

The background of the slide features a large, faint, red circular seal of Rutgers University. The seal contains the text "RUTGERS UNIVERSITY" and "EST. 1823" around a central emblem.

RUTGERS

New Jersey Agricultural
Experiment Station

Pesticide Storage and Spills: Minimizing Risk...

*NJ Shade Tree Federation
98th Annual Conference
October 26, 2023*

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Most pesticides create
some risk of harm to
human health & the
environment...

Pesticide spills
increase that risk...





Arborists in New Jersey must always:

Plan to have a pesticide
spill...

- Storage: best management practices
- Well-trained licensed applicators
- Recordkeeping & reporting

QR Codes to Download Handouts



Slides



Storage
Inventory
& Letter

Spill Report
Card

Pesticide Storage Areas

Properly designed
pesticide storage areas:

- protect product
 - theft-proof
 - fire-proof
 - child-proof
 - environmentally safe
 - minimize risk of spills
-
- Save \$
 - Protect YOU!!!!!!





Restricted Use Pesticides
& their empties with residues
must be locked & secure
when unattended

NJDEP Storage Requirements – any registered pesticide

- Display pesticide storage sign prevailing language(s)
- No storage next to food & animal feed

Separate herbicides
from other products



Source: NJAC 7:30-9.5

Restricted Use Pesticide Storage



locked & secure



Storage of Restricted Use Pesticides Within an Occupied Building

- structurally separate room
- adequately vented



Mechanical Ventilation



Passive
Ventilation

NJ Requirements - Storage Inventory



Applicator or dealer keep

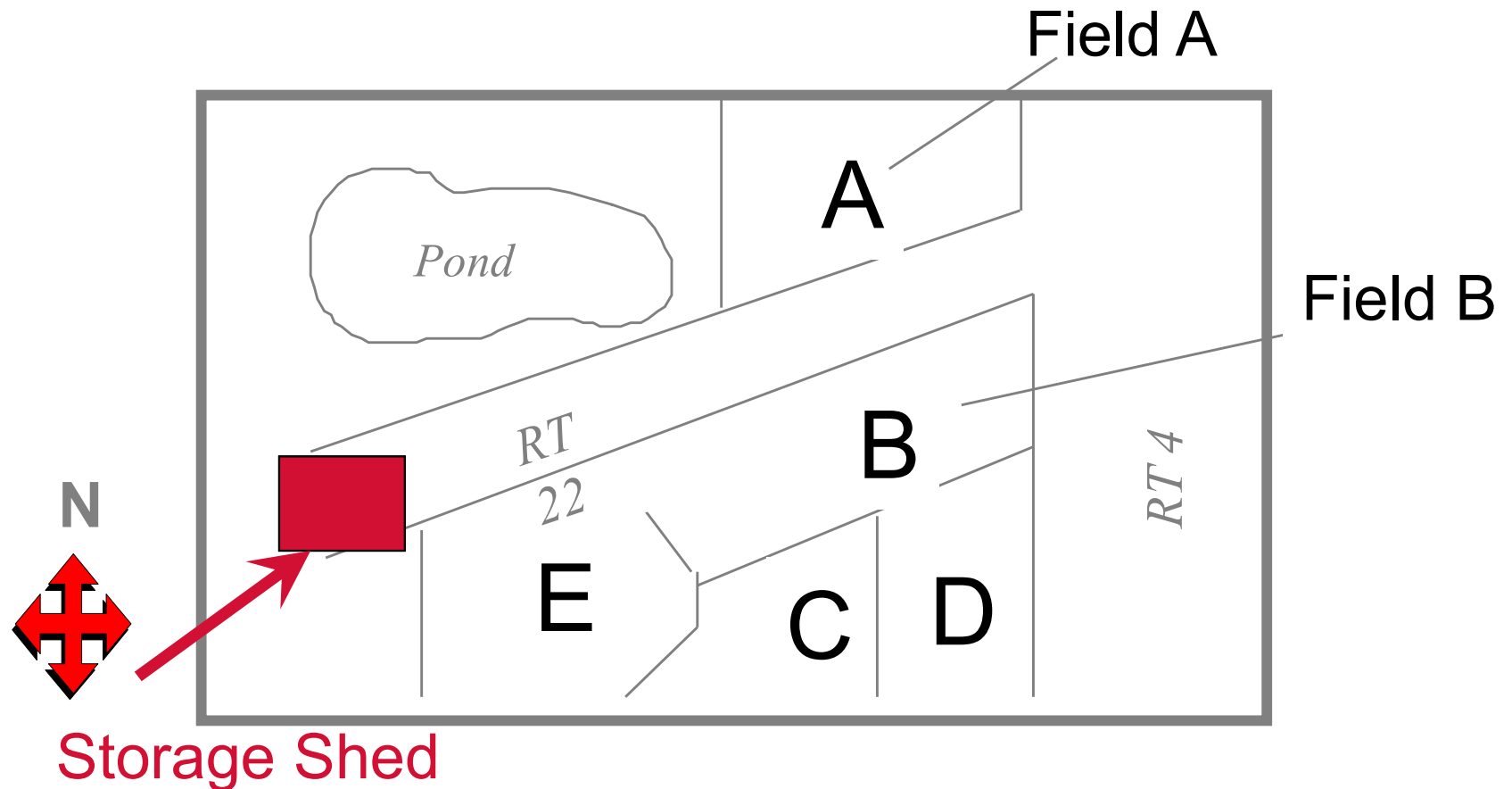
1. List of **any** pesticides stored (or likely to be stored) for more than 7 days
2. Keep at **separate location** from storage
3. On **file for 3 years**
4. Provide immediately **upon request to NJDEP**
5. Updated & sent to the **local fire company** each year by May 1 (with cover letter)

