

**APS Protocol for**  
**RECEIPT OF HAZARDOUS MATERIAL SHIPMENTS**  
(Reviewed 3/2/2017)

**Scope & Application**

Throughout this document, the term *hazardous material* means any material regulated by the U.S. Department of Transportation as a hazardous material.

This procedure governs APS Beamline acceptance of all packages known or suspected to contain hazardous materials. It applies not only to shipments delivered to Argonne National Laboratory by common carriers, but also to materials brought to the laboratory by researchers in personal, rental, or institutionally owned vehicles.

There is no threshold quantity below which the procedure need not be followed.

**Purpose**

This procedure is intended to minimize the negative consequences that could result from the failure of packaging methods and materials used to ship hazardous materials.

NOTE: This procedure does not eliminate or “supersede” an individual’s decision to manage a situation by dialing 9-1-1.

**Procedural Steps and Notes**

1. When a package known or suspected of containing a hazardous material arrives at the LOM, or as soon as possible thereafter, a competent person employed by the Beamline shall inspect it for signs of **leakage** and **significant damage to the outer packaging**. This inspection shall be conducted before the package is opened. (Beamlines can use this inspection to verify all arriving materials were previously disclosed to the Beamline on the Experiment Safety Form.)
2. After making appropriate log entries, the competent person may release to users those packages that show no sign of leakage of contents or significant damage to the exterior of the package.
3. Users shall notify a Beamline representative if, upon opening, a package containing hazardous materials shows evidence of leakage of contents. Such packages shall be moved to the nearest available fume hood and treated as described below.
4. The competent person shall ensure that all packages showing signs of leakage<sup>1</sup> and all packages that have suffered significant damage to the exterior packaging are

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<sup>1</sup> This requirement applies even if the signs of leakage appear inconsistent with the hazardous materials suspected to be contained therein.

immediately placed in the nearest available chemical fume hood and that the hood sash is moved to its most fully closed position.

**WARNING: packages shall not be placed in hoods with potentially incompatible materials.**

NOTE: If the hood has a drain, the drain must be blocked or closed to keep material out of the plumbing.

5. The person inspecting the package shall attempt to ascertain (or verify) the contents of the package by examining accompanying documentation.<sup>2</sup> If the package arrived without accompanying documentation or if the documentation is damaged or possibly contaminated, the inspector shall use whatever other means are appropriate to establish what materials should be found in the package, in what form the materials should be found, and how the materials were packaged. **If leaking or suspect package's contents cannot be determined, the package should not be examined until the shipper can be contacted.** Whenever a competent person must manage a situation involving a leaking or suspect package with unknown contents, the competent person shall promptly inform the APS by calling either a Floor Coordinator or the APS ES&H Coordinator.
6. If possible and not already done, the person inspecting the package shall consult with the shipper or user about the condition of the package. If neither unnecessary delay or an increase in the risk of negative consequences would result, the inspector shall invite the user to be present when the package is opened.
7. Unless the individual already knows the Argonne requirements applicable to possible hazardous wastes, the person inspecting the package shall contact NWM-Waste Management to request guidance on the disposal of contaminated packaging material and the materials contained therein.
8. After making appropriate arrangements for the disposal of the contents of the package and its contents, the inspector and other interested persons shall don personal protective equipment appropriate for the material in its expected form and then open package and examine its contents.
9. If the integrity of the inner packaging appears not to have been breached and the contents appear intact, the contents may be released to the user. If the packaging shows only signs of physical damage or water damage that could be mistaken for leakage, the packaging can be treated as common waste. However, if the packaging shows evidence suggesting contamination by another substance, the inspector should seek guidance from the APS ES&H Coordinator or NWM-Waste Management. Until such guidance is issued, the packaging should be handled as hazardous waste and stored in a Satellite Accumulation Area in a container bearing the words "Suspect Hazardous Waste." The packaging should not be intermingled with other wastes.

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<sup>2</sup> Shipments of commercially manufactured reagents should be accompanied by material safety data sheets.

10. If the packaging and its contents have been compromised, the packaging shall be treated as hazardous waste following guidance issued by NWM-Waste Management. Any attempt to recover hazardous materials shall be performed only after a safety review appropriate to the hazards and apparent severity of risk. No recovery shall be attempted unless hazards have been characterized, adequate hazard controls are in place, and Beamline management has authorized the work to proceed. Where required by Argonne policy, written procedures shall be developed before initiating such activities.
11. Beamline management shall consult with the APS ES&H Coordinator to determine whether an incident involving leakage or loss of a material requires investigation and whether reporting requirements apply.