

4.1 Mass Composting - Background

1. Composting is a naturally occurring biological decomposition process in which bacteria, fungi and other microorganisms convert organic matter into a stabilized product termed compost in the presence of air. Carcass composting systems require a variety of ingredients or co-composting materials, including carbon sources (i.e. sawdust, straw, etc.) and bulking agents (i.e. shavings).
2. The CFIA Science Directorate performed a risk assessment on composting. Due to current lack of scientific data documenting inactivation of the abnormal prion through the composting process the risk assessment assumed the abnormal prion would not be degraded during composting. The resulting risk assessment found that SRM subjected to composting would present a very low to low risk of transmitting the BSE agent within the domestic ruminant population.
3. Mass Composting has been identified as a useful intermediate method to decrease the volume of SRM to be disposed. Mass composting however is not an acceptable method of disposal. Under the CFIA's current working policy, only those methods posing no greater than a negligible risk of transmitting BSE to domestic ruminants are considered acceptable methods of disposal. However, in terms of SRM, the final compost will still be classified as SRM and thus subject to all regulatory and permitting requirements applicable to SRM.
4. Permits for final disposition of composted SRM will only be issued to pre-approved (permitted) single sites which have negligible risk for exposure to domestic ruminants.
5. On farm composting will not be controlled by the CFIA if it is carried out on the same premises where the SRM is generated and the product (compost) does not leave the premises of origin. The CFIA has advised the provincial ministries (who have regulatory authority over on farm composting) that it is not recommended for the compost produced from SRM and remaining on the premise, to be spread on land directly grazed by domestic ruminants for at least 5 years.

4.2 Mass Composting - Preinspection

1. All sites that intend to receive SRM or carcasses from which SRM has not been removed for composting must apply to the CFIA for a permit to receive and process SRM.

2. The owner or operator of the composting site must submit a completed application for permit form to the local CFIA district office. The district office should forward this application and any associated documentation to the Area Program specialist responsible for TSE disposal.
3. The CFIA inspector (Area Program specialist responsible for TSE disposal) who will be responsible for conducting the inspection of the particular site will review the permit application for completeness. The application form must be accompanied by copies of:
 - i. all relevant municipal and provincial licences and inspection reports;
 - ii. detailed site plans including drainage, traffic flow, distance from property lines, topographical diagrams, and any geological assessments that have been done on the site;
 - iii. normal operating procedures and any additional applicable quality assurance programs pertaining to the containment of SRM for composting;
 - iv. documentation outlining pest control and scavenger access prevention procedures.

If any of the appropriate documentation is missing from the application, the CFIA inspector is to contact the owner or operator of the composting site and inform them of any incompleteness in the application.

4. The owner or operator of the mass composting site must complete a proposal outlining the final disposition of composted SRM following the composting process (i.e. spreading, incineration, etc.). This proposal must include the controls for preventing domestic ruminants from being exposed to the composted SRM. As the product of composting will remain classified as SRM and subject to all regulatory controls the transporter and recipient of the composted SRM material will also require permits. Applications for these permits should be submitted to CFIA at the same time as the application referenced in point 2.
5. Upon receipt of all of a completed application for permit with all appropriate accompanying documentation, the CFIA inspector should contact the owner or operator of the composting site and schedule an inspection visit.

4.3 Mass Composting – Site Inspection

1. Separation: Property of the composting site must have adequate separation from adjacent properties to prevent direct exposure of domestic ruminants to SRM (i.e. fences or other barriers may be used to satisfy this requirement). The site itself or implemented measures should discourage access by wild ruminants and scavengers.

2. **Signage:** Signage is to be legible and be installed at all access points around the perimeter. Signage shall include information on hours of operation, phone numbers for emergency contacts and types of material accepted for composting.
3. **Cleaning:** The external surfaces of the vehicle that may have come in contact with the composted SRM material at the site must be visibly clean prior to exiting the site.
4. **Operation:** Personnel trained in normal operating procedures as it pertains to SRM containment must be present during all SRM receiving hours of operation. Gates and doors are to be locked during all non-operating hours of the composting site. Operating and maintenance manuals must be readily accessible to operating personnel who are present at the composting site.
5. **Site preparation:** Site location and plot should follow the prescribed details as outlined in the applicable provincial standard. For provinces without provincial standards, a Canadian provincial standard should be selected and followed. The site should be engineered with a base which provides for leachate containment and a runoff collection system.
6. **Equipment and parts of equipment which handle or turn compost must be designated as SRM equipment or be subject to cleaning on site by pressure washing to be clean of all organic material prior to alternate use.**
7. **Leachate Control system:** The composting process must be formulated to prevent the formation of leachate. Liquid must be collected and re-incorporated into compost material to prevent the release of leachate from the composting site.
8. **Compost must be confined to the composting site until further permitting is obtained from CFIA regarding final disposition of the composted SRM.**
9. **Records:** Monitoring logs including but not limited to delivery logs, visitor logs and amounts of co-composting agents added to SRM are to be maintained and kept on site. Integrity breeches (i.e. access by scavengers, domestic or wild ruminants, leachate escape or movement of SRM or compost out of area previously approved by permit) must be reported to CFIA.

The compost owner or operator must keep records for a period of 10 years. A record must be kept for each day on which the SRM is removed, stained or received or the carcasses are collected or received.

Records must include:

- i. the person's name and address and the date of the removal, staining, collection or reception;
- ii. the combined weight of the specified risk material and the carcasses or parts of carcasses collected or received, as well as the number of those carcasses;
- iii. the name of the dye used to identify the specified risk material or the carcasses;
- iv. the numbers of the approved tags, as defined in section 172, that are on the carcasses or, in the case of carcasses not bearing approved tags, the information referred to in paragraph 187(2)(a) in respect of the carcasses;
- v. if the person treated, confined or destroyed the specified risk material or the carcasses, the date on which and the manner in which the specified risk material or the carcasses were treated, confined or destroyed; and
- vi. if the person did not confine or destroy the specified risk material or the carcasses,
 - a. the name and address of the person, if any, who received the specified risk material or carcasses from him or her,
 - b. the name and address of the person, if any, who transferred the specified risk material or the carcasses to another location and the manner in which the specified risk material or the carcasses were transferred, and
 - c. the name and address, if known to the person, of the person, if any, who confined or destroyed the specified risk material or the carcasses.

4.4 Mass Composting – Inspectors Report

1. All observations regarding the application, associated documentation and physical inspection should be recorded on an Inspector's Report (CFIA-ACIA 1520).
2. In summary, the report should specifically identify areas of discrepancies between the composting site applying for a permit and the requirements as listed in this manual. Section 4.2, 4.3 Mass Composting.
3. All deficiencies need to be addressed with a written corrective action plan by the applicant and are to be verified for effectiveness by a follow-up on-site inspection prior to issuing a permit.
4. If inspections do not identify any areas of discrepancy or deficiency, the inspector should in final summary include a recommendation of the period of time for which the permit should be valid. Permits will be issued

annually for composting sites which fulfil all requirements listed in this manual provided on-going compliance monitoring is conducted. On-going compliance monitoring will be conducted via random inspections for verification of compliance with written standard operating procedures. Compliance monitoring will be conducted by CFIA inspectors at least once during the time which the permit is valid.

5. A copy of the report should be forwarded to the CFIA program staff responsible for SRM disposal at the Area office.

DRAFT