

Dangerous Goods May Not Be

Most are aware that materials that pose a *hazard during transport*, such as flammable paint or lithium batteries, are considered "Dangerous Goods" - "DG" for short.

It's important to know that if you don't identify DG, pack / label DG properly, or do not train your shipping staff *, you may be subject to fines from the Department of Transportation. If you have any DG training needs or want your DG program audited, drop us a note. But let's look at 4 scenarios.

1) What if you distribute a calibration standard that states it contain 5 parts-per-million Uranium in water; everyone knows Uranium is radioactive, and Radioactive materials ship as a Class 7 DG, right? But your supplier does not ship it that way to you; what should you do?

In the case of Radioactives, it's complex, but it boils down to "how radioactive is it?" The DOT publishes lists of activity by isotope; a bunch of bananas may be more radioactive than 5 ppm Uranium (bananas contain *naturally-occurring radioactive Potassium*).

2) Let's say you ship various paints; most of the paints are flammable, and labeled and packaged properly as such. Someone has the idea - to simplify things - you will ship *all* paints as DG, with the same flammable packaging / labeling. The thought is that "over classification" is not a big deal. But as an FAA inspector said to me, "*We don't want you to 'under classify,' we don't want you to 'over classify,' we just want you to 'classify.'*"

Here it is vital that **only** DG are packaged and marked as such. You do not want an airport shut down for a non-DG paint spill!


3) Suppose you ship products from other suppliers, and one of the products they send to you contains a liquid. They do not indicate it's a DG, and claim the liquid is proprietary, so they won't identify it. What do you do?

*Training does **not apply** to those who **purchase** DG packaging!

If there's a hint it may be DG (e.g. one breaks and smells of acetone, a flammable liquid) contact the supplier. However, if it appears innocuous (i.e. a carpenter's 'bubble level') then ship the same way your supplier did. The DOT has provisions where - if using proper judgment - you would not be cited for something like this, if in fact it was a DG, but you had no inkling it was.

4) You ship chemicals to customers, and a customer wants to return something. They do not have training in DG shipping, so legally they can't ship it. Or can they?

Here it depends on who the "shipper" is. We will assume packaging is either unopened (ideally) or not damaged. If the customer has the proper packaging tape to re-seal the box, here's what you do. If they agree, you send them the return shipping label, with all appropriate information. You become the shipper; the DOT regulations are satisfied.

This is exactly how laptop Lithium batteries (a DG) are recycled - the cardboard box and return label meet the DG requirements, and the label / box supplier is the "Shipper" as far as the DOT is concerned. 

App Corner - NIOSH Lift Calcs

Since I've been teaching classes like "*Smart Device and the EHS Professional*" for a decade or so, it seems prudent to add a section of the myriad Apps for EHS. Maybe "myriad" is not correct; we are not as big - nor as lucrative - an audience, compared to say those who play "Angry Birds."

That said, there are good Apps out there for iOS; there may be similar for Android users.

One useful App is the *NIOSH Lift Index* from Scott Stevens: a simplified version of the *NIOSH Lifting Equation*. One still has to know the parameters; but its much easier than a 164-page document! 