



## Safety Awareness for Field Crews

# Metal Pesticide Canisters

### Marine Debris Hazards

Marine debris may pose either physical or chemical hazards to personnel and/or wildlife, including the presence of sharp objects, trip/slip hazards, and hazardous materials.

### Pesticide Canisters

Aluminum pesticide canisters were discovered by marine debris cleanup crews working on Afognak Island in March, 2013. Similar canisters have previously been found on beaches in Washington State, Oregon, British Columbia and Southeast Alaska. These canisters are typically about 10 inches tall.

### Aluminum Phosphide Pesticide

Canisters may contain tablets, pellets or residual powder containing aluminum phosphide, a potent pesticide. The tablets or pellets react with water or water vapor in air, generating toxic fumes (phosphine gas). When used as intended as a fumigant, this gas is used to kill insects, rats and other pests. Canisters are placed in the holds of ships carrying grains such as barley, canola, corn, oats, soybeans, and wheat. Fumigation of a large hold takes days to weeks, thus at-sea treatment is common, and it is possible that we will find these discarded canisters in locations along major shipping routes.

### Open, Empty Canisters

Canisters that lack a lid and that do not contain pellets/tablets should generally be safe, as the pesticide reacts fairly quickly when exposed to air or water, leaving behind a powdery residue.

### Moving Canisters with Cap/Lid

If the canister needs to be moved (e.g., to prevent expected re-wash out to sea or to protect a sensitive habitat), proceed with caution.

Washington Department of Ecology



## DO NOT OPEN CANISTERS WITH CAP/LID!

Doing so could pose a health hazard, as the phosphine gas is toxic if inhaled. Also be aware that the gas is flammable.

Provided the lid stays in place during transport, the risk to the handler should be low. Wear disposable gloves, if possible stay upwind of the canister when moving it, and do not hold it close to your face and nose. Wash hands well after handling, particularly before eating, drinking, etc.

### Respect Property Ownership

Do not move a canister to non-Service lands, without specific permission to do so from the land owner/manager.

### Document

If you find these canisters during field operations, please note the location (coordinates or map location) and quantity. Take photographs if possible.

If you can safely read a product label, record the product name. If the canister has a readable label, the product name may provide clues as to whether it contains an aluminum phosphide pesticide. Many (but not all) of the products will have phrases like “phos”, “fume”, or “gas” as part of the product name.

### Report

Report all observations so we can begin to understand the scope of the problem, and to contact other response agencies if warranted. Reports go to:

**Phil Johnson**  
(907) 786-3483 / [philip\\_johnson@fws.gov](mailto:philip_johnson@fws.gov)