DISPOSING OF PESTICIDE

Resource ID#: 2788

Disposing of pesticide containers

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INTRODUCTION

Every pesticide user, whether for agricultural production or for application around the home grounds, is faced with the question of what to do with empty pesticide containers. The purpose of this booklet is to provide some practical guidance for the safe handling and disposal of such containers.

The suggestions are based on practical experience and information garnered by researchers, operators, and professionals who are familiar with the problem. This publication is not intended to supersede any manufacturer's specific instructions, or to supplant specific regulations enforced by local or Federal authorities. Check the label of each product for specific instructions from the manufacturer, and check with local authorities for existing disposal regulations. Where such regulations exist, this booklet should be considered as supplementary information only.

Containers of pesticides sold for household and garden use are usually disposed of satisfactorily through regular trash collection, provided that liquid containers have been rinsed and drained in accordance with the manufacturer's recommendation on the label and in compliance with local codes and regulations. A practical concern for the safety and well-being of children and pets dictates that used containers must **never** be used to store other substances around the home or left where contact with them cannot be prevented.

By following the suggestions contained in this booklet, one can achieve a practical approach to safety which will greatly reduce the possible hazards associated with empty pesticide containers. No guarantee or warranty is expressed or implied that complete decontamination can be attained. When there is question or doubt concerning a specific product, **consult the manufacturer.**

(The following information is drawn from recommendations compiled by the Subcommittee on Container Disposal & Specifications of the Good Operating Practices Committee of the National Agricultural Chemicals Association.)

HAZARD POTENTIALS

The container and label serve to provide convenient amounts of a specific chemical, accompanied by instructions for its proper use and storage until the contents have been exhausted. For this reason it is imperative that all such chemicals be **kept in the original container** and stored in a locked area until actually used. Proper disposal of such empty containers is the final act in safe usage!

Most pesticide chemicals are packed in two general types of containers:

A. COMBUSTIBLE
B. NON-COMBUSTIBLE

IMPORTANT — UNDER NO CIRCUMSTANCES WHATSOEVER SHOULD ANY EMPTY CONTAINER BE ABANDONED OR BE ALLOWED TO ACCUMULATE IN ANY AREA ACCESSIBLE TO UNAUTHORIZED PERSONS. PESTICIDE RESIDUES WHICH MAY REMAIN IN THESE CONTAINERS MAY POSE A HAZARD TO CHILDREN, PETS, LIVESTOCK, AND WILDLIFE, AS WELL AS TO ADULTS WHO MAY CONVERT THE CONTAINERS TO OTHER USES.

AT ALL TIMES — AVOID SKIN CONTACT OR BREATHING OF DUST OR VAPORS.

WHEN BURNING CONTAINERS — STAY WELL AWAY FROM SMOKE OR FUMES.

CLEAN UP — WASH THOROUGHLY WITH SOAP AND WATER BEFORE EATING OR SMOKING, AND ALWAYS AT THE END OF A WORKDAY.

COMBUSTIBLE CONTAINERS

1. These are defined as containers which can be completely destroyed by burning. Included in this category are paper bags, fiber drums, burlap bags, cloth bags, cardboard boxes, fiber boxes, wooden boxes, and plastic bags.

2. The following procedures for disposing of empty combustible containers of this type are recommended. They are listed in the order of preference, procedure A being the most desirable.

A. Burn the empty containers in an open fire at the site of use if such is permitted by local authorities.

B. Burn the empty containers in a supervised public or private dump. Notify the supervisor of the nature of the containers so that necessary precautions may be taken.

C. Burn the empty containers in a commercial incinerator as soon as possible after they have been emptied.

D. If unable to burn empty containers in any manner, thoroughly crush them and bury the pieces where permitted by state or local authorities.

