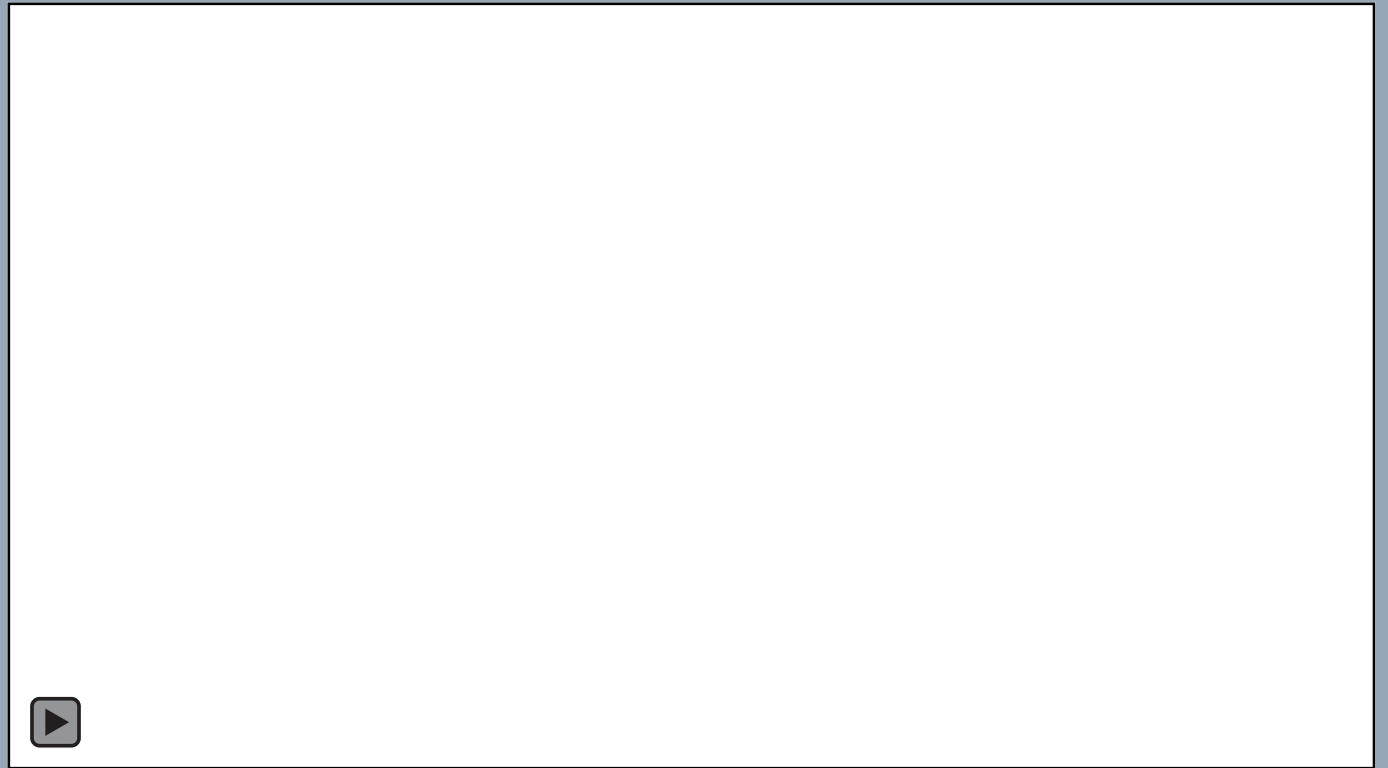


Chapter Order

Dan Wixted

Cornell Cooperative
Extension

Pesticide Safety
Education Program



Prerequisite Knowledge

Also called “scaffolding”

Making sure person has knowledge needed to understand new concept

Prerequisite Knowledge

مؤشوراك

Prerequisite Knowledge



Prerequisite Knowledge



Prerequisite Knowledge



Prerequisite Knowledge

Manual writer's mantra:

Knowledge is like a house:
it is built from the ground up.

