

Guideline For Air Pollution

Objective of the Guidelines:

The objective of these guidelines is to mitigate air pollution risks associated with agricultural activities and facilities by identifying sources of air emissions, assessing potential impacts, and implementing effective protection measures.

Scope and Coverage:

These guidelines encompass various agricultural activities and facilities that may contribute to air pollution, including soil testing, soil amendments, crop residue management, machinery operations, and processing facilities.

- Interface with Activities and Sources of Air Pollution:
 - Dust Emission from Soil Testing:
 - Air Pollutant: Particulate Matter (PM10 and PM2.5)
 - Impact: Inhalation of particulate matter can cause respiratory issues and long-term health problems.
- Use of Gypsum for Soil Amendment:
 - Air Pollutant: Particulate Matter (PM10)
 - Impact: Exposure to gypsum dust can lead to respiratory irritation.
- Development of Custom Hiring Centres (CHCs) and Farm Machinery Banks (FMBs):
 - Air Pollutants: Nitrogen Oxides (NOx), Carbon Monoxide (CO), Particulate Matter (PM)
 - Impact: Emissions from machinery can contribute to localized air pollution.
- Setting Up Seed Storage, Processing & Packing Facility:
 - Air Pollutants: Particulate Matter (PM10), Volatile Organic Compounds (VOCs)
 - Impact: Dust emissions and VOCs can affect indoor and outdoor air quality.
- Setting Up Cold Storages:
 - Air Pollutants: Hydrochlorofluorocarbons (HCFCs), Refrigerant Gases
 - Impact: Refrigerant leaks can deplete the ozone layer and contribute to global warming.
- Establishment of Fish Feed Mills:
 - Air Pollutants: Particulate Matter (PM10), Odorous Compounds, VOCs
 - Impact: Dust emissions and Odors from feed milling can impact air quality.
- Mini Fish Processing Unit:
 - Air Pollutants: Particulate Matter (PM2.5 and PM10), Odorous Compounds, VOCs
 - Impact: Emissions can lead to respiratory issues and unpleasant Odors.
- Establishment of Ice Plant:

- Air Pollutants: Ammonia (NH₃), Refrigerant Gases
- Impact: Ammonia emissions can cause irritation upon exposure, and refrigerant leaks pose environmental risks.

Protection Measures:

- Dust Emission from Soil Testing:
 - Use sealed containers and indoor testing with proper ventilation.
- Use of Gypsum for Soil Amendment:
 - Handle gypsum in sealed bags and provide protective gear for workers.
- Crop Residue Management (Non-Burning):
 - Promote mulching or composting instead of burning.
- Development of Custom Hiring Centres (CHCs) and Farm Machinery Banks (FMBs):
 - Maintain machinery for reduced emissions and promote fuel-efficient equipment usage.
- Setting Up Seed Storage, Processing & Packing Facility:
 - Install dust collection systems and use low-VOC materials.
- Setting Up Cold Storages:
 - Implement leak detection systems and transition to eco-friendly refrigerants.
- Establishment of Fish Feed Mills:
 - Install dust control systems and adopt low-emission processing methods.
- Mini Fish Processing Unit:
 - Use enclosed processing systems with effective exhaust.
- Establishment of Ice Plant:
 - Prevent ammonia leaks through proper handling and maintenance.
- Reporting / Record Keeping:
 - Maintain detailed records of air pollution sources, pollutants, and implemented protection measures.
 - Monitor air quality parameters regularly and conduct audits to ensure compliance with regulations.