Inventory

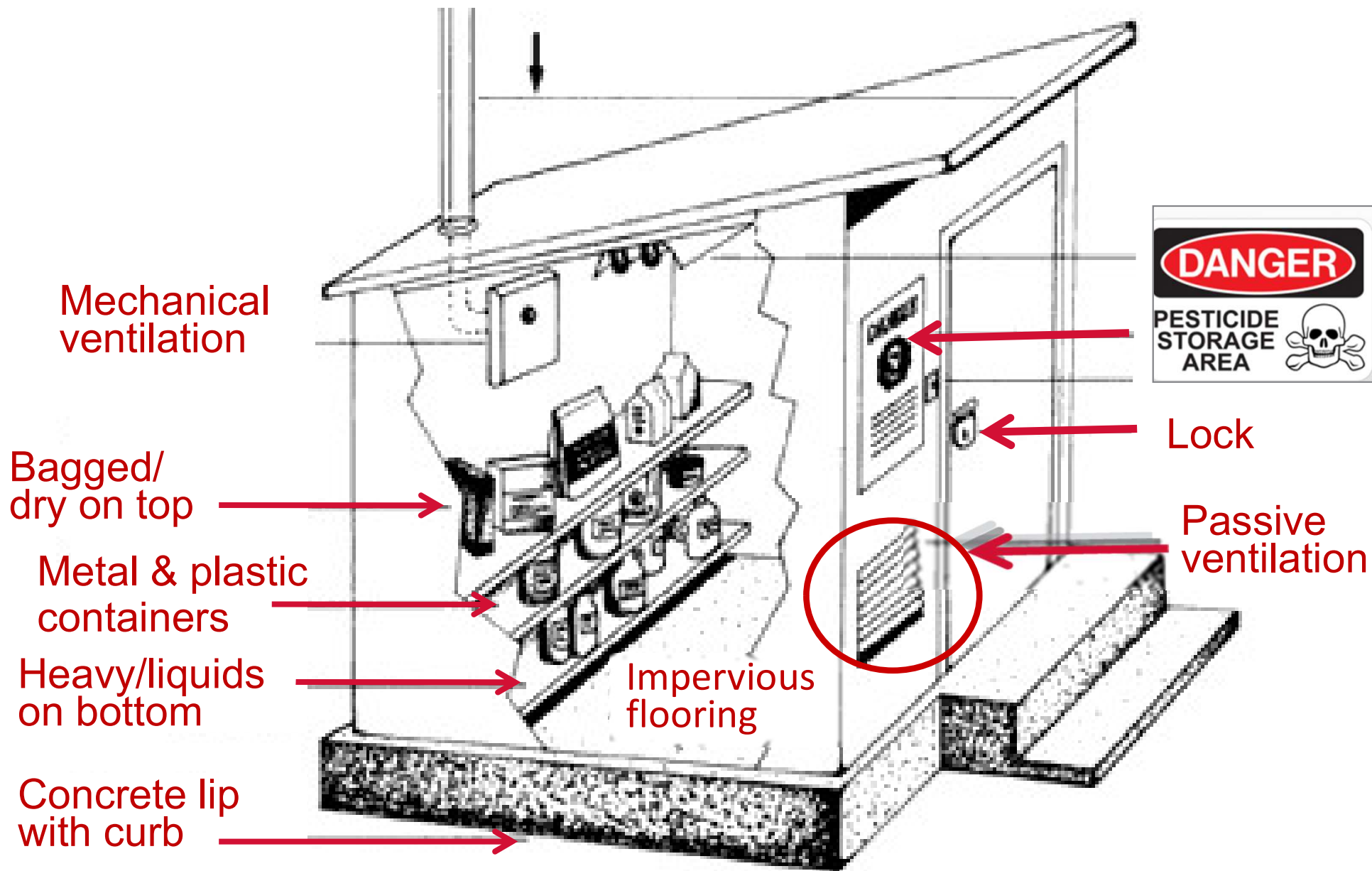
Storage Location	Brand Name	Active Ingredient Name	EPA Reg. Number	Amount
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Notice to Fire Department