Ignoring this causes manuals to start at level higher than reader's level

Ordering Content

Think in broad terms first, then at finer levels

- Group content into sections
- Then identify & arrange chapters within a section

Ordering Content

Rely on learning objectives because they:

- Identify content you will write about
- Greatly facilitate scaffolding
- Help you write shorter, more-focused chapters
- Eliminate risk of unnecessary repetition in text

Ordering Content

1st “draft” is 100% learning objectives, 0% text

Don't start writing until you've decided
what you are writing about

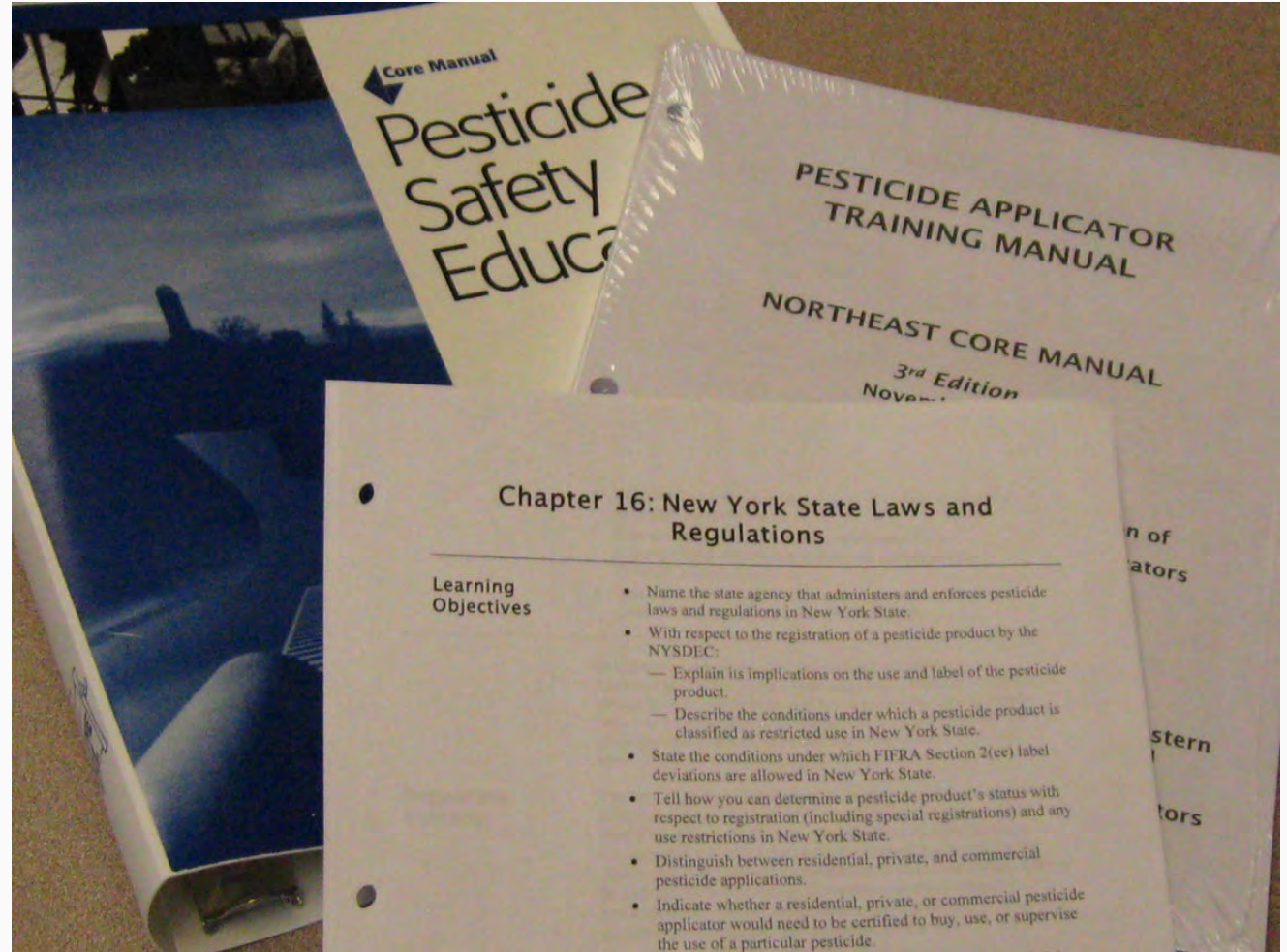
Ordering Content

1st “draft” is 100% learning objectives, 0% text

Don't start writing until you've decided
what you are writing about

Expect to do some remodeling along the way

EXAMPLE: NORTHEAST CORE MANUAL



Ch. 1-4: Pesticide Basics

- 1: Definitions (e.g., pest, pesticide, site, label)
- 2: Pests
- 3: Types of Pesticides
- 4: Formulations

