

**United States Department of Agriculture  
Agricultural Marketing Service, Science & Technology  
Microbiological Data Program**

SOP No: MDP SAMP PROC-03		Page 1 of 7
Title: Packing and Shipment of MDP Samples		
Revision: 3	Replaces: : 4/24/06	Effective: 4/29/09

**1. Purpose:**

To standardize the packing and shipping procedures utilized by all participating States collecting samples for the USDA/AMS Microbiological Data Program (MDP).

**2. Scope:**

This Standard Operating Procedure (SOP) shall be followed by the sample collectors to pack and ship MDP samples to the appropriate laboratory(ies) for analysis.

**3. Outline of Procedure:**

- 5.1 Packaging Procedures for Fresh Commodities
- 5.2 Shipment of MDP Samples

**4. References:**

- Sample Advisory Committee Meeting, December 2-4, 2008
- Sample Advisory Committee and Sampling Manager communications (email and telephone), January, February, and April 2008
- Sampling Managers' Conference Call, March 13, 2006
- PDP/MDP Federal/State Meeting, Denver, CO, September 27-29, 2005
- MDP Public Meeting, Washington, DC, April 15, 2002
- MDP Public Meeting, Washington, DC, January 10, 2002
- Program Plan, July-December 2002
- Program Plan, January-June, 2002
- Program Plan, April-September 2001
- MDP Federal/State Meeting, Tallahassee, Florida, January 10-11, 2001
- Workplan for MDP Pilot Study, August 25, 1999

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**5. Specific Procedures:**

**5.1 Packaging Procedures for Fresh Commodities**

**5.1.1** These packing procedures provide minimum MDP requirements and are presented as general guidelines. Each participating State shall, as part of their internal sampling SOPs, have on file written procedures that include specific details as to the materials and procedures used for packing the MDP samples. Both the MDP SOPs and the State's internal SOPs will be used as the measure of compliance during Monitoring Programs Office (MPO) sampling reviews.

**5.1.2** Each site sample shall be packed by the sample collector.

**5.1.3** Samples may be boxed and prepared for shipment at the collection site, or transported to a local State office or shipping facility for packing. If samples are transported away from the collection site for later packing, loose and/or perishable samples must be maintained in a cooled container until they are packed for shipment.

**5.1.4** Loose and/or perishable samples must remain in a cooled container or held in a MDP/PDP dedicated refrigerator if they are not packed within a half an hour of collection.

**5.1.5** Sample collectors shall use precautions to prevent samples from being contaminated during packaging.

**5.1.6** Loose and/or perishable samples must be placed in an insulated shipping container that has been pre-cooled with frozen cold packs.

**5.1.7** Fresh commodity samples must remain properly cooled during shipping. An adequate number of frozen cold packs shall be placed in the shipping container, surrounding the samples (top, bottom, and sides) to ensure refrigerated temperatures of the product during transit. **Loose, wet ice is not an acceptable coolant material.**

**5.1.8** Sufficient room shall be provided inside the shipping box so that samples are not squeezed, broken, bent, or bruised and there is no danger of rupturing hermetically sealed bags.

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**5.1.9** To avoid sample damage, frozen cold packs shall not come into direct contact with the sample. The cold packs should be wrapped in an insulating material to ensure that samples do not freeze.

**5.1.10** The collector shall use a sufficient amount of packing materials to prevent movement of the produce during transit, thereby protecting the samples from bruising or damage. These packing materials also help keep the samples at refrigerated temperatures and provide insulation against sub-freezing temperatures during air transport. Paper bags and shredded computer paper are not acceptable packing materials.

**5.1.11** If computer/electronic problems occur that prohibit the use of electronic Sample Information Forms (SIFs), the sample collector shall fax a SIF to the laboratory or a paper SIF shall be placed inside a separate plastic ziplock bag and packed inside the same shipping container as the corresponding site sample.

**5.1.12** If a sample will not be collected, an electronic SIF must be completed for each site sample not collected and emailed to MPO. If paper SIFs are used, MPO must be notified and the paper SIF sent, faxed, or emailed to the receiving laboratory who in turn notifies MPO. (Refer to MDP SAMP PROC-04, Section 5.1.)

**5.1.13** If commodities have been grouped for collection, it is permissible for more than one commodity type to be placed directly in the same insulated shipping container. However, when packaging more than one fresh commodity type, collectors should attempt to package together fresh commodities that have similar temperature, moisture, ethylene gas, packaging, and shipping requirements to minimize product degradation. Information regarding these requirements is provided on each commodity Fact Sheet.

**5.1.14** If the pre-cooled insulated shipping container will not change hands, thereby maintaining chain-of-custody, it is not necessary for the packing box to be sealed [i.e., the collector “hand” delivers the site sample(s) to the laboratory]. However, the collector must ensure that the container lid fits tightly and securely so that it does not open during transit.

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## **5.2 Shipment of MDP Samples**

**5.2.1** States required to transship MDP samples to other States must use an insulated shipping container (i.e., ice chest, insulated box, etc.) for loose and/or perishable commodities that is capable of maintaining refrigerated temperatures throughout transit.

**5.2.2** In an effort to help reduce sampling costs, the reuse of shipping containers and coolants is encouraged. If a State elects to have a shipping container and packaging materials returned, a return shipping label must be included inside the box. Return shipping should be accomplished by the most cost effective means possible.

**5.2.3** If samples are “hand delivered” to a local State office, shipping facility, or State laboratory, sample collectors must ensure that the product is placed in a pre-cooled insulated shipping container along with a sufficient number of ice packs to ensure refrigerated temperatures during transport.

**5.2.4** MDP samples must be shipped overnight by a service that results in the sample arriving at the assigned laboratory(ies) on a weekday and no later than the morning following sample collection unless the sample collectors receives prior approval from the laboratory and MPO.

**5.2.5** Samples shall not be shipped one or two days before a Federal or State holiday unless the sample collector receives prior approval from the laboratory and MPO. [Refer to MDP SAMP PROC-01, Section 5.6.3.5 for required shipping days.]

**5.2.6** The sample collector and/or primary State laboratory shall be responsible for ensuring that samples are shipped to the correct laboratory(ies) as provided quarterly on MDP Sample Shipping Assignment Charts.

**5.2.7** Copies of shipping transactions for all samples shall be kept on file by the State in the event that shipping problems arise. The duration of time for keeping such records shall be determined by each State needs.

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**5.2.8** Any additional information regarding packaging, shipping, and temperature requirements of commodities will be provided on MDP Fact Sheets or sent to State Sampling Managers in writing from the MPO Sampling Manager.

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*4/29/09*

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Revision 3

- Added new reference in Section 4.
- Added references to loose and/or perishable samples.
- Shredded computer paper is no longer permitted as a packing material ("paper dust" becomes airborne and is a problem in the laboratories).
- If problem occurs with use of e-SIF, collector shall fax or mail paper SIF to the laboratory.
- Fact Sheets referenced for source of packing information.
- Shipping times no longer required to be recorded on SIFs (reference to requirement is being removed).
- Clarifications added on the return of shipping materials.
- Enhanced clarifications by word changes in many sections.
- Made formatting changes.