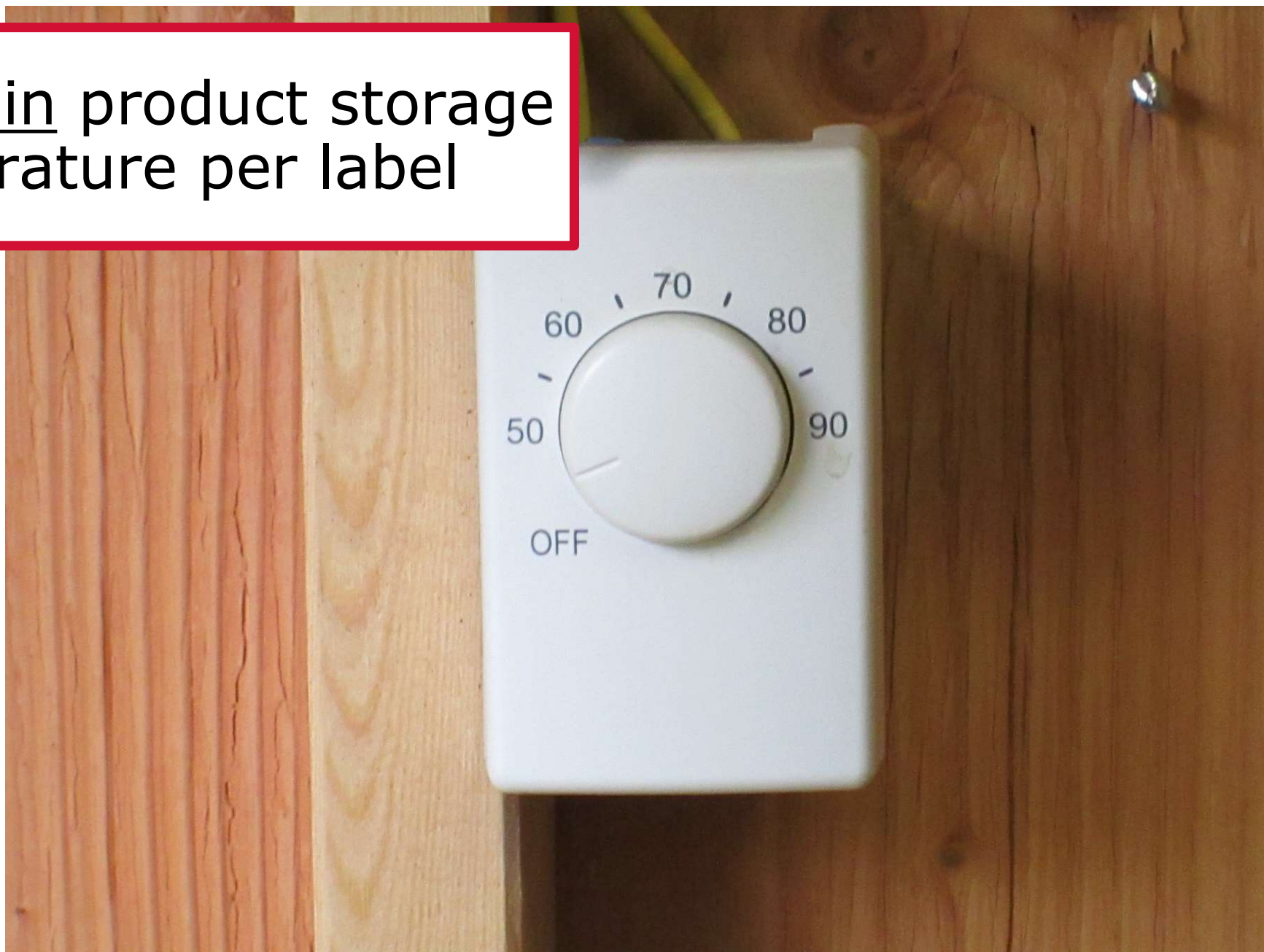
Exact description of
where pesticide storage is on the property
can be written OR diagram (*sketch, map, etc.*)