Ch. 5-9: Health Concerns

5: Routes of Exposure (and Risk Equation)

6: Toxicity of Pesticides

7: Personal Protective Equipment

8: Responding to Exposure

9: Heat Stress

Ch. 10-11: Environmental Concerns

10: Pesticides in the Environment

11: Pesticides and Water

Ch. 12-13: Pest Management

12: Pesticide Resistance

13: IPM

Ch. 14-16: Laws & Regulations

14: Federal Laws and Regulations

15: Pesticide Residues and Tolerance

16: State Laws and Regulations

Ch. 17-20: Handling Pesticide Products

17: Storing Pesticides

18: Transporting Pesticides

19: Pesticide Security

20: Emergency Planning and Response

Ch. 21-27: Application and Disposal

21: Application Methods and Equipment

22: Pesticide Drift

23: Application Safety

24: Equipment Calibration

25: Calculations for Mixing Pesticides

26: Mixing and Loading

27: Managing Pesticide Wastes

Example: Northeast Core Manual

1 Definitions	11 Pesticides and Water	21 Application Methods/Equip.
2 Pests	12 Pesticide Resistance	22 Pesticide Drift
3 Types of Pesticides	13 Principles of Pest Mgmt	23 Application Safety
4 Formulations	14 Federal Laws & Regs	24 Equipment Calibration
5 Pesticide Exposure & Risk	15 Pesticide Residue/Tolerance	25 Calculations for Mixing
6 Toxicity of Pesticides	16 State Laws & Regs	26 Mixing and Loading
7 PPE	17 Storing Pesticides	27 Managing Pesticide Wastes
8 Responding to Exposure	18 Transporting Pesticides	28
9 Heat Stress	19 Pesticide Security	
10 Pesticides in Environment	20 Emergency Plan/Response	

Example: Northeast Core Manual

1 Definitions	11 Pesticides and Water	21 Application Methods/Equip.
2 Pests	12 Pesticide Resistance	22 Pesticide Drift
3 Types of Pesticides	13 Principles of Pest Mgmt	23 Application Safety
4 Formulations	14 Federal Laws & Regs	24 Equipment Calibration
5 Pesticide Exposure & Risk	15 Pesticide Residue/Tolerance	25 Calculations for Mixing
6 Toxicity of Pesticides	16 State Laws & Regs	26 Mixing and Loading
7 PPE	17 Storing Pesticides	27 Managing Pesticide Wastes
8 Responding to Exposure	18 Transporting Pesticides	28 The Pesticide Label
9 Heat Stress	19 Pesticide Security	
10 Pesticides in Environment	20 Emergency Plan/Response	

