Safety Hazards in Greenhouses and OSHA Inspections

Northwest Indiana Flower Growers Association
Agenda

- Discuss most common greenhouse hazards
- Discuss commonly required written safety programs
- Discuss OSHA inspections
Electrical

- Missing face plates
- Missing breakers
- Too many extension cords that are being used for permanent usage
- Blocked panels
- Damaged cords
- Hazardous wiring
Electrical (cont.)

- Missing face plate
Electrical (cont.)

- Missing breakers
Electrical (cont.)

- Too many extension cords being used
- May not be used as permanent wiring
  - Temporary use is less than 90 days
- May not be attached to the building surface
- May not be used to raise or lower equipment
- May not be under carpet or in flooring

- Must be placed in raceway if run across traffic area
- May not be buried
- May not have 3rd grounding prong removed
- May not be used outdoors unless rated
- Must not be coiled around metal
- May not have multiple cords plugged together
Electrical (cont.)

- Blocked panels
Electrical (cont.)

- Damaged cords
Electrical (cont.)

- Hazardous wiring
Electrical (cont.)

- Hazardous wiring
  - Piggy-backing power strips
Pesticides

- Locked
- Labeled
- Poly lining on wood shelves
- Eyewash bottles
- Emergency shower
- Application logs
- WPS poster
Pesticides (cont.)

- Locked
- Your pesticide storage area should be fenced, locked, and separated from other activities. No other products should be stored with pesticides.
Pesticides (cont.)

- Labeled
Pesticides (cont.)

- Poly lining wood shelves
Pesticides (cont.)

- Eyewash bottles
  - Should be:
    - Sealed
    - Clean from debris
    - Checked for expiration
    - Checked to ensure the eyewash mounts have eyewash bottles in them
Pesticides (cont.)

- Eyewash stations – plumbed
  - Should be:
    - Kept clean from debris
    - Kept clear of storage items so that it is easy to access
    - Tested regularly
    - Caps should be on the nozzles when not being used
Pesticides (cont.)

- Emergency shower
  - Should be:
    - Located near the pesticide mixing area
    - Kept clear of storage items
    - Tested regularly
### Pesticide Application Log

*Weather Conditions: (1) sunny, (2) cloudy, (3) temp. above 85F, (4) windy, (5) no wind*

<table>
<thead>
<tr>
<th>Date/Time/Applicator’s Name</th>
<th>Equipment and Method of Application</th>
<th>Weather Cond.*</th>
<th>Crop (name)</th>
<th>Target Pest</th>
<th>Location</th>
<th># of square feet</th>
<th>Product Name</th>
<th>EPA reg. #</th>
<th>Application Rate (oz/gal.)</th>
<th>Total Gallon</th>
<th>REI (Hours)</th>
<th>REI Expiration (Mo/day/year)</th>
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Pesticides (cont.)

- WPS poster
Housekeeping

- Blocked exit/aisle way
Housekeeping (cont.)
Housekeeping (cont.)

- Trip hazards
Housekeeping (cont.)
Housekeeping (cont.)
Missing guards
Missing guards (cont.)
Missing guards (cont.)
Fire extinguishers

- Check charge monthly
- Have them serviced annually
Compressed gas cylinders

- Required to be clearly labeled as to the contents and any associated hazards
- Must be secured upright and in place to prevent falling by using approved chains, straps, stands or carts
- Cylinders containing oxidizing gases, such as oxygen and nitrous oxide, shall be stored separately from flammable gases or liquids
- Empty cylinders should be identified and stored separately from full or partially full cylinders
Railings
Railings (cont.)
Seatbelt use on equipment
Seatbelt use on equipment (cont.)
Aluminized shade cloth

- Should be fire resistant/fire retardant
- Have a 3 foot clearance from all combustible sources (i.e. heaters, fan motors, etc.)
Aluminized shade cloth (cont.)
Aluminized shade cloth (cont.)
Written programs

- HAZCOM
- Respiratory written program
- Written safety program
- Emergency action plan
Written programs (cont.)

- HAZCOM
  - OSHA has created the Hazard Communication Standard to help ensure your safety when working with chemicals
  - Parts of the written program:
    - Hazard determination and identification
    - Hazardous substance inventory
    - Labels
    - Material Safety Data Sheets (MSDS)
    - Employee training
    - Recordkeeping
Written programs (cont.)