Pesticide Storage Best Management Practices

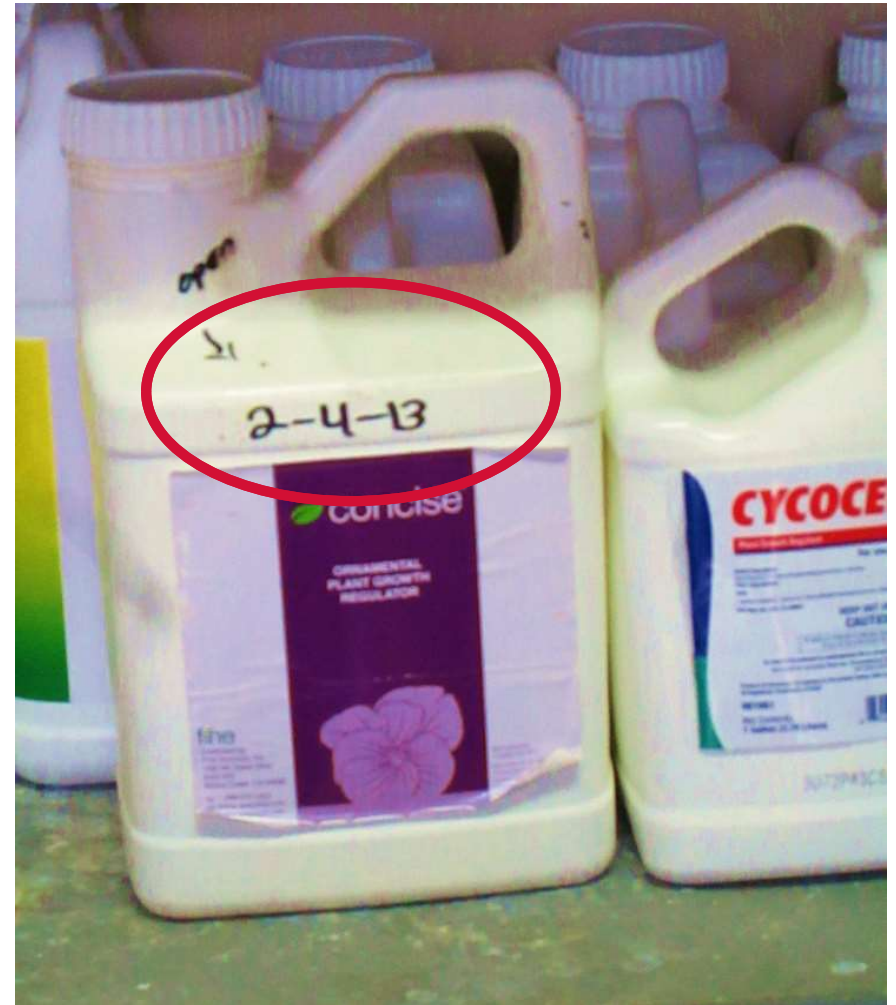


Maintain product storage
temperature per label



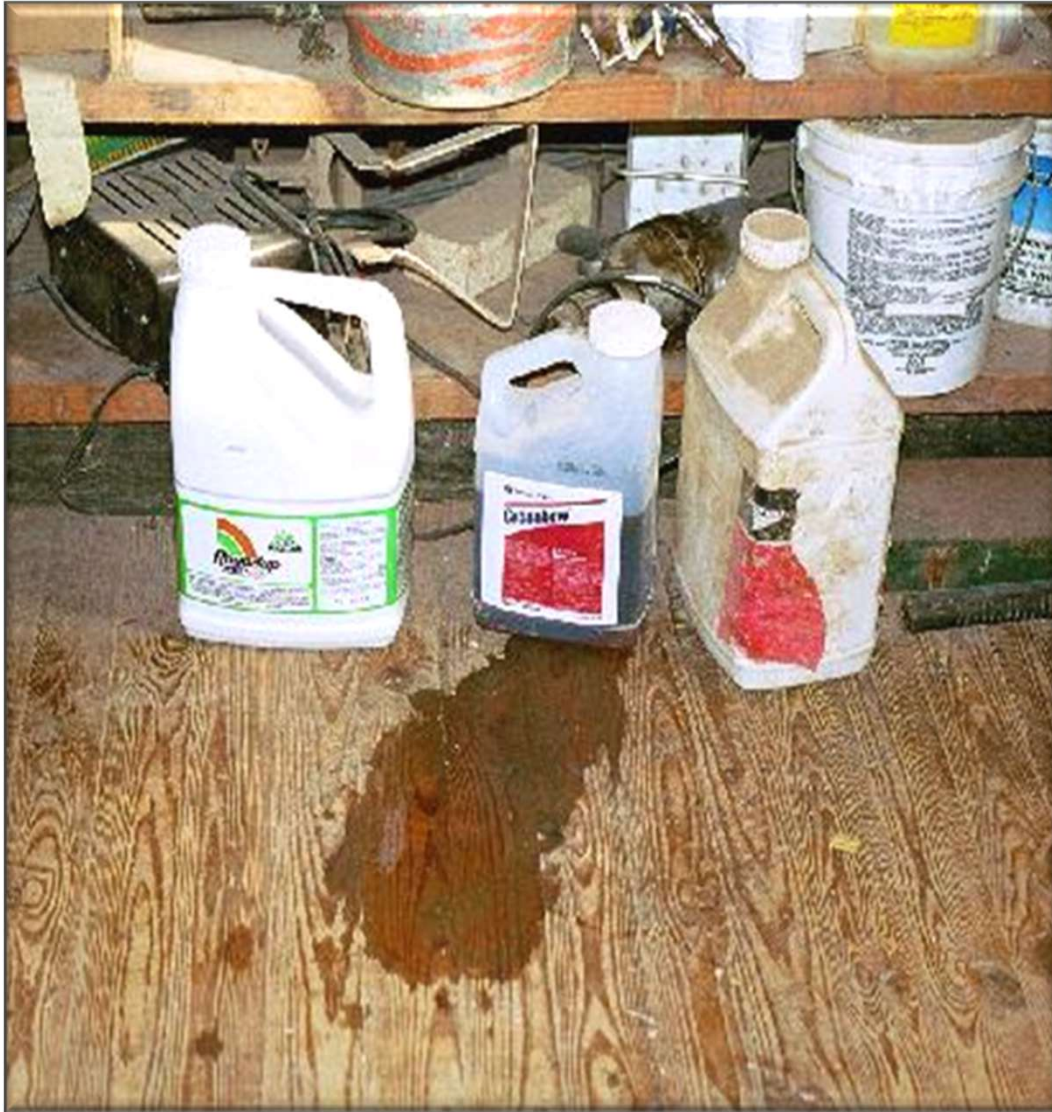
'Zero Pesticide Storage' Practices:

- Use last year's chemicals 1st & **avoid carryover**
- Buy only what you need for a single season (e.g., smaller size); updated inventory
- Always check for an **expiration date**
- Mark each container with **purchase or open date***



**check/record
expiration date*

Storage Area Flooring



- Avoid dirt or wood
- Impervious surfaces best (concrete; epoxy-coated)
- Keep large drums & bags directly off floor (containment)



HPDE 'spill pallets'

- grids keep containers out of spilled product
- rated by gallons contained
- built-in reservoir
- siphon/sump out & reuse product

Storage: Secondary Containment



RAREC

Storage: Secondary Containment & Separation of Herbicide Service Containers (large golf course)



When Pouring Product...



Easy drain &
recovery of product

Secondary Containment

When Filling
Application
Equipment...

...a la Dollar Store



A spill just waiting to happen...



Shelving Do's & Don'ts #1



Shelving Do's & Don'ts #2



- **Inspect** regularly
tears
splits or breaks
leaks and drips
rust & corrosion
dried drips & crud
- **If container breached, transfer** to an appropriate container & label it...





