**Agricultural Structures**

Unit VI — Plumbing

Instructor Guide

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Emphasize the importance of following local building codes and zoning laws when installing or repairing plumbing. Discuss relevant local building codes and zoning laws.

a. Information regarding building codes and zoning laws is available from local regulatory agencies, such as the planning and development department, public works department, and county board of commissioners.

b. General information about Missouri building codes and zoning laws is also available from the MU Extension, University of Missouri-Columbia, accessed January 17, 2012, from <http://muextension.missouri.edu/explore/agguides/>.

2. Use or adapt the activity sheets found in the unit to assess student competency at performing basic plumbing procedures. Review or supplement these activities as needed, based on student mastery of the procedures and the tools and materials the students will be using. **NOTE: Students should only complete this performance-based activity if they have mastered all the relevant competencies and have the instructor’s permission to perform the activity.**

3. For the performance-based assessment activity, have students apply the skills and procedures discussed in the unit to complete an appropriate plumbing project, such as one requiring students to join dissimilar types of pipe — copper, PVC, CPVC, and black iron.

4. The student handout for this activity includes a Project Completion Checklist and a Project Evaluation Checklist. Students can use these checklists to track the progress of their project and evaluate their work. Supplement or modify the student handout to reflect actual projects, as needed.

5. Have students turn in their completed projects.

6. Test the completed projects by attaching a water source to one side of the joint and a copper hose bib to the other. All joints should be watertight.

7. The final assessment score will be based on the overall quality of the work and the ability to safely and correctly complete the project within the available time.