SPECIAL NOTE CONCERNING EMPTY WEED KILLER CONTAINERS

3. Some weed killers when burned emit vapors which may cause damage to nearby vegetation. Containers of these products should not be burned but should be disposed of by the alternate method of burying in the absence of specific labeling directions. Manufacturers of weed killers should be consulted for specific instructions regarding disposal of their products and/or containers by burning.

NON-COMBUSTIBLE CONTAINERS

1. Types of containers in this category are those made of glass or metal. In general, these containers are used for liquid pesticides.

2. Non-combustible containers containing liquids should be rinsed and drained immediately after emptying to conserve chemicals, stop unnecessary pollution, and reduce handling and transportation hazards during disposal.

3. The following procedures for handling, rinsing, and disposing of empty non-combustible pesticide containers are recommended. Each step must be followed to ensure safety in the disposal of the container.

A. **It is essential** that personnel engaged in the handling and disposal of empty pesticide containers be aware of the potential hazards associated with the process. These hazards may be considered as those due to both contact with the residue in the container and/or contact with the rinse solution.

B. **All personnel** handling empty pesticide containers should wear protective clothing. Protective clothing should include appropriate gloves and footwear, freshly laundered cap and coveralls, and face shield or goggles.

The **Rinse and Drain Procedure** is detailed on page 9.

The **Jet Rinse Procedure** is detailed on page 10.

Disposal of Containers is outlined on page 11.

RINSE AND DRAIN PROCEDURE

When emptying a liquid pesticide from a container, the flow will normally subside to drops as the container becomes empty. **Continue draining for 30 seconds** after drops commence.

IMPORTANT STEPS IN THE PROCECURE!

Rinsing

Add the correct amount of rinse solution (water or the designated spray carrier) as follows:

Container Size	**Amount of rinse solution needed**
Less than 1 Gal.	One-fourth container volume
1 Gallon	1 quart
5 Gallon	1 gallon
30 and 55 Gall.	5 gallon

Replace closure.

Shake container or roll and tumble to get rinse on all interior areas.

Draining

Drain into sprayer or mix tank (continue 30 seconds after drops start).

REPEAT THE ABOVE STEPS FOR TOTAL OF 3 RINSES.

1 Gal. and 5 Gal. steel containers should be punctured before draining the 3rd rinse.

It is recommended that the container be punctured in the top near the pour spout to allow for complete drainage of the **third rinse.** The bead which seals the top of the container to the sidewall forms a built-in trap which holds several grams of product and/or rinse material. **Puncturing** will allow complete drainage of the **final rinse.**

All other containers except 1 and 5 gallon steel. Do not puncture. Replace closures and **secure tightly in the 30 and 55 gallon steel containers.**

JET RINSE PROCEDURE

The Jet Rinse and Drain Procedure is a system whereby the rinse (water or designated spray carrier) is sprayed into the container under pressure and allowed to drain into the spray tank. See diagram.

1. The Jet Rinse System can be constructed with the versatility to rinse all sizes of empty containers which can be lifted into rinsing position over the spray nozzle. Rinse solution is held
allowed to drain into the mix or spray tank prior to spraying the next rinse into the container.

3. To permit containers maximum drainage, it is recommended that containers such as steel 1 gal. - 5 gal. containers be punctured after emptying and prior to mounting over rinse nozzle.

4. After the third rinse and drain, large containers

DISPOSAL OF TRIPLE-RINSED OR JET-RINSED CONTAINERS

1. **Preferred Disposal**

A. **Plastic Containers:** Where permitted, burn, as described in combustible containers.

B. **Glass Containers:** Break or crush into large container (such as a 55 gal. open headed drum with cover) and recycle for scrap to a glass melting plant.

C. **Steel 1 gal. - 5 gal. Containers:** Crush and recycle for scrap to a steel melting plant.

D. **Larger Steel Containers — 30 and 55 gal.:** Recycle to an approved drum reconditioner (check with State Department of Agriculture for list).
OR
Recycle as scrap into a steel melting plant.

