal streptococci (FS) is very important and helps in identifying the source of pollution as to whether it is from animal or human source(septic tank). During enquiry of complaints on suspected contamination of water bodies this ratio is extremely useful. FC/FS ratio is approximately 0.2 for cows & buffaloes, 0.4 for chicken and 4.4 for humans. It is 0.04 for pigs. Hence if the FC/FS ratio is less than one, the water body can be concluded to be contaminated from animal discharges and if greater than 4, then it is from human sources.

22. The Associations of Pig Farmers and Farmer Producer Companies has a major role to play in these matters. They shall give training to the farmers on environmental friendly management of farms. There shall be periodic interactions between them & the Board officials at District Level. They shall bring to the notice of the Board if waste in excess of that required is taken by the members. They shall also encourage its members to apply for the consent of the Board and comply with consent conditions.

Sd/-
CHAIRMAN

To

1. The Chief Environmental Engineer,
   Head Office Thiruvananhapuram
   Regional Office Thiruvananhapuram /Ernakulam/Kozhikode.
2. The Senior Environmental Engineer,
   District Office. Kottayam
3. The Environmental Engineer, District Office,
   Thiruvananthapuram, Kollam, Pathanamthitta, Alapuzha, Idukki,
   Ernakulam-1, Ernakulam-2, Environmental Surveillance Centre
   Eloor.Thrissur, Palakkad, Malappuram, Kozhikode, Kannur, Wayanad,
   Kasargod.

Copy to:-

1) All Technical Staff in HO
2) IT Cell (for uploading in the website and adding in phoenix)
3) C.A. to CHN & MS

FORWARDED BY ORDER

SENIOR ENVIRONMENTAL ENGINEER-1