- Respiratory
  - Ensures all employees are protected from exposure to respiratory hazards
  - Parts of the written program:
    - Purpose
    - Scope and Application
    - Responsibilities
      - Program Administrator
      - Supervisors
      - Employees
    - Respirator Selection
    - Medical Evaluation
    - Fit Testing

- Respirator Use
  - General use
  - Emergency procedures
  - Respirator malfunction

- Air Quality
- Cleaning, Maintenance, Change Schedules and Storage
- Training
- Program Evaluation
- Documentation and Record Keeping
- Voluntary Respirator Use
Written programs (cont.)

- Written safety program
  - Parts of the program:
    - Safety Policy Statement
    - Employer Information
    - Designation of Safety Responsibilities
    - Employee Reporting and Conduct
    - Inspection Procedures
    - Hazard Correction Procedures
    - Accident Investigation
    - Disciplinary Procedures
    - Employee Training
    - Recordkeeping
Written programs (cont.)

- Emergency action plan
  - Parts of the program:
    - Emergency personnel names and phone numbers
    - Evacuation routes
    - Emergency phone numbers
    - Utility company emergency contacts
    - Emergency reporting and evacuation procedures
    - Medical emergency
    - Fire emergency
    - Extended power loss
    - Chemical spill
    - Severe weather and natural disasters
    - Critical operations
OSHA inspections

- What instigates an OSHA inspection?
  - Imminent danger
  - Serious accident, illness, injury or death
  - Complaints
  - Permit inspection
  - General administrative plan
Planning for an OSHA inspection

- Be pro-active, not reactive
- All OSHA inspections are unannounced
- Inspections may be triggered by,
  - a serious accident,
  - a disgruntled employee
  - a type of work activity such as excavation or a high rise construction
- To avoid penalties,
  - maintain a safe workplace,
  - comply with OSHA’s regulations,
  - keep an updated OSHA log,
  - documentation of training, and current posters.
- When you have a strong safety program, fewer accidents will occur.
Handling the inspection

- OSHA inspector will arrive unannounced
- Inspector will present his/her credentials
- Adopt a written procedure for responding to an inspection.
- Upon arrival, the inspector should be referred to the key person
  - if not available inspector may wait for a reasonable period of time.
Opening conference

- Inspector will explain role of OSHA and ask to conduct an inspection.
- OSHA needs your consent to conduct an inspection.
- If inspection is refused, inspector will inform you the he/she may be back with an inspection warrant issued by court.
The walk-through

- Inspection may be limited or encompass the entire facility.
- **Have available for review:**
  - Injury and Illness Program
  - First Aid Cards
  - OSHA Log 300 (updated to current date)
  - OSHA posters (Filled-in with appropriate information)
  - Hazardous communication program
  - Emergency numbers
  - Permit postings
  - Documentation for safety training and job specific
  - Written Respirator program
Walk-through imminent hazards

☐ If an inspector determines that a condition or practice creates an imminent hazard to the safety and health of workers, employer or affected workers the inspector can prohibit employees from using the area, machine or equipment that presents a hazard.

☐ A yellow tag is placed conspicuously in the area and only an authorized OSHA representative can remove a yellow tag.
Closing conference

☐ Will discuss any unsafe conditions observed.
☐ May or may not issue citation.
☐ OSHA has six months to issue a citation from time of inspection.
☐ Inspector may want to review regulation.
☐ Inspector may want to talk to the district manager.
Recommendations

☐ Appoint a key person
☐ Accompany inspector, keep notes and observations of interest to inspector
☐ Take photographs of items of interest to inspector
☐ Formalize a report and send it to company attorney to establish an attorney-client relationship
Types of violations

- **Regulatory violation**
  - Failure to comply with procedural requirements
- **General violation**
  - Not expected to result in serious injury or death
- **Serious violation**
  - Substantial probability of death, injury or illness
- **Repeat violation**
  - 2+ violations of same safety order within a 3 year period
- **Willfull violation**
  - Knowing, intentional to harm
Appeals: you have 15 days from date you receive citation

Penalties: Start from $750 per citation for a regulatory to over $70,000 for a willful violation

Criminal Penalties: at least $35,000 to over $70,000 and up, plus possible prison time

If deemed a felony, up to $25,000 fine and three years in prison. Plus the corporation can be fined up to $1 million.
Appealing a citation

- Appealing or not, cost compared to penalties
- Willful or Criminal penalties contact your attorney for advise
- Schedule an appointment with OSHA District Manager to review citations
- Fix and document any citations
- Take any previous documentation with you (inspections, trainings, maintenance records)
- Be pro-active not re-active
Pictures of safety hazards