Waste Pesticide Program



Washington State Department of Agriculture

Obsolete Pesticide Disposal

- WSDA offers a FREE pesticide disposal program
- Reduces the amount of unusable pesticides in storage
- Provides education and assistance
- On-farm burning or burial has been prohibited for over 30 years





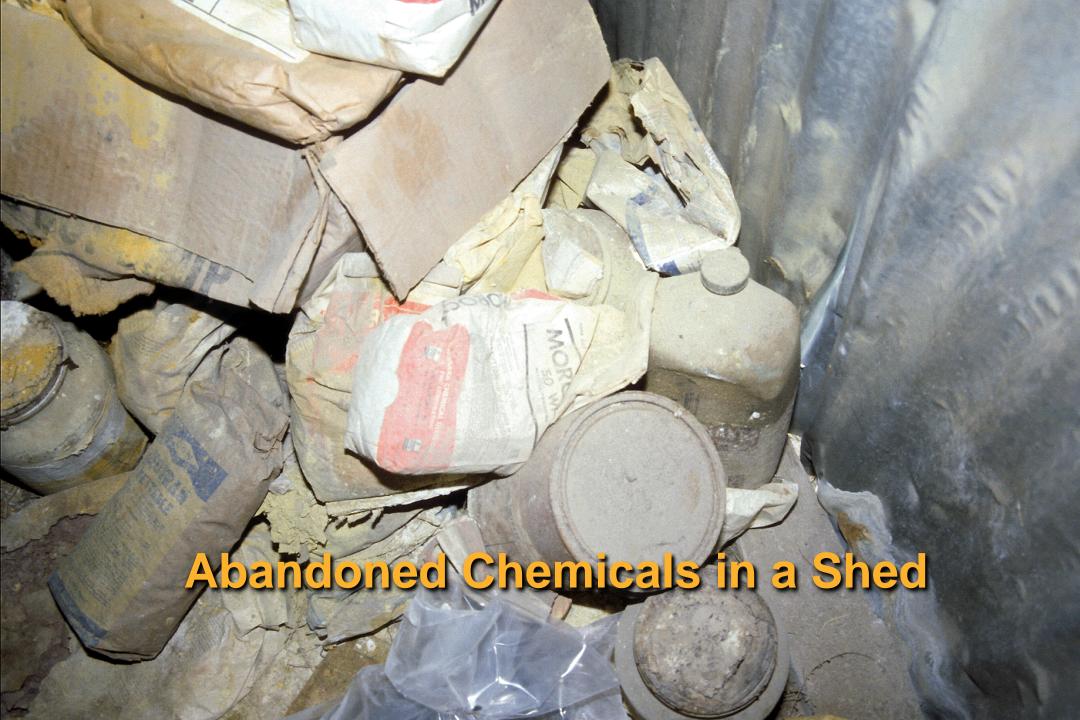
PESTICIDE

STORAGE

KEEP OUT

POISON









Product Stewardship

Waste Minimization

CAUTION

PESTICIDE STORAGE



DANGER