Example: Northeast Core Manual

Pests and the Pesticide Label

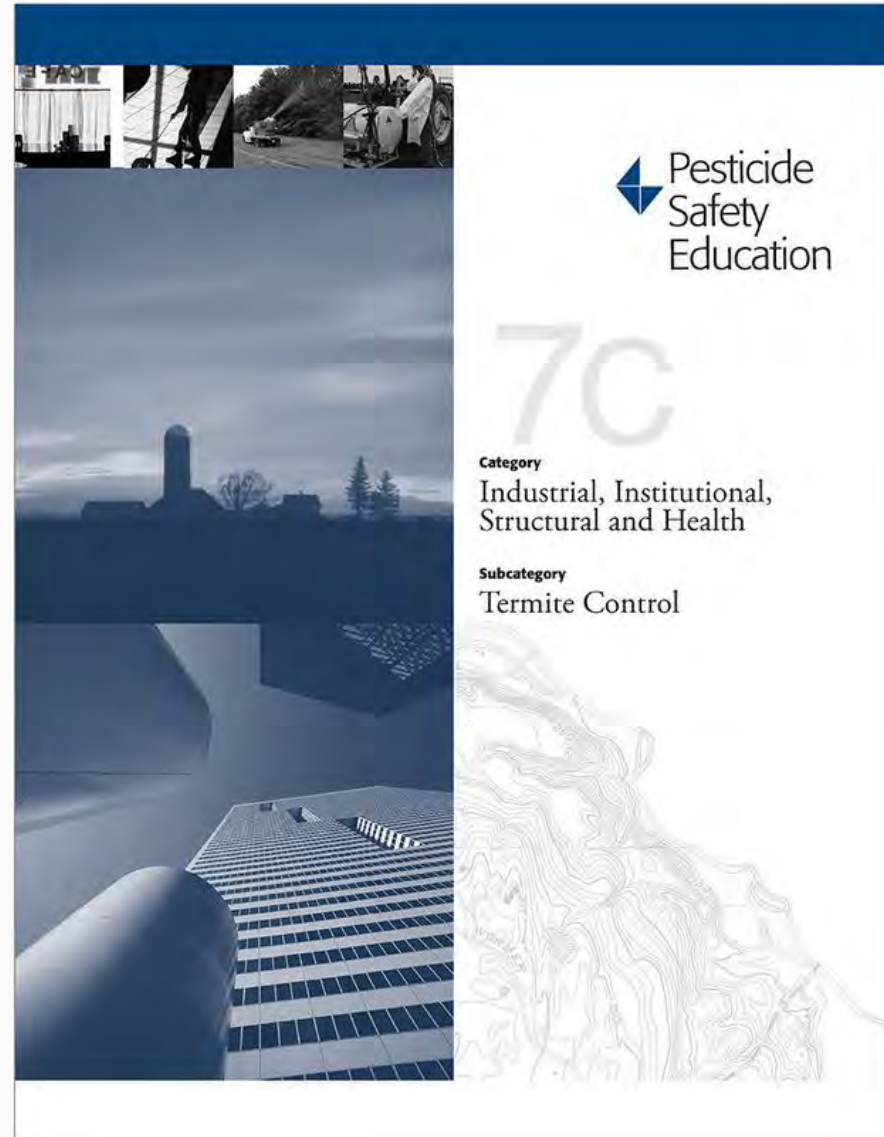
To find out exactly which pests and sites a pesticide is labeled for, you need to read the “Directions for Use” section of the label. Note that the list of pests may be different for different sites. For example, a pesticide that is labeled for use both indoors and outdoors might list ants only under “outdoor pests.”

Example: Northeast Core Manual

Finding PPE Requirements on the Label

The PPE required for handling a pesticide will usually be listed in the “Precautionary Statements” section on the label. For pesticides whose labeled sites include agricultural plants, there will be other PPE requirements listed in an “Agricultural Use Requirements” section of the label; these requirements pertain only to agricultural workers on farms and in forests, nurseries, and greenhouses as required by the Worker Protection Standard (see Chapter 14).