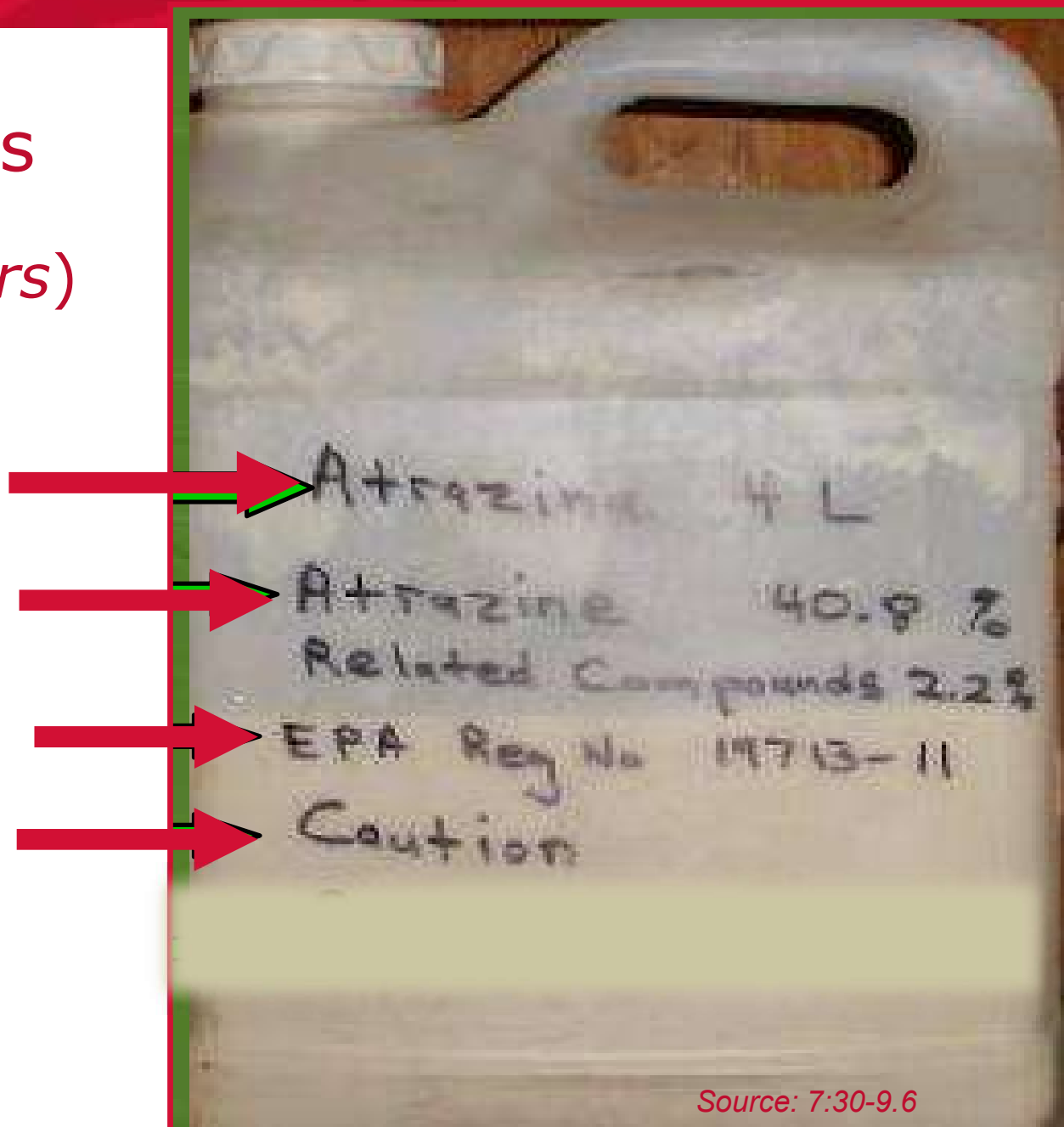
NJDEP Minimum Label Requirements (for transfers or service containers)

