

US EPA ARCHIVE DOCUMENT

Module 4

Soil Fumigant RED Requirements

Good Agricultural Practices (GAPs)

What are GAPs?

- Application Practices that:
 - Improve safety & efficacy
 - May be generic or specific to application method, chemical
- Developed by registrants, growers, applicators, and EPA
- Many already on labels
- Must document in Fumigant Management Plan and/or Post Application Summary to show compliance

Why have GAPs?

- Ensure that all applicators follow the same standards
- Reduce potential for:
 - bystander & handler exposure to emissions from soil fumigants
 - accidents
- Improve efficacy of soil fumigation

Label Statements

“The following GAPs must be followed during all fumigant applications.”

“All measurements and documentation to ensure the mandatory GAPs are achieved must be recorded in the FMP and/or the post-application summary.”

Examples of Generic GAPs



Soil moisture

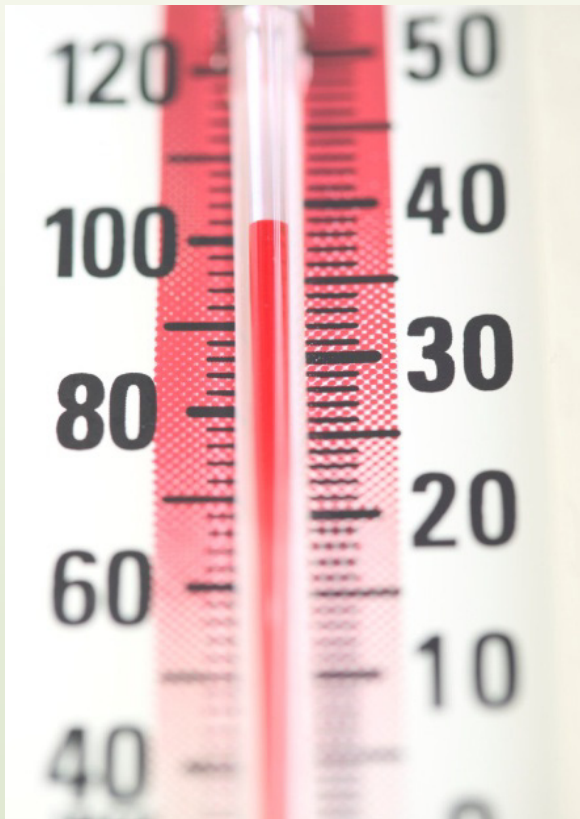
- Appropriate for soil type
- Determined using USDA's Feel and Appearance method or an instrument



Soil preparation

- good tilth
- free of large clods
- crop residue
(if present) must not interfere with soil seal

Another Example of a Generic GAP



Soil temperature

- Maximum soil temperature is 90 degrees F
- Depth of soil temperature measurement varies

Example of Application Method-Specific GAP

Tree Replant

- Before Application
 - Remove
 - *Tree stump*
 - *Primary root system*
 - *Backfill the hole with soil*
- After Application
 - Cover with soil and tamp, or
 - Compact soil



Example of Chemical-Specific GAP

Methyl Bromide

- Hot gas outdoor applications
 - Introduce fumigant from outside application block
 - Tarps must be used
 - Fumigant delivery tubes must be under tarps
 - Fittings, connections, and valves must be checked for leaks



Other GAPs

- Soil seal
- Calibrate, maintain, and clean equipment
- Prevent end-row spillage

Review Questions

True or False?

GAPs...

1. ...were developed solely by EPA.
2. ...will be mandatory on new labels.
3. ...must be recorded only in the Fumigant Management Plan.
4. ...are identical for all soil fumigants.

Summary

Good Agricultural Practices:

- Minimize exposure from emissions
- Increase safety and efficacy of applications
- May be generic, or specific to a chemical or application method
- Many on labels as recommendations, more will be mandatory
- Must be documented in FMPs and/or post-application summaries

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