EXAMPLE: TERMITE MANUAL



Ch. 1: Termites and Other WDI's



Identification

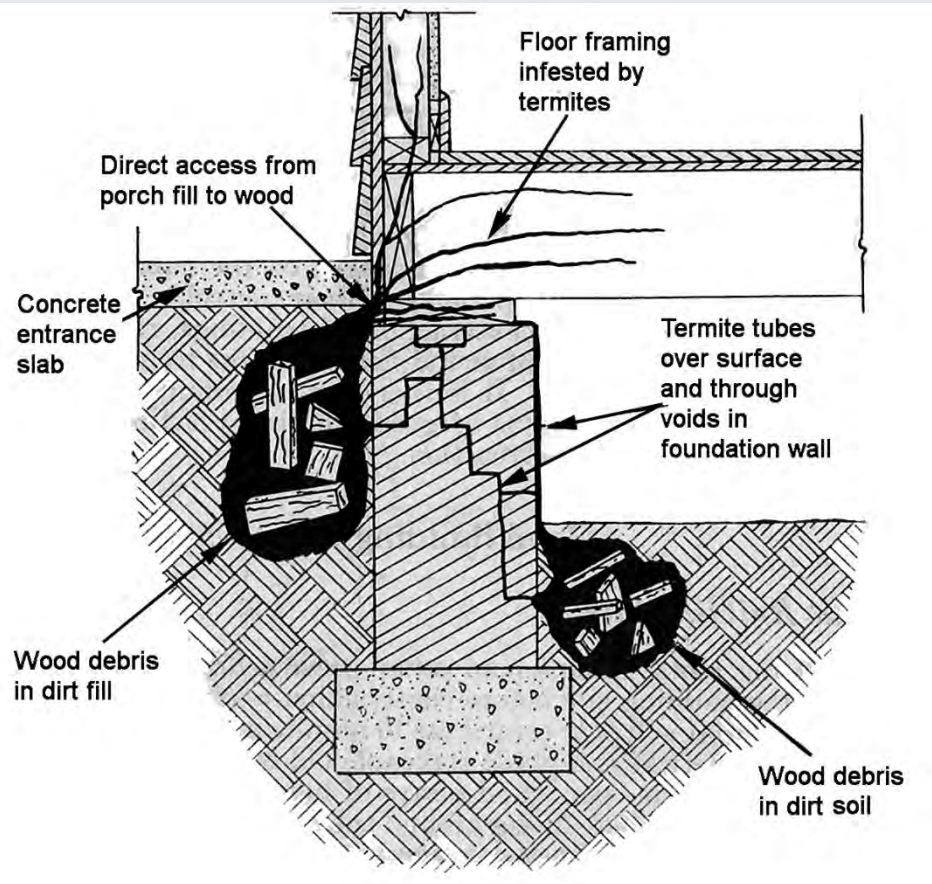
Biology

Conducive conditions

Damage

Signs of active infestation

Ch. 2: Preventive Construction Practices



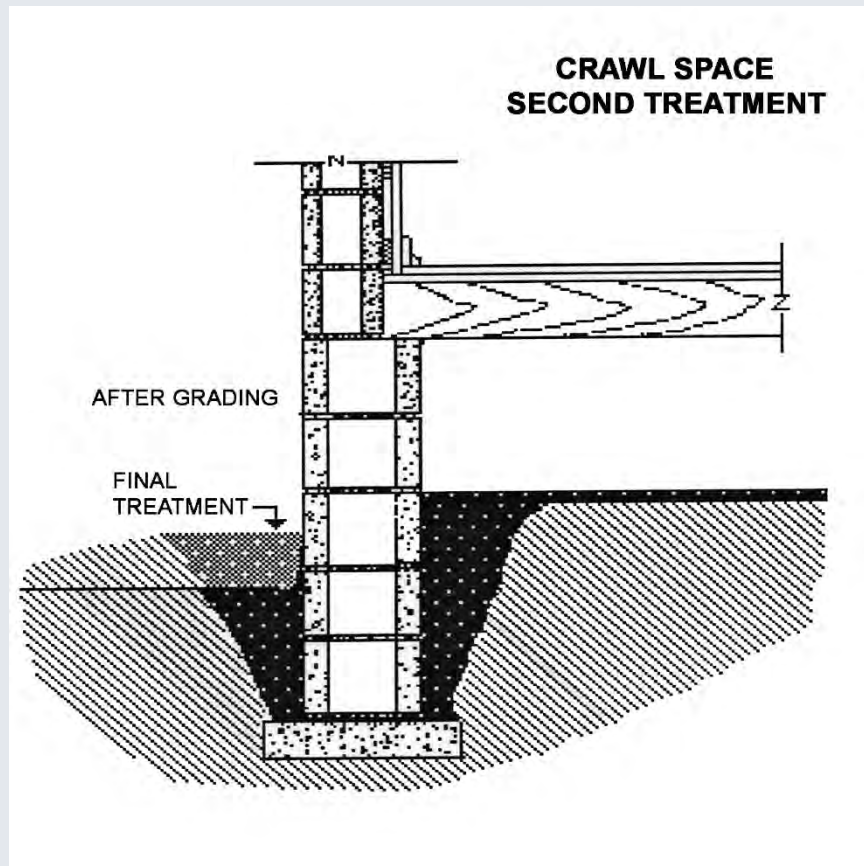
Foundation types
Proper drainage
Exclusion methods
Avoid common problems

Ch. 3-5: Methods of Application



Treating the soil
Treating the structure
Baits

Ch. 6: Pre-Construction Treatment



Site concerns (e.g., wells)
Placement
Legal requirements (e.g.,
HUD, municipal)