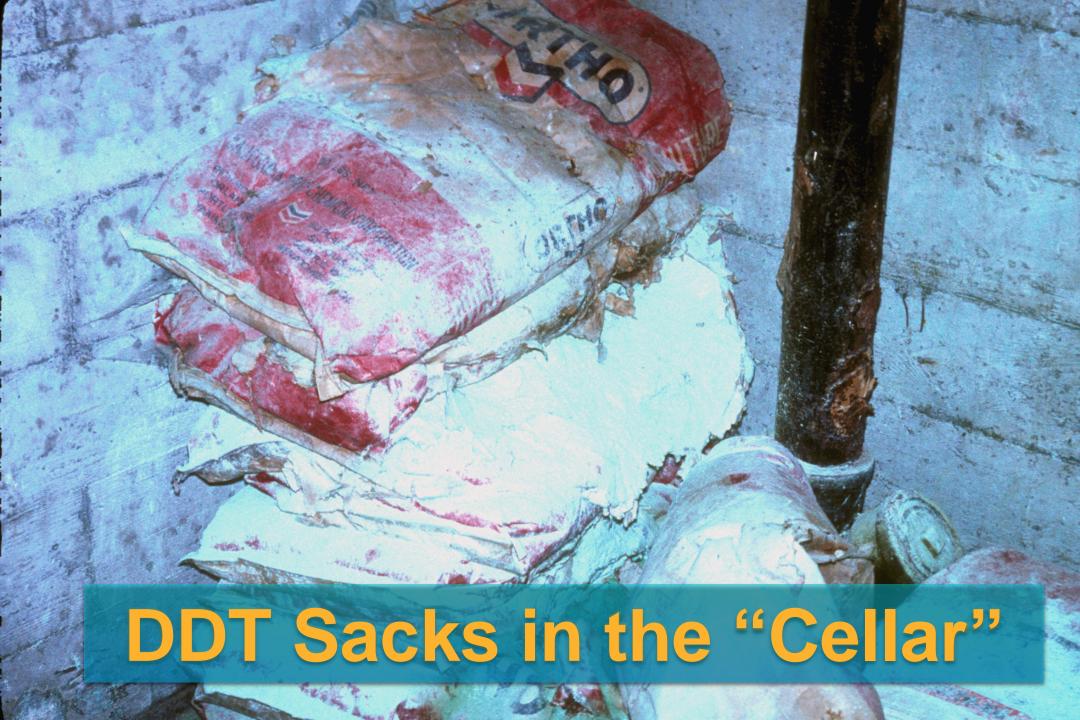
HAZARDOUS WASTE STORAGE

Regulatory Authority

- Product —
 Department of
 Agriculture (WSDA)
- Waste –
 Department of Ecology





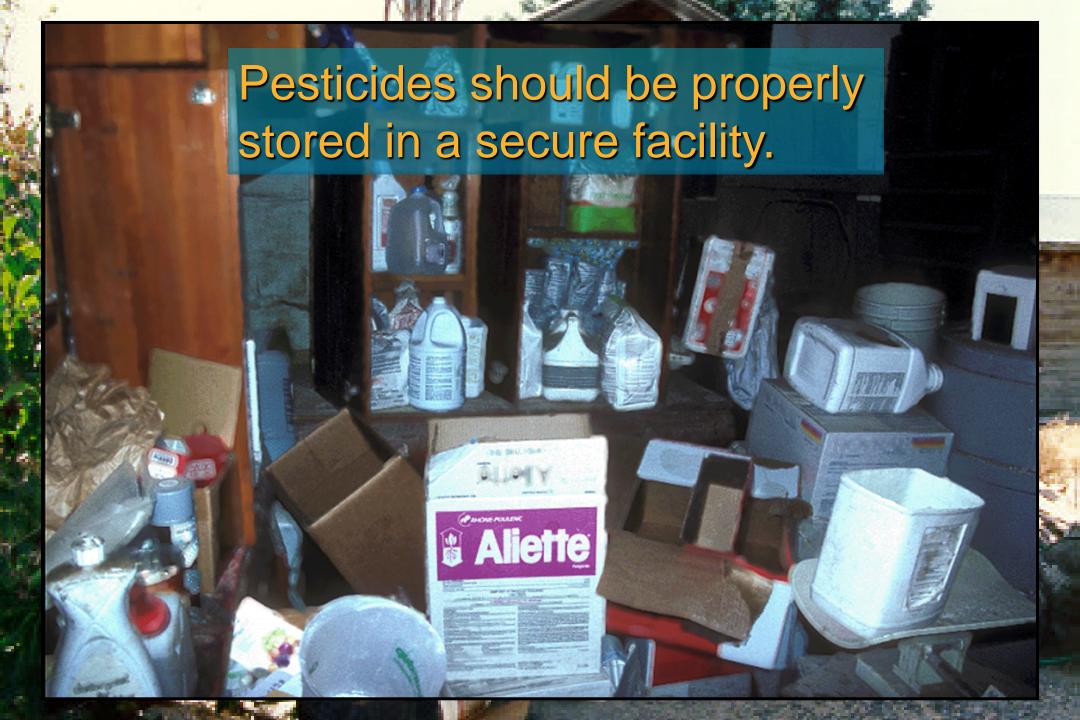


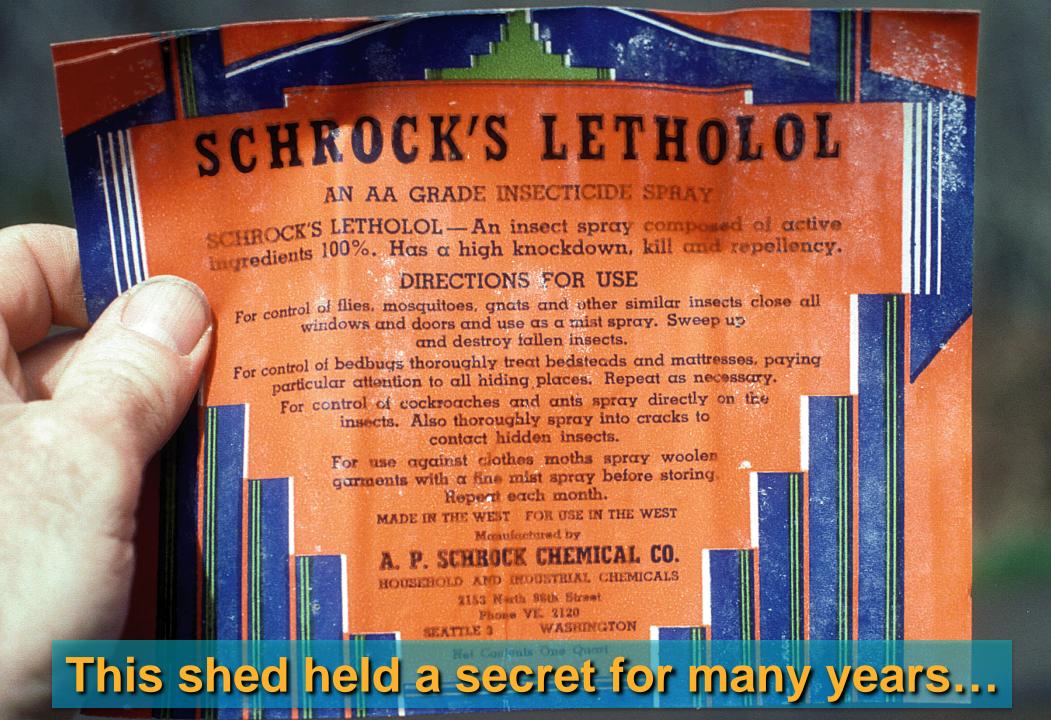




Why we continue with the program







Pesticide Waste Stream

- Unusable product
- Unwanted product
- Excess tank mix

- Spill residue
- Unrinsed containers
- Washwater
- Rinsates



What is a Waste Pesticide?