1. Trade &
common names

2. Percent of
each active

3. EPA reg number

4. Signal word



Source: 7:30-9.6

NJDEP Regs Pesticide Storage Areas

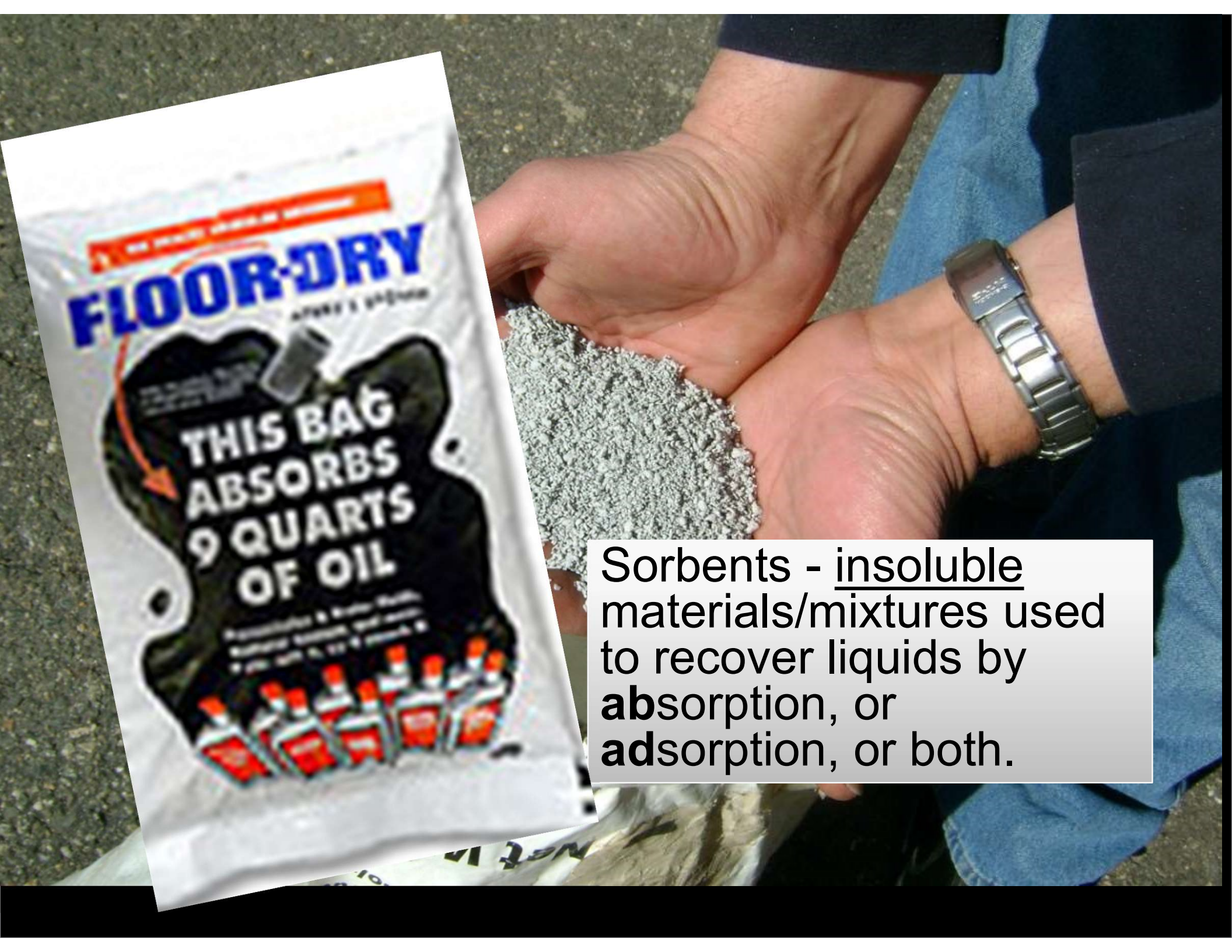
Recovery
or containment system

OR

- Shovel; or dust pan & brush for **dry**
- Equipment **immediately** available
- Enough absorbent for **liquid** spills



Not a product endorsement



Sorbents - insoluble materials/mixtures used to recover liquids by **absorption**, or **adsorption**, or both.



Weighted boom,
sorbent, banner
guard, PPE,
respirators



Chatham County Mosquito
Control – Savannah GA

Pre-fab spill kits



Not a product endorsement





Pesticide Service Vehicles

“Any vehicle used to transport pesticides to an application site”

- Truck; car; van; tractor or ATV with a trailer
- Pesticides separated from driver; **NOT in cab**; grill partition allowed to limit movement of pesticide containers
- Must be a licensed pesticide applicator or operator if transporting to application site
- Does not include going from dealer to business