Ch. 7: Inspecting for Termites



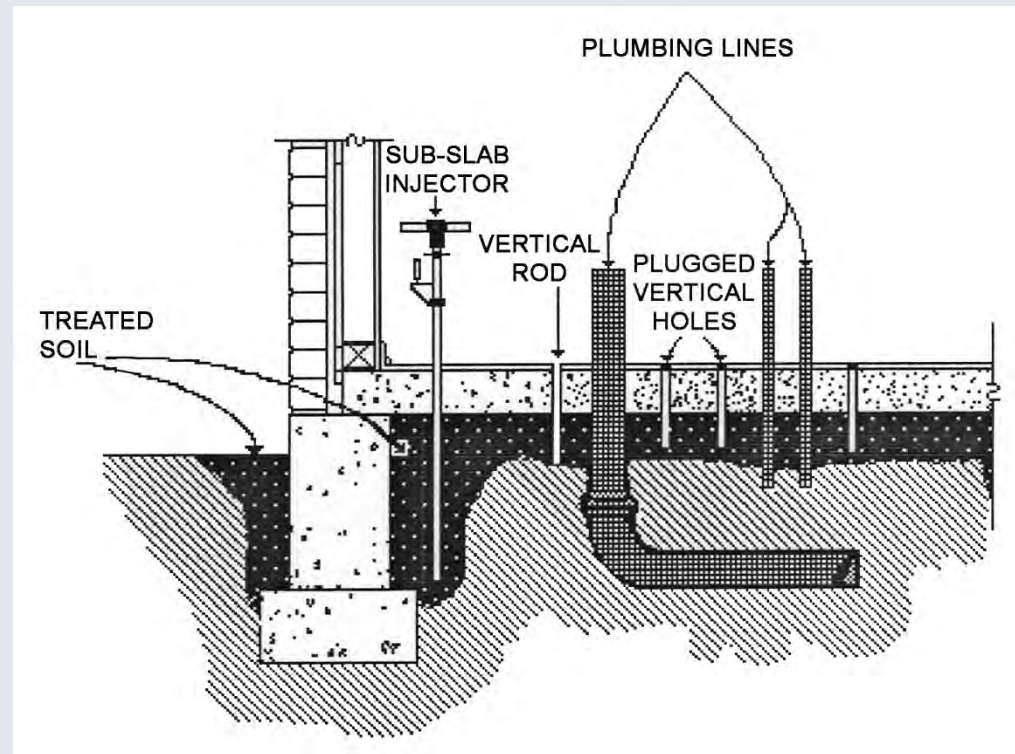
Definitions (e.g., sill plate vs sole plate)

Diagramming

Procedures and tips

Reporting

Ch. 8: Post-Construction Treatment



Dealing with complications:
Subslab ductwork
Utility lines
Foundations in disrepair
Finished basements
Protecting residents

EXAMPLE:
WOOD
PRESERVATION
MANUAL

Wood Preservation



*A Pesticide Applicator Certification Training Manual
for Wood Treaters*

Ch. 1: Wood & Its Preservation



Courtesy USDA Forest Products Laboratory


Why we preserve wood
Define preservative
Properties of wood & how
they affect treatment
AWPA Standards

Ch. 2: Treatment Methods



Basic descriptions
Rest of chapters refer
back to methods

Ch. 3: Wood Preservatives



CELLU-TREAT[®]
DOT WOOD PRESERVATIVE

A wood preservative for protection and treatment
of lumber against fungal decay and wood
destroying insects including termites

Active Ingredient:
Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4)..... 98%

Other Ingredient*..... 2%

Total..... 100%


*Contains 2% H₂O - Absorbed Moisture

EPA Reg. No. 64405-8 EPA Est. 64405-TN-1

Net Weight: _____ lbs.

KEEP OUT OF REACH OF CHILDREN
CAUTION

See side panel for First Aid and additional Precautionary Statements.