- Pesticide that cannot be used due to
 - Canceled or suspended
 - Product deterioration
 - Label deterioration
 - Ingredients not identifiable
 - Not in original container
- A pesticide you do not want to use





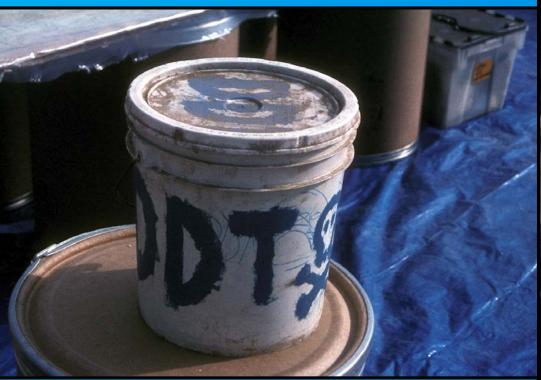


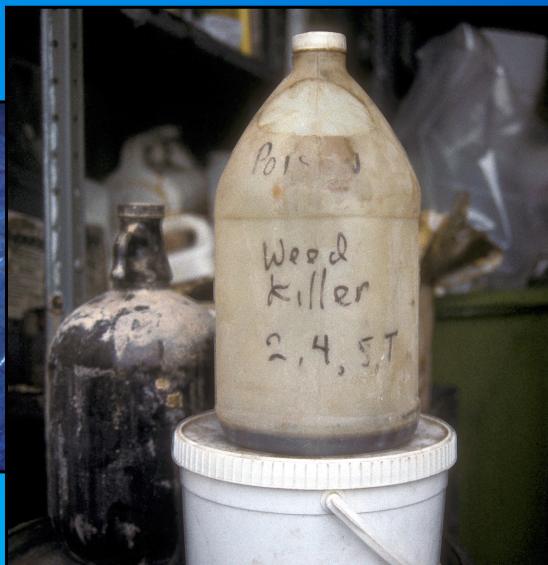






Not in Original Container







Waste Minimization

- Buy only what is needed
- Proper storage
- Check inventory and rotate stock
- Plan ahead mix amount needed
- Use care mixing and loading
- Rinse containers at time of mixing



Waste Minimization

- Good calibration = no left over mix
- Sequence applications for less rinsing
- Rinse & and wash equipment in field
- Use mix / load pad at permanent site
- Use rinse and washwater as product



Assess Your Operation

- Think Waste
 - Identify weak points
 - Fix them
 - Waste is expensive



Good Stewardship Eliminates Waste





Pesticide Stewardship: Storage

- Store pesticides separately
- Eliminate ALL floor drains
- Keep product off of the floor
 - Use pallets for sacks and large containers
- Do Not store liquids above dries
- Clean spills as they are discovered
- Store PPE in a different room!







Pesticide Storage: Security

- Keep storage area locked
 - Access ONLY to mixers \ applicators
- Maintain a current inventory record
 - Base inventory during winter
 - Update purchases and use/disposal
 - Update after spring applications



Do You Have an Inventory?

- Inspect your storage during the winter
 - Deal with leaky or poor containers
 - Review ALL of your products
 - Segregate unusable and unwanted products
 - Group by types: herbicides, insecticides, etc.
 - Create an inventory of "current-use" products
 - Give away or dispose of ALL "non-current"



Storage Facilities

- Contact your local Fire Dept.
 - Compliance with Uniform Fire Code
 - SARA Title III Reporting
- Contact local Building Dept.
 - Compliance with zoning ordinances
- Contact your Neighbors



Good Storage Saves Time and \$\$\$









Pesticide Stewardship:

What to do with Unwanted Pesticides

What to do with Unwanted Pesticides?

WSDA offers a FREE pesticide disposal program.

Burning or burial has been prohibited for over 30 years.



Purpose of Program

Reduce the amount of unusable pesticides in storage

Provide education and technical assistance



History of Program

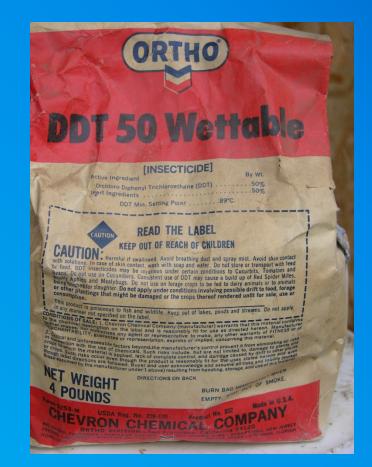
- As of January, 2016
 - 7,931 customers
 - 449 events
 - 3,155,199 pounds collected
 - 398 pounds per customer Avg.



History of Program

Passed the 3 million pound mark at Spokane on Earth Day 2015

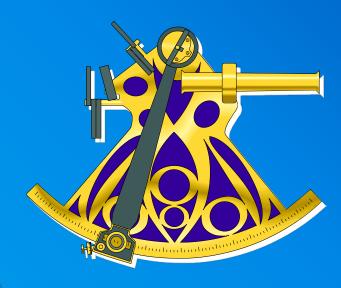
Over 1,000 pounds of DDT collected that day!





Navigating the Program

- Customer
 - Visits WSDA website
 - Submits inventory
 - Transports product to site



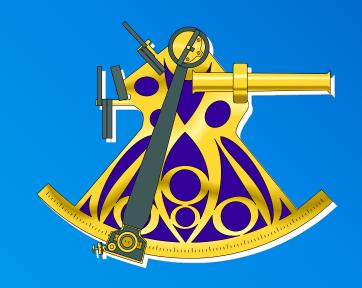
- WSDA becomes owner of pesticide
- Hazardous waste contractor packages, transports and disposes of pesticide



How to Participate

- Visit WSDA Website
 - Submit inventory

OR



- Call or email WSDA to request assistance
- WSDA schedules pesticide collection events based upon customer demand.





Washington State Department of Agriculture

A+ | a- | Print

enter search terms

Search

Home / pestfert / pesticides / wastepesticide.aspx « you are HERE

WSDA Home	
Pesticide Management	
Compliance Activities	
Enforcement Actions	
Laws & Rules	
Licensing and Education	H
Pesticide Sensitive Registry	
Pesticide Storage	
Pesticide Registration	
Waste Pesticide Program	
Worker Protection	

Page updated/verified: Nov 19, 2014

Waste Pesticide Program

Mission Statement: To collect and properly dispose of cancelled, suspended or otherwise unusable pesticides and minimize further accumulation through education and outreach.