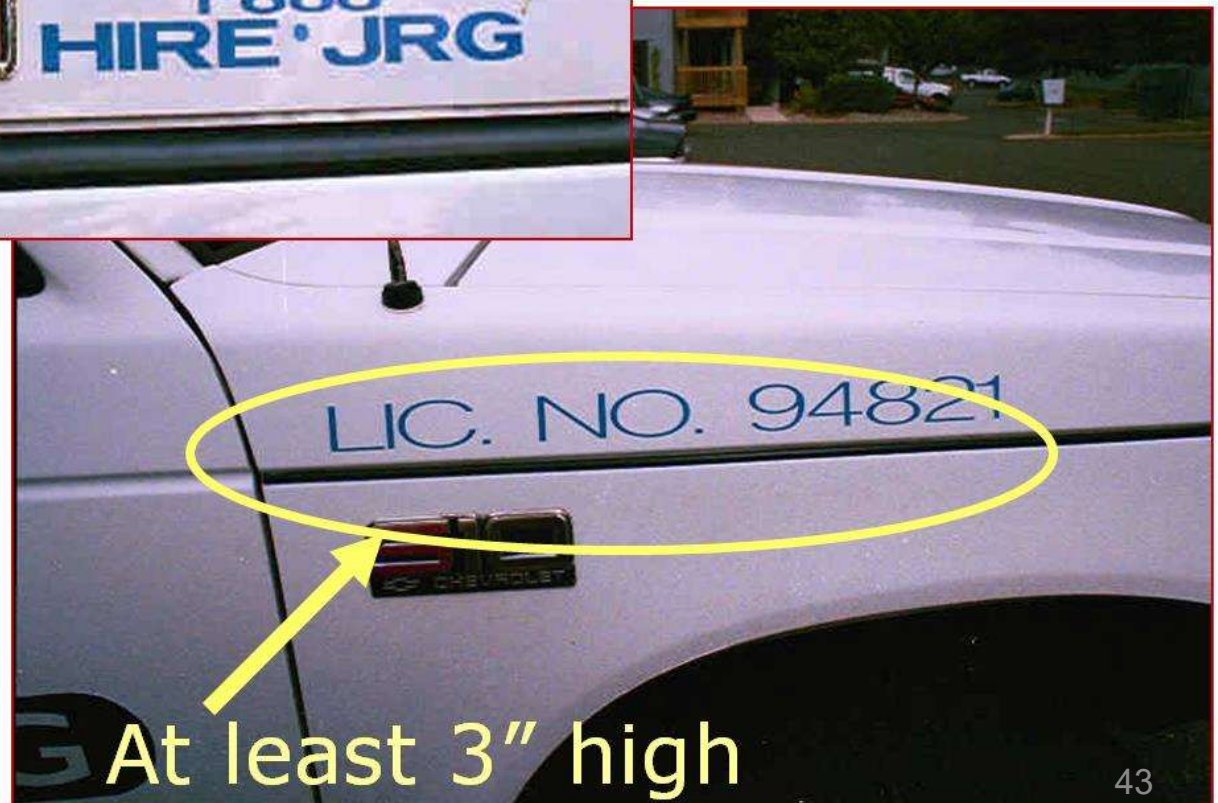


Pesticide Service Vehicles



License #
on at least
2 sides of
vehicle

Contrasting
color to
background



At least 3" high

Transport of products:

- Containers properly labeled
- Glass container(s) padded
- Container(s) < 5 gals stored (avoids spills)
- Container(s) > 5 gals. braced/secured to vehicle
- Tank containing pesticides equipped with cover while in transport





**Restricted Use Pesticides
must be locked & secured
when unattended**

Pesticide Service Vehicles

Spill clean-up supplies

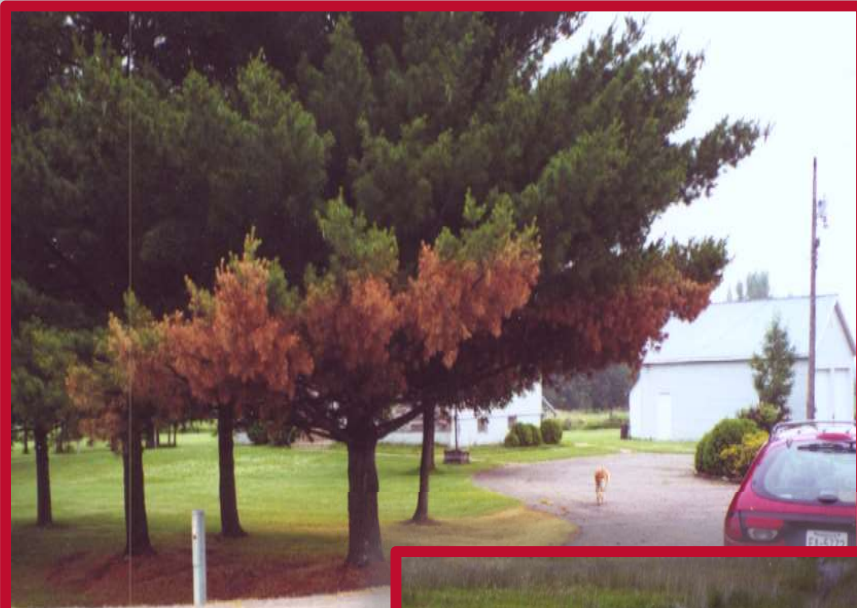
- shovel and/or broom & pan
- adequate sorbent



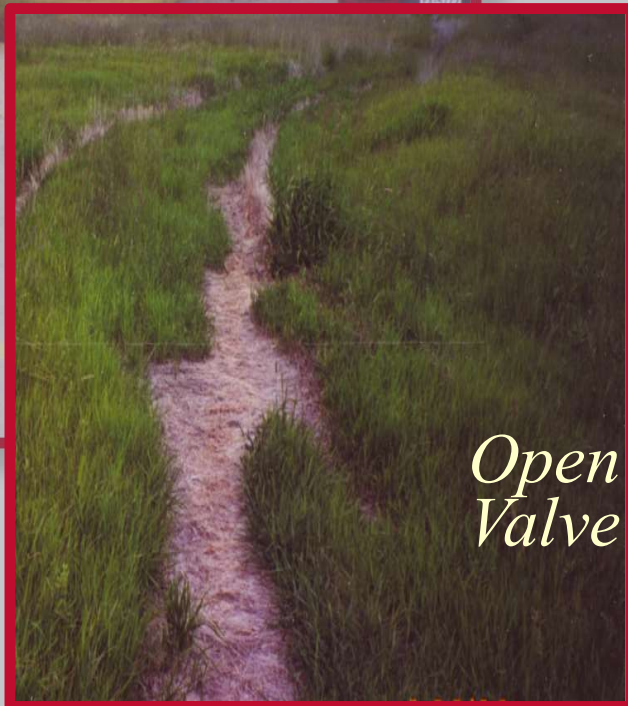
Fire Extinguisher

- rated 10-B:C
- dry chemical or CO₂





*Spray Hose
Rupture*



*Open
Valve*

NDEP defines a spill as
“...any

- intentional or unintentional
- action or omission
- resulting in the releasing, discharging, leaking, pumping, pouring, emitting, emptying, or dumping
- of any pesticide
- to any location which is not a labeled & intended site...”



Reportable spill...?

