

# Checklist for Building No Smell Compost Hog Operation Projects

Creating a no-smell compost hog operation requires careful planning and attention to various factors to ensure the system is efficient, environmentally friendly, and odor-free. Here's a comprehensive checklist to guide you through the process:

## Planning and Design

### 1. **Site Selection:**

- Choose a location away from residential areas.
- Ensure good drainage to prevent waterlogging.

### 2. **Regulatory Compliance:**

- Obtain necessary permits and approvals.
- Understand local environmental regulations and guidelines.

### 3. **Design Layout:**

- Plan the layout for easy access and movement of materials.
- Include areas for receiving, processing, composting, and storage.

## Infrastructure

### 4. **Shelters and Pens:**

- Build weather-resistant shelters for hogs.
- Design pens with adequate space and ventilation.

### 5. **Composting Facility:**

- Construct composting bins or windrows.
- Ensure the facility is covered to control moisture and temperature.

### 6. **Drainage System:**

- Install a proper drainage system to manage runoff.
- Include a leachate collection system to prevent groundwater contamination.

## Materials and Equipment

### 7. **Composting Materials:**

- Gather carbon-rich materials (straw, wood chips) and nitrogen-rich materials (hog manure).

- Avoid materials that could introduce pathogens or contaminants.

#### 8. **Equipment:**

- Use tractors or skid steers for turning compost.
- Invest in a temperature probe for monitoring compost piles.

### **Management Practices**

#### 9. **Feeding and Bedding:**

- Provide balanced nutrition to hogs to reduce odor.
- Use ample bedding materials to absorb moisture and reduce smell.

#### 10. **Compost Management:**

- Turn compost regularly to aerate and accelerate decomposition.
- Monitor temperature, moisture, and pH levels.

#### 11. **Odor Control:**

- Use biofilters or compost covers to manage odors.
- Apply composting amendments like lime or zeolite if necessary.

### **Monitoring and Maintenance**

#### 12. **Regular Inspections:**

- Inspect the site regularly for any signs of odor or pollution.
- Check equipment and infrastructure for maintenance needs.

#### 13. **Record Keeping:**

- Maintain logs of compost temperature, moisture levels, and turning schedules.
- Keep records of inputs and outputs for regulatory compliance.

### **Community and Environmental Considerations**

#### 14. **Community Relations:**

- Inform the local community about the project and its benefits.
- Address any concerns promptly and transparently.

#### 15. **Environmental Impact:**

- Conduct an environmental impact assessment.

- Implement measures to protect local wildlife and water sources.

## **Health and Safety**

### **16. Worker Safety:**

- Provide training on compost handling and equipment use.
- Ensure proper use of personal protective equipment (PPE).

### **17. Animal Welfare:**

- Maintain high standards of animal care and hygiene.
- Monitor hog health regularly.

By following this checklist, you can establish a no-smell compost hog operation that is efficient, environmentally friendly, and community-conscious.