- Waste Pesticide Program Overview
- Apply for Free Pesticide Disposal
- View or Print out Blank Pesticide Inventory Form
- View or Print out Pesticide Inventory Instructions and sample inventory form
- Frequently Asked Questions
- Contact Information

Photo Gallery

- Waste Pesticide Collection Events
- Unsafe / Illegal Storage
- Illegal Dumping
- Plastic Pesticide Container Recycling

Links and Other Resources

- Empty Plastic Pesticide Container Recycling Program
- Hazardous Waste and Toxics Reduction and Prevention
- Earth 911 website
- Ag Container Recycling Council(ACRC)

APPLY for Free Pesticide

<u>Disposal</u>

Results of 2012-2013 Pesticide
Collections

Amount of Pesticide Products

Collected Per Year

Waste Pesticide Identification
& Disposal Activity Report:

1988 - 2007

Why Participate?
Find out in
AENews On-line

Over 2.9 million pounds of unusable pesticides have been collected from over 7,600 customers since 1988.

Thank you for your interest in proper pesticide disposal!

www.agr.wa.gov/wastepesticide

Program Anchors

WSDA is the hazardous waste generator

No charge to customers

Paper work is relatively simple



































Top Ten Waste Pesticides

1. 2,4-D

6. Petroleum Oil

2. Dinoseb

7. Parathion

3. Sulfur

8. Captan

4. DDT

9. Pentachlorophenol

5. Malathion

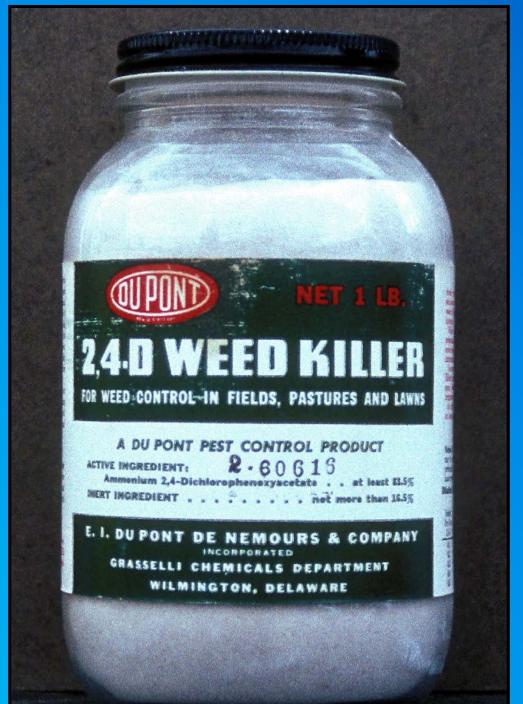
10. Endrin



2,4-D

83.5 % A.I.

A new and promising weed killer.





Dinoseb - the "General Weed Killer"





DDT 50 Wettable

[INSECTICIDE]

Active Ingredient

By Wt.

Dichloro Diphenyl Trichloroethane (DDT)50% Inert Ingredients50%

DDT Min. Setting Point89°C.

READ THE LABEL KEEP OUT OF REACH OF CHILDREN

with solutions. In case of skin contact, wash with soap and water. Do not store or transport with feed or food. DDT insecticides may be injurious under certain conditions to Cucurbits, Tomatoes and Beans. Do not use on Cucumbers. Consistent use of DDT may cause a build up of Red Spider Mites, viscily Aphids and Mealybugs. Do not use on forage crops to be fed to dairy animals or to animals or other plantings that minds that minds are conditions involving possible drift to food, forage or other plantings that minds that minds are conditions involving possible drift for sale, use or or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption

This product is poisonous to fish and wildlife. Keep out of lakes, ponds and streams. Do not apply in any manner not specified in any manner not specified on the label.

IDITIONS OF SALE: 1. Chevron Chemical Company (manufacturer) warrants that this material conforms the chemical description on the label and is reasonably fit for use as directed hereon. Manufacturer makes, nor authorizes any agent or representative to make, any other warranty of FITNESS or of CHANTABILITY, guarantee or representation, express or implied, concerning this material.

chical and unforeseeable factors beyond the manufacturer's control prevent it from eliminating all isks operation with the use of chemicals. Such risks include, but are not limited to, damage to plants and ough label fixes occur even though the product is reasonably fit for the uses stated hereon ose assumed by the manufacturer under 1 above) resulting from handling, storage, and use of this material.

DIRECTIONS ON BACK

BURN BAG MACOUT OF SMOKE.

RON CHEMICAL COMPANY

16 FL. 0Z.

INSECTICIDE

DEODORANT

Stainless .. Fragrant

KILLS FLIES, MOTHS, MOSQUITOES, ANTS, BED BUGS AND MANY OTHER INSECT PESTS

PESTRUYTO DOT

ACTIVATED INSECT KILLER POWDER FORM FOR HOME USE

Flies, Mosquitoes,
Ants, Roaches,
Ticks, Bedbugs, Moths, Lice,
Crickets, Wasps, Silverfish,
Gnats, Fleas, Beetles and
Many Other Insects!