NJDEP Spill Reporting Thresholds

1. Outside a structure – *if more than*
 - 1 pound active ingredient
2. Inside a structure- *if more than*
 - 1 pound active dry pesticides
 - 1 gallon liquid (pesticide &/or diluent)

Phone immediately
Send written report within 10 days



**1-877-
WARNDPEP**

- Name/address/phone of dealer, applicator, operator
- Name/address/phone of *commercial* business, dealer
- Incident location
- Pesticide name & EPA registration number
- Estimated amount & dilution rate of pesticide
- Corrective action(s) taken

Rutgers "Spill Report Card" Template

Pesticide Spill Report Call NJDEP Department Hotline: 1-877-927-6337

Date and time: _____

Name/address/phone of applicator, operator, or dealer: _____

Name/address/phone of applicator or dealer: _____

Name /phone of property owner or operator: _____

Incident location: _____

Pesticide name(s) and EPA registration number: _____

Estimated amount & dilution rate of pesticide: _____

Corrective action(s) taken: _____

New Jersey Environmental Protection Pesticide Control Program Regulations

"...a spill is defined as any intentional or unintentional action or omission resulting in the releasing, discharging, leaking, pumping, pouring, emitting, emptying, or dumping of any pesticide to any location which is not a labeled & intended site..." (NJAC 7:30-1.2)

Reportable Spills (NJAC 7:30-9.17) -- only certain spills have to be reported to the NJDEP:

1. **Outside** a structure -- if more than
 - 1 pound active ingredient
2. **Inside** a structure- if more than
 - 1 pound active dry pesticides
 - 1 gallon liquid (pesticide &/or diluent)
3. **Termiticide** indoor spill
 - >50 in² organochlorine termiticide contamination at 1 injection point
 - >1 yd² aggregate contaminated by organochlorine termiticide on/at interior wall base
 - when heating duct/system is contaminated

Who is responsible to report: licensed dealer, dealer business, commercial pesticide operator, applicator, or business owner. All must notify the Department of any reportable pesticide spill under supervision and/or direct observation.

Call 1-877-927-6337. Follow up within 10 days with a written report to the Pesticide Control Program, P.O. Box 411, Trenton, NJ 08625.

- One page to print double-sided
- Cut in two
- Use to call in
- Send as written report

Professionals minimize pesticide spill liability



- Equipment used properly maintained &/or calibrated
- No injury to persons/environment
- Pesticide application records per regs
- Application per pesticide label
- All persons involved were licensed
- Immediate report to NJDEP
- Acceptable clean-up

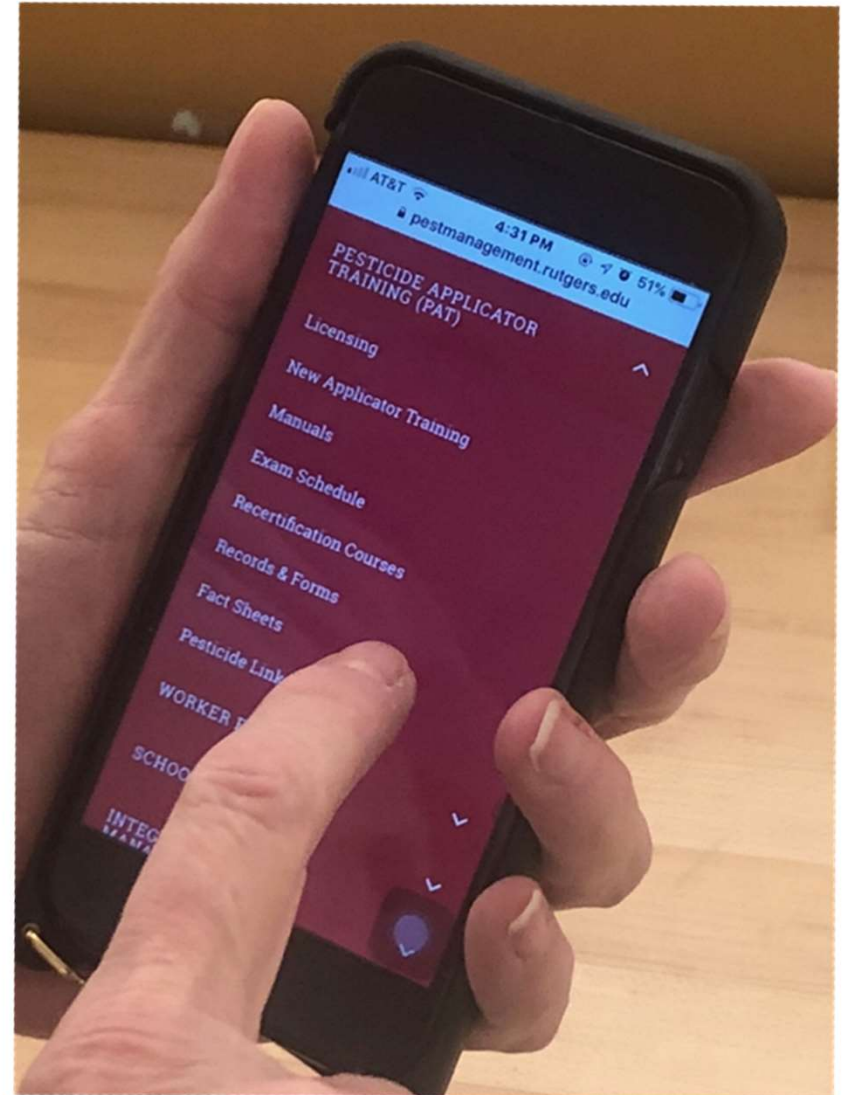
Take Home: Monk says Plan to have a pesticide spill NOW!!!



Rutgers Pesticide Safety Education Program Resources

Pesticide Applicator Training

- Licensing
- New Applicator Training
- Manuals
- Exam Schedule
- Recertification Courses
- Records & Forms
- Fact Sheets
- Pesticide Links



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