### 3745-66-77 SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES- CONTAINERS

<table>
<thead>
<tr>
<th></th>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
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<tbody>
<tr>
<td>1</td>
<td>Has the owner or operator ensured that incompatible wastes, or incompatible wastes and materials (see appendix to rule 3745-66-99 of the OAC below for examples), is not placed in the same container, unless they have complied with paragraph (B) of rule 3745-65-17 of the Administrative Code [3745-66-77(A)]</td>
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<td>2</td>
<td>Has the owner or operator ensured that hazardous waste shall not be placed in an unwashed container that previously held an incompatible waste (see the appendix to rule 3745-66-99 of the Administrative Code for examples), unless they have complied with paragraph (B) of rule 3745-65-17 of the Administrative Code. [3745-66-77(B)]</td>
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<td>3</td>
<td>Has the owner or operator ensured that the storage container(s) holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments shall be separated from the other materials or protected from the other materials by means of a dike, berm, wall, or other device. [3745-66-77(C)]</td>
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**Comment:** The purpose of this rule is to prevent fires, explosions, gaseous emissions, leaching, or other discharge of hazardous waste or hazardous waste constituents which could result from the mixing of incompatible wastes or materials if containers break or leak.

### Appendix to 3745-66-99

**Examples of Potentially Incompatible Waste**

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as: heat or pressure; fire or explosion; violent reaction, toxic dusts, mists, fumes, or gases; or flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a group A material with a group B material may have the potential consequence as noted.
### Incompatible Waste Checklist

**Group 1**

**Group 1-A**
- Acetylene sludge
- Alkaline caustic liquids
- Alkaline cleaner
- Alkaline corrosive liquids
- Alkaline corrosive battery fluid
- Caustic waste water
- Lime sludge and other corrosive alkalies
- Lime waste water
- Lime and water
- Spent caustic

**Group 1-B**
- Acid sludge
- Acid and water
- Battery acid
- Chemical cleaners
- Electrolyte acid
- Etching acid liquid or solvent
- Pickling liquor and other corrosive acids
- Spent acid
- Spent mixed acid
- Spent sulfuric acid
- Potential consequences: heat generation; violent reaction.

**Group 2**

**Group 2-A**
- Aluminum
- Beryllium
- Calcium
- Lithium
- Magnesium
- Potassium
- Sodium
- Zinc powder
- Other reactive metals and metal hydrides

**Group 2-B**
- Any waste in Group 1-A or 1-B
- Potential consequences: fire or explosion; generation of flammable hydrogen gas.

**Group 3**

**Group 3-A**
- Alcohols
- Water

**Group 3-B**
- Any concentrated waste in Groups 1-A or 1-B
- Calcium
- Lithium
- Metal hydrides
- Potassium
- SO2Cl2, SOCl2, PCI3, CH3SiCl3
- Other water-reactive waste
- Potential consequences: fire, explosion, or heat generation; generation of flammable or toxic gases.

**Group 4**

**Group 4-A**
- Alcohols
- Aldehydes
- Halogenated hydrocarbons
- Nitrated hydrocarbons
- Unsaturated hydrocarbons
- Other reactive organic compounds and solvents

**Group 4-B**
- Concentrated Group 1-A or 1-B wastes
- Potential consequences: fire, explosion, or violent reaction.

**Group 5**

**Group 5-A**
- Spent cyanide and sulfide solutions

**Group 5-B**
- Group 1-B wastes
- Potential consequences: generation of toxic hydrogen cyanide or hydrogen sulfide gas.

**Group 6**

**Group 6-A**
- Chlorates
- Chlorine
- Chlorite
- Chronic acid
- Hypochlorites
- Nitrates
- Nitric acid, fuming
- Perchlorates
- Permanganates
- Peroxides
- Other strong oxidizers

**Group 6-B**
- Acetic acid and other organic acids
- Concentrated mineral acids
- Group 2-A wastes
- Group 4-A wastes
- Other flammable and combustible wastes
- Potential consequences: fire, explosion, or violent reaction.