EASY TO USE-SAFE TO USE
Just dust on baseboards,
mouldings, furniture, pipes,

radiators, drains, cracks, window sills, doorways, steps, etc. 3 OUNCE SIZE

B OZ. ECONOMY SIZE 69°





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Apply PEST or an array of the control of the contro

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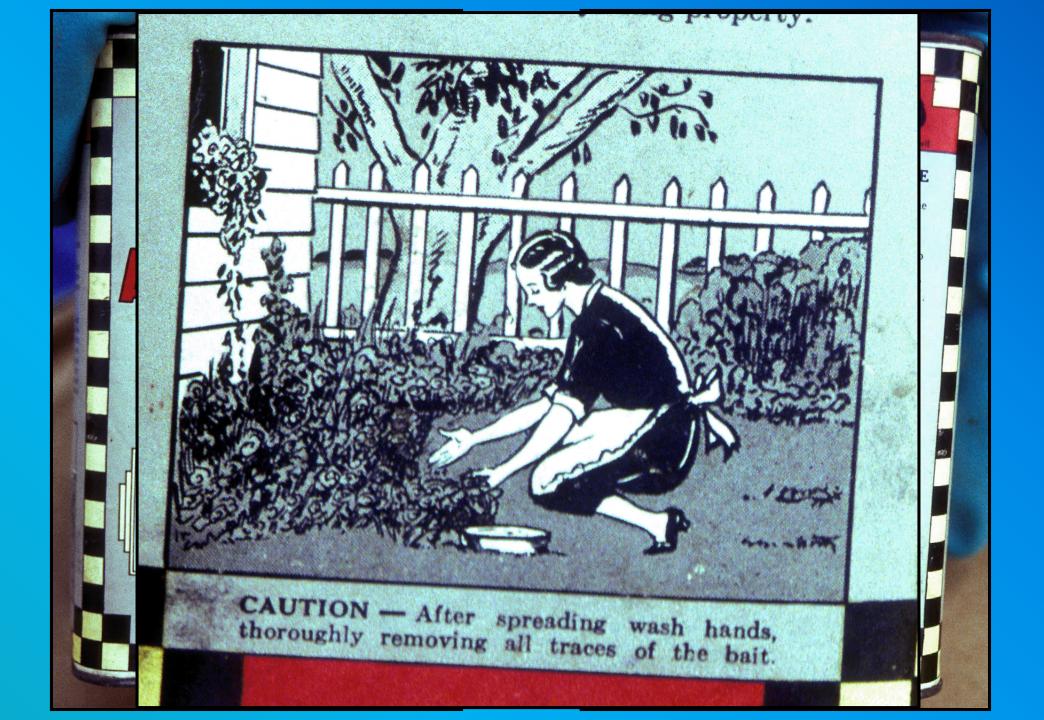
PESTROY
10%

Endrin in a Glass Jug?

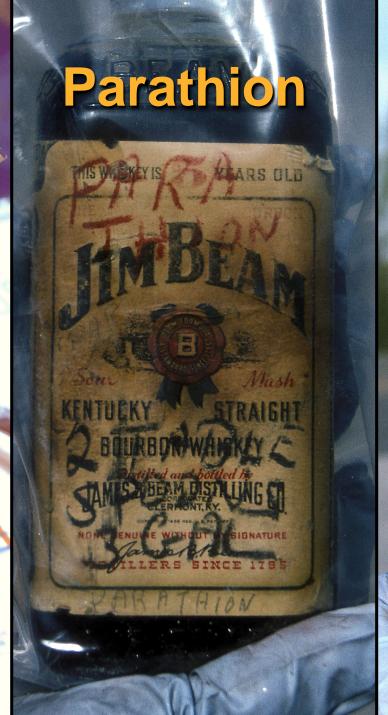
Not a Great Idea!

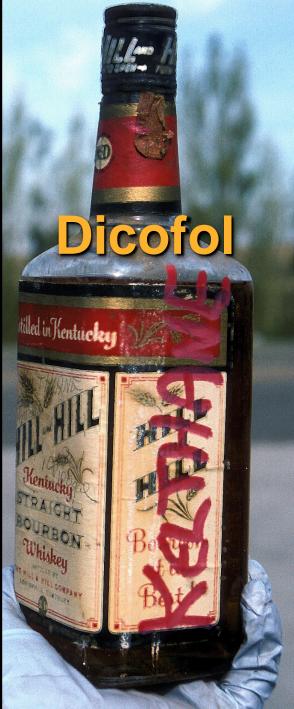
















Pesticide Stewardship:

Empty Container Management

THIS SITE IS USED FOR THE DISPOSAL OF EXTREMELY HARMFUL PESTICIDES AND CONTAINERS

Pouse of you and your family DO NOT SALVA NOT SALVAGE from this area NO TOME NADA

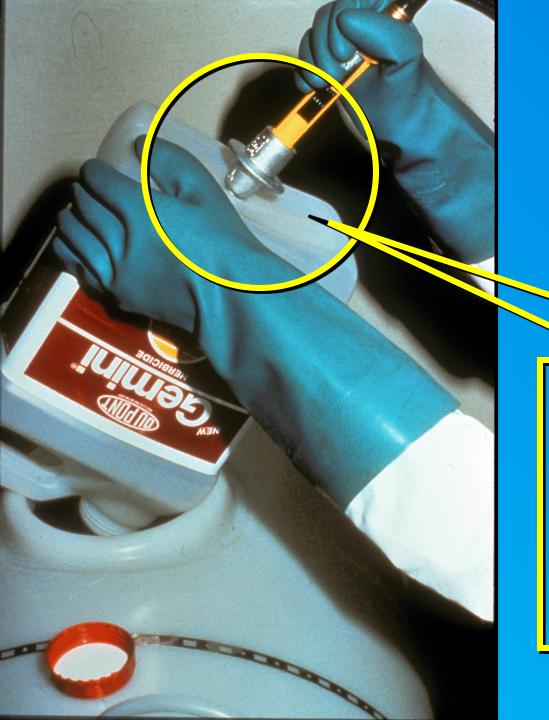
long time ago.



