

## Introduction

The importance of selecting the best site to apply manure cannot be overemphasized. Site selection is one of the major factors that directly affect the success of your operation. When you spend time up front analyzing and selecting the best sites, you are reducing your chances of incurring potentially expensive environmental problems and adverse public relations. Even though the site may look good initially, its use may result in problems that could easily have been avoided by choosing another site. As issues of site selection for land application are discussed in this lesson, producers are encouraged to evaluate their own land application site to better understand the strengths and weaknesses of those sites. This can be done with the aid of the Environmental Stewardship Assessment (see Appendix A) and the Regulatory Compliance Assessment (see Appendix B).

A few good rules to remember in selecting application sites are as follows:

1. Select a site that is consistent with federal, state, and county regulations as well as local county ordinances. State and local (county and city) regulations may restrict surface manure applications in certain water supply watersheds. Local rules and regulations may be more restrictive than state requirements. Therefore, before trying to locate any sites in an area, contact your local county officials and your state water quality agency for help to determine if certain areas of the county will not be approved.
2. Select a site that is as isolated as possible. Buffer setback restrictions along waterways can significantly reduce available land. Buffers are designed to minimize the potential for impacts to adjacent homeowners as well as impacts to the environment. It is also crucial to consider the direction of the prevailing wind in relation to the site and residential development in the area.
3. Select a site that is not too steep. The flatter the land, the lower the potential for runoff. In addition, flatter slopes generally have better soils and make the maintenance of a cover crop easier. Higher slope land can be used if appropriate erosion control and runoff precautions are taken.
4. Select a site that is as far away from surface water as possible, minimizing runoff impacts, should some of the wastewater be transported off-site.
5. Select a site that has as deep a seasonal groundwater table as possible, reducing the risk of potential groundwater contamination.
6. Select a site that has good vertical separation from bedrock (3