How applied
Advantages/disadvantages
Uses of treated wood
Hazards to health &
environment

Ch. 4: Site Design



Areas to:

Store & prep wood

Receive preservative

Store chemicals

Treat wood

Hold treated wood

Ch. 5: Site Management



Protect workers
Maintain equipment
Inspect drip pad
Reduce and dispose of waste
Prevent and respond to spills

Ch. 6: Prepare Wood for Treatment



Inspect wood

Drying wood

Kiln vs air drying

Moisture content

Keeping wood clean

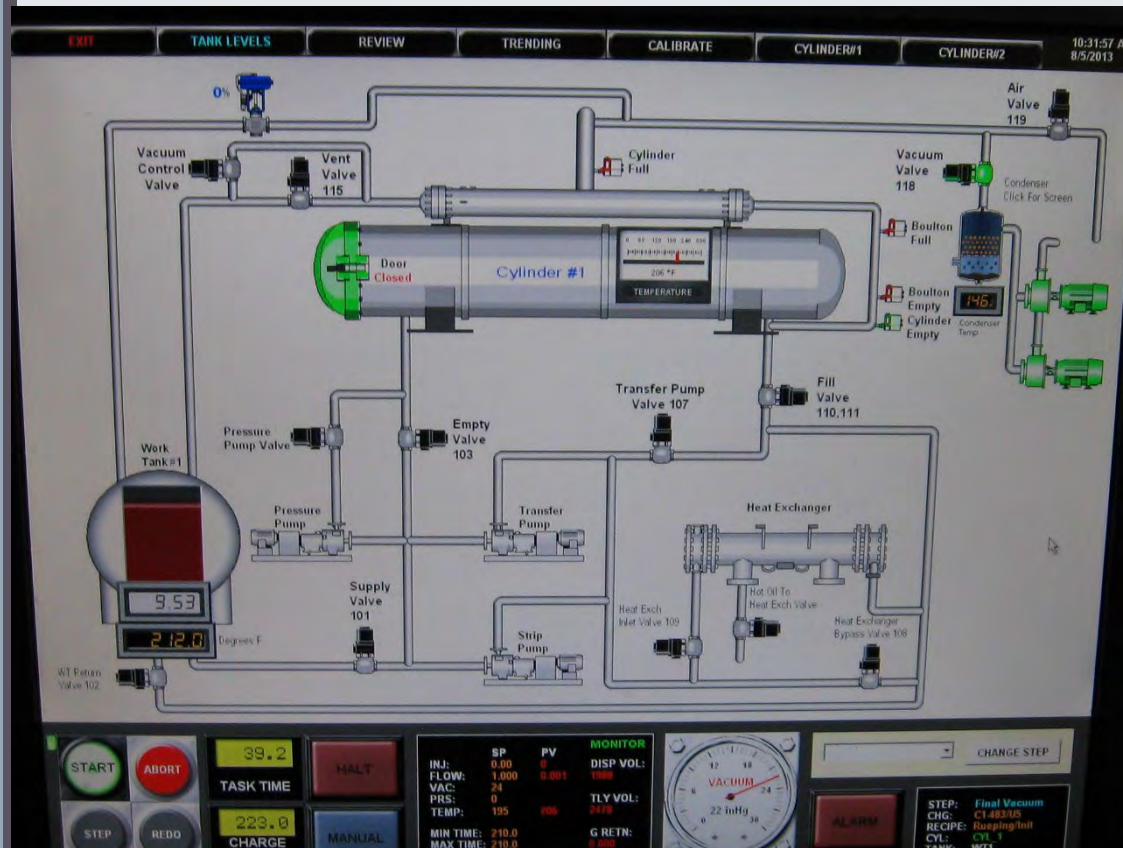
Machining/drilling wood

Ch. 7: Prepare Preservative Mix



Assess inventory
Ordering & delivery
Determine concentration in tank
Adjust concentration in tank to get proper mix
Taking samples

Ch. 8: Pressure Treating Wood



Loading wood into cylinder
Setting up the charge
Altering presets
Monitoring the treatment
Troubleshooting
Preventing excess drippage

Ch. 9: Post-Treatment Activities



Remove wood from vessel
Analyze wood for retention
and penetration

Move wood to/from drip
pad

Tag wood

Maintain treatment record

Chapter Length

Chapter Length

Northeast Core Manual:
8 pages/chapter

Wood Preservation & Termite Manuals:
10 pages/chapter (more graphics)

Wood and Its Preservation

A Training Module for Use with
*Wood Preservation: A Pesticide Applicator Certification Training Manual
for Wood Treaters*

December 2015