Container Rinsing

- During mixing operation
- Immediately upon emptying
- Pour rinsate into spray tank
- Eliminates hazardous waste





Good Process Poor Technique

Insert power washer on side, near bottom - NOT thru bottom











Containers are chipped for reuse by plastics companies







Products from Recycled Containers



Drain Tile



Pallets



Docks & Piers



Posts



Contacts

Waste Pesticide Collection Program

1 (877) 301-4555, press 5 wastepesticide@agr.wa.gov

Container Recycling / ACRC

Agri-Plas, Inc.

(503) 390-2381

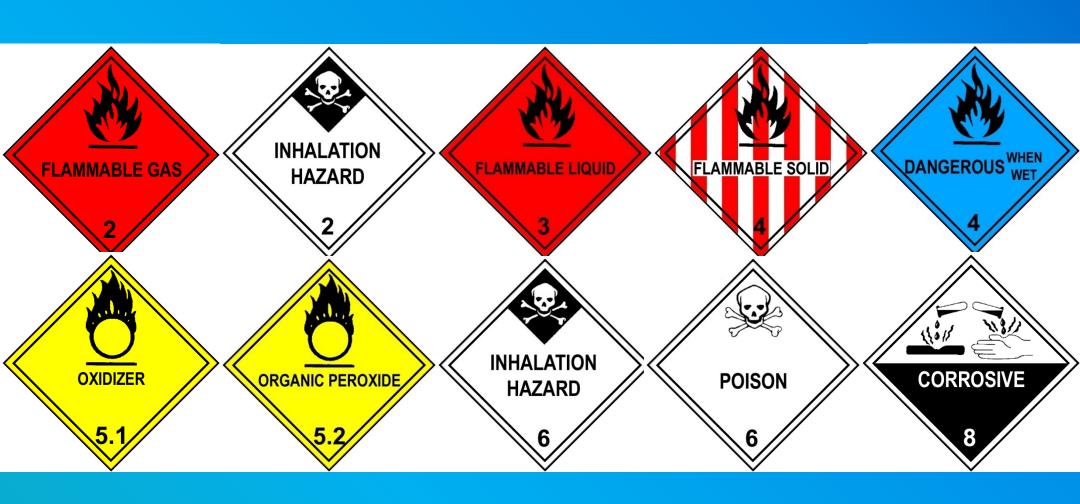
www.agriplasinc.com



Pesticide Stewardship:

What's in That Container?

It is much more than pesticides!



2.1 – Flammable Gas

- Ethylamine
- Methyl Chloride
- Various compressed gases and aerosols with a high percentage of flammable solvents





2.3 – Poison Gas

- Chlorine Gas (also corrosive)
- Methyl Bromide
- Sulfur Dioxide (also corrosive)
- Cyanogen Chloride (also corrosive, reactive)







3 – Flammable Liquids

- Carbon disulfide (also toxic)
- Ethylene dichloride (also toxic)
- Butylamine (also corrosive)
- 1,3-Dichloropropene (also toxic)
- Many pesticides with petroleum distillates, xylenes and other solvents





4.1- Flammable Solid

- Sulfur international shipments
 (US shipments class 9)
- Naphthalene





4.3 - Dangerous When wet

- > Aluminum Phosphide
- Calcium Carbide
- Calcium cyanamide
- Zinc phosphide > 10%
- ➤ Sodium, metallic reacts violently with water to produce a flammable gas 1947 DISPOSAL VIDEO









5.1 - Oxidizer

- Sodium Chlorate
- Sodium nitrate
- Ammonium Nitrate
- Potassium Chlorate (smoke generators)
- Agribrom® Granules & Tablets
- Potassium Permanganate
- Calcium hypochlorite pool chemical
- Hydrogen Peroxide > 20%







Lawsuit Filed Over 2005 Chemical Fire



An explosion and chemical fire that resulted in 2,500 people being evacuated from El Dorado in 2005 is now the subject of a lawsuit in which a hazardous waste facility is accusing two companies of improperly labeling waste containers.

Shortly after the January 2nd, 2005 incident, an Arkansas Department of Environmental Quality report said the reaction was likely a result of

spontaneous ignition of a barrel of **SOCIUM Chlorate** that may have contained other materials that reacted with the chemical at the Teris LLC facility.

Teris, recently acquired by Massachusetts-based Clean Harbors Environmental Services, has filed a federal lawsuit The suit does not ask for a specific dollar amount, but says the incident cost Teris millions of dollars.

The suit says xxxxxx and xxx didn't properly label waste from a sodium chlorate spill in xxxxx, xxx, that was brought to the facility to be incinerated.

No one was hurt in the incident, and the evacuees were let back into their homes the next day.

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5.2 — Organic Peroxide

- Benzoyl Peroxide
- Peroxyacetic Acid (also corrosive)
- Fortunately, very few pesticides are class 5.2