2. If preferred disposal cannot be accomplished, container should be crushed and/or buried at an approved dump site.

SAFETY EDUCATION

Safety in the use and storage of pesticides results from the right combination of attitudes and actions. The job isn't done right until you have disposed of the empty container in a safe way as described in this booklet.

The industry recognizes a continuing need for education and reeducation in the basic steps to safety for those who use pesticides to protect agricultural production, and for those who use them to protect the home and surroundings.

The National Agricultural Chemicals Association has prepared a number of visual aids and materials for use by individuals and groups in promoting safety on the farm and around the home.

Individual copies of the printed materials are available in packet form and may be obtained for use in planning local community safety programs. Scout troops, 4-H Clubs, FFA Chapters and Garden Clubs will find that such a program will prove to be helpful in planning for a meeting program or community activity.

For a **free** packet of information write:
Safety Information Packet
NACA
1155 15th St. N.W.
Washington, D.C. 20005

FOLLOW THIS RINSE AND DRAIN PROCEDURE FOR PESTICIDE CONTAINERS

1

Empty container into spray tank. Then drain in vertical position for 30 seconds.

2

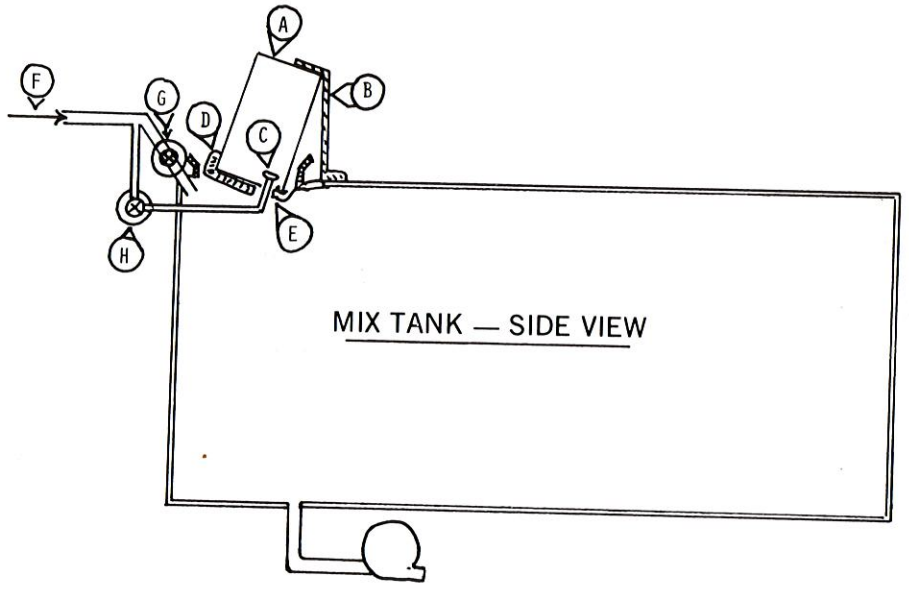
Add a measured amount of rinse water (or other dilutent) so container is 1/4 to 1/5 full. For example, one quart in a one-gallon container.

3

Rinse container thoroughly, pour into tank, and drain 30 sec. Repeat three times. Puncture container before final drain.

4

Crush pesticide container immediately. Sell as scrap for recycling or bury. Do not reuse.



MIX TANK — SIDE VIEW

MIXING TANK OUTFITTED WITH JET RINSE UNIT

A — 5 Gal. Container
B — Container Hold-Down Bar
C — Rinse Nozzle
D — Container Rinse Cradle
E — Drain Tool Puncture in Container
F — *Water Inlet Under Pressure
G — Mix Tank *Water Fill Valve
H — Rinse Valve (Delayed Close Type — To Permit Preset Quantity of Water to Flow Through)

*Water or other liquid used as spray carrier.


BEFORE USING ANY
PESTICIDE
STOP
READ THE LABEL