

## **GUIDELINES TO REQUEST AUTHORIZATION FOR COMPOSTING END OF LAY HENS**

### **Background**

Routine mortality disposal may proceed as per the provisions of Section 15(2) by burial, burning, composting or rendering. Routine mortality is interpreted as the daily mortality rate expected at any livestock operation. It represents a very small percentage of the livestock inventories.

End of lay hen culls exceed the routine, daily mortality rate at egg laying operations and therefore disposal of end of lay hens must follow procedures intended for mass mortalities events at livestock operations. End of lay hen disposal must comply with Section 15(6) of the *Livestock Manure and Mortalities Management Regulation* MR 42/98 which requires notification to Manitoba Conservation and disposal in a manner acceptable to the department.

Regardless of the disposal method chosen, producers must inform Manitoba Conservation of their plans and obtain an authorization prior to disposing of the mortalities. Burial of end of lay culls is not an acceptable disposal method, and will only be accepted on an exceptional basis. Where rendering and disposal at a licensed landfill are not possible, Manitoba Conservation will consider for approval disposal proposals that rely on composting of mortalities.

This document is intended to facilitate producers' written submission of an end of lay cull composting plan to Manitoba Conservation. The following procedures should be followed to prepare a mortalities composting proposal and to

obtain authorization from Manitoba Conservation.

### **Site suitability**

Composting of end of lay hen culls is subject to Section 15.1(1) where:

- Composting sites must be located at least 100 m away from surface water, sinkhole, water well and property boundaries; and
- The site must provide adequate surface water, groundwater and soil protection

Acceptable composting facilities include composting treatment stations (within buildings, closed or partially closed), in-vessel composting systems, composting sites with engineered and impervious bases and windrow composting. Where composting is carried out on an earthen base, the soil at the site must have a hydraulic conductivity of  $1 \times 10^{-6}$  cm/sec or less. Depending on soil conditions, clay or plastic liners or a concrete base may be required to adequately protect soil and groundwater from pollution.

### **Composting process**

Pursuant to Section 15.1(1) of the Regulation, the composting process must be acceptable to the Director. The general principles of composting apply, namely listing proportions of the compost "recipe", nature of each substrate, the target C:N ratio, and a design for the composting pile or windrow. **Where the composting process requires substantial amount of manure (> 15% by weight) as a**

**primary substrate, a permit to construct a manure treatment facility is required as per Section 6 of the Regulation.** For further information on composting please refer to the document End of Lay hens Composting Guidelines or other similar information developed and published by Manitoba Agriculture, Food and Rural Initiatives.

### **Composting proposal**

The plan submitted to Manitoba Conservation must provide details regarding the composting process, including the proposed location of the facilities. Where necessary, acceptance of the plan may be contingent on construction conditions for the composting facilities to ensure that surface and groundwater protection is equal to or greater than the requirements set out in Construction Requirements for Confined Livestock Areas and Collection Basins.

### **The plan must include but is not limited to:**

- Description of the design and management of the system to facilitate composting
- Drawings of site plan including location of composting site and distance to features including sinkholes, wells, surface watercourses and property boundaries
- Composting site soil information
- Depth to groundwater table
- Storm water and leachate management plan
- Volume of birds to be composted
- Type and volume or mass of substrate (carbon source) to be used
- Design of composting facilities (layout, shape, size and construction of windrow). If bins

composter is used provide dimensions, capacity etc.

- Environmental restrictions
- Equipment available for the process
- Surface gradient

### **Proposal review**

The plan will be reviewed along with existing information by the Engineering Section of Environmental Services, Manitoba Conservation. Please send your completed proposal to:

Engineering Section  
Environmental Services  
1007 Century Street  
Winnipeg, MB, R3H 0W4  
FAX: 204-948-2420  
E-mail: [EnvironmentalEng@gov.mb.ca](mailto:EnvironmentalEng@gov.mb.ca)