6.1 - Inhalation Hazard

- Chloropicrin
- Arsenic Trichloride
- > Allyl Alcohol







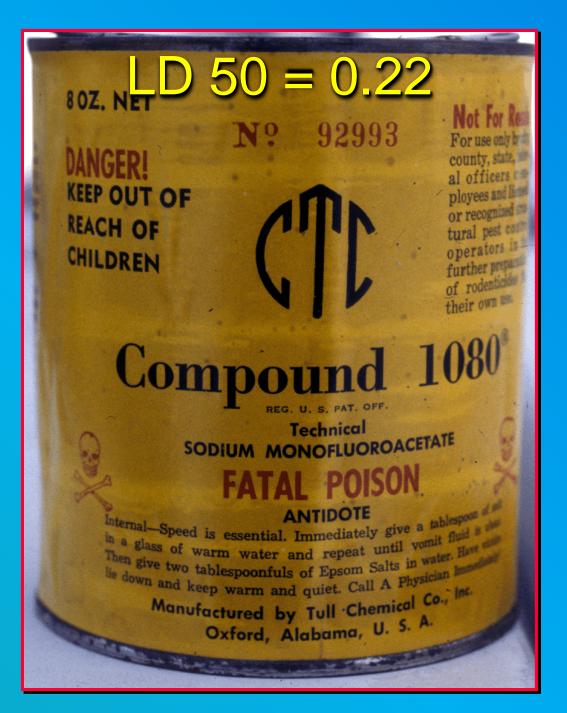
6.1 - Poison

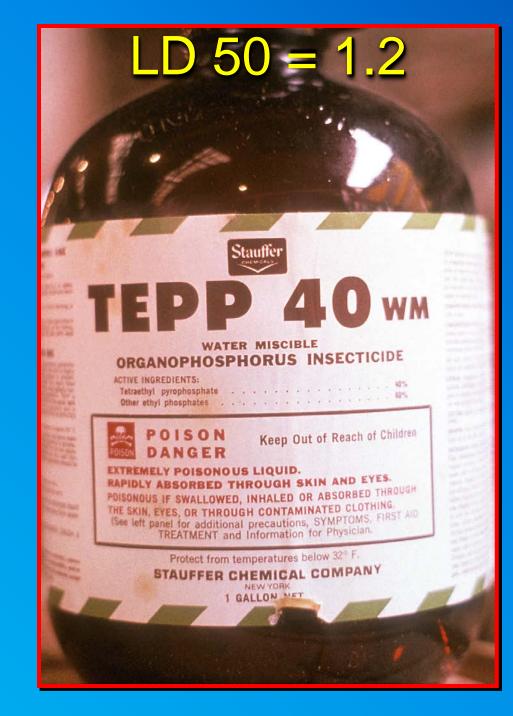
This is the most common hazard class for many pesticides with higher toxicities

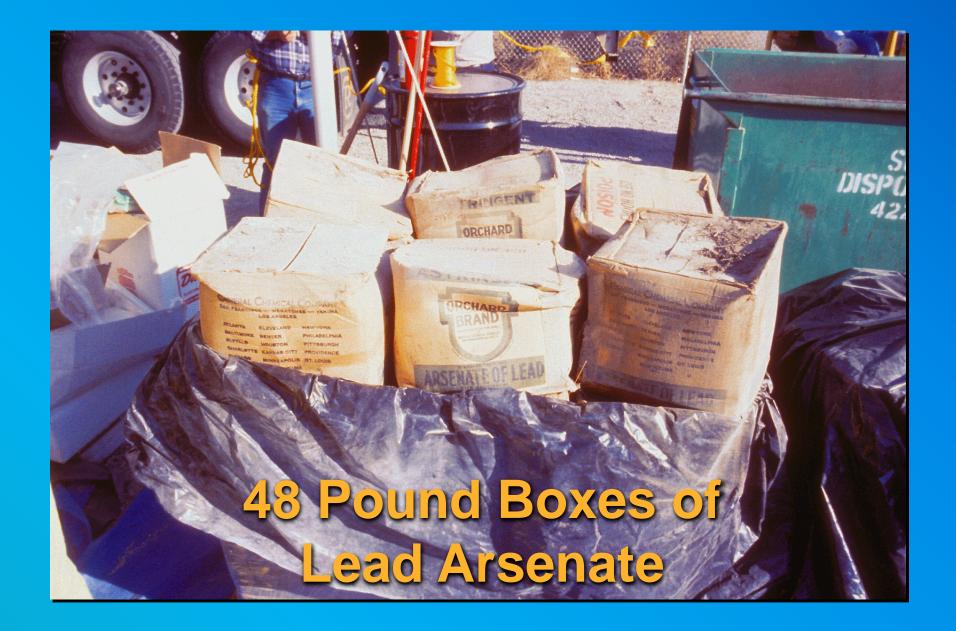


- > Termiticides
- Insecticides (especially older products)



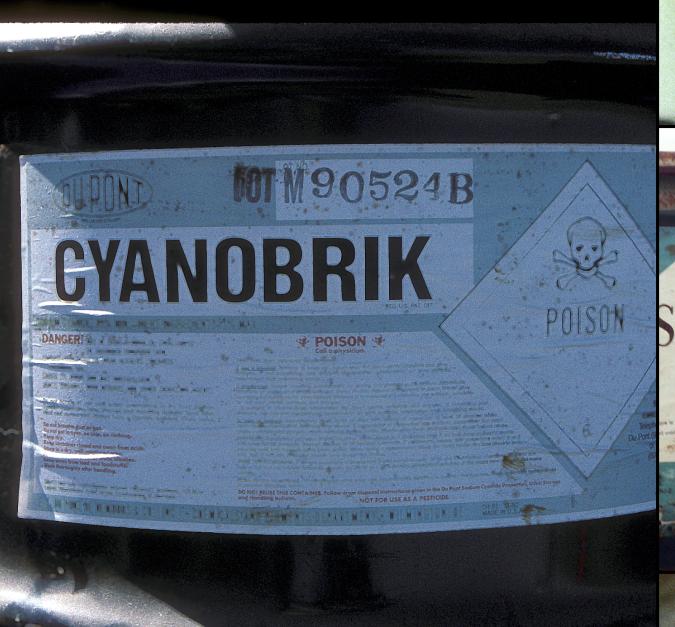






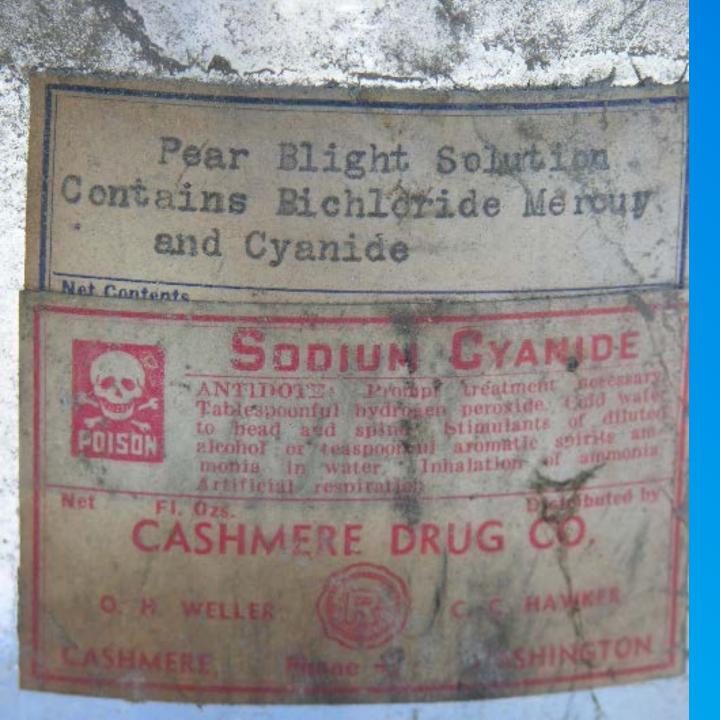












Pear Blight Solution

Sodium Cyanide



Bichloride Mercury

LD50 = 1 mg/kg



DDT 50 Wettable

Active Ingredient [INSECTICIDE]	Ву	Wt.
Dichloro Diphenyl Trichloroethane (DDT) Inert Ingredients		50%
o saicillis	89°C	

DDT Min. Setting Point . .

READ THE LABEL KEEP OUT OF REACH OF CHILDREN

with solutions. In case of skin contact, wash with soap and water. Do not store or transport with feed or food. DDT insecticides may be injurious under certain conditions to Cucurbits, Tomatoes and Beans. Do not use on Cucumbers. Consistent use of DDT may cause a build up of Red Spider Mites, Mostly Aphids and Mealybugs. Do not use on forage crops to be fed to dairy animals or to animals or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.

This product is poisonous to fish and wildlife. Keep out of lakes, ponds and streams. Do not apply in any manner not specific in any manner not specified on the label.

Notitions of sale: 1. Chevron Chemical Company (manufacturer) warrants that this material conforms the chemical description on the label and is reasonably fit for use as directed hereon. Manufacturer, makes, nor authorizes any agent or representative to make, any other warranty of FITNESS or of RCHANTABILITY, guarantee or representation, express or implied, concerning this material.

in citical and unforeseeable factors beyond the manufacturer's control prevent it from eliminating all isks crops to the material is and unforeseeable factors beyond the manufacturer's control prevent it from eliminating all isks crops to the material is chemicals. Such risks include, but are not limited to, damage to plants and though label directions are plants, and the material is applied, lack of complete control, and damage caused by drift to other plants though label directions are though the product is reasonably fit for the uses stated hereon and even though the product is reasonably fit for the uses stated hereon and even though the product is reasonably fit for the uses stated hereon and even though the product is reasonably fit for the uses of this material those assumed by the manufacturer under 1 above) resulting from handling, storage, and use of this material.

DIRECTIONS ON BACK

BURN BAG IMMEDIAT OF SMOKE.

Product No. 832
Product No. 83

RESTRICTED USE PESTICIDE

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Aqueous Emulsion Containing 4 lbs. Parathion Tech. per gal. (1/2 Pt. Parathion F-4 equivalent to 1 lb. Parathion W-25)

POISON

See side panels

for antidote

and precautions

Parathion O, O-diethyl O-p-nitrophenyl phosphorothioate Inert Ingredients:

47.3% 52.7%

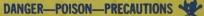
NOT FOR HOME USE



CAN KILL YOU

DANGER

Keep out of reach of children





CAN KILL YOU IF SWALLOWED

This product can kill you if swallowed even in small amounts; spray mist or dust may be fatal if swallowed.

CAN KILL YOU BY SKIN CONTACT

This product can kill you if touched by hands or spilled or splashed on skin, in eyes or on clothing (liquid goes through clothes).

CAN KILL YOU IF BREATHED

This product can kill you if vapors, spray mist or dust are breathed.

STOP! READ THE LABEL

EPA REGISTRATION No. 4581-179

EPA ESTABLISHMENT No. 279-WA-1 NET CONTENTS ONE GALLON SOLD BY

FRESNO, CA

PHILADELPHIA, PA.

8 - Corrosive

- Ethephon
- Metam Sodium
- Sodium hydroxide
- Calcium oxide (quicklime)
- Sodium Hypochlorite (bleach)
- Formaldehyde (also flammable & toxic)
- Various acids and bases







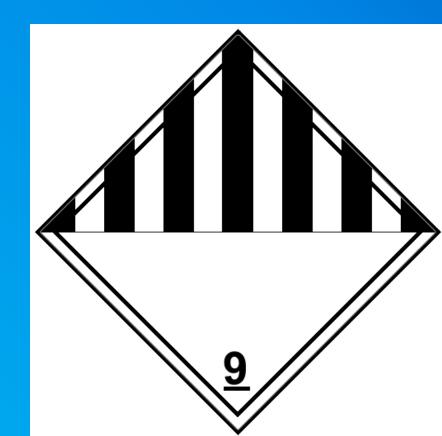




9 – Misc Hazardous Materials

Materials that present a hazard during transportation but do not meet the definitions of hazard classes 1 – 8

- > 2,4-D > 100 pounds
- Captan



It is much more than pesticides!

Remember...

- > There are many hazards beyond toxicity.
- Improper generator packaging and deficient documentation caused two major disposal facility fires.
- As generators and contractors, it is our job to do it right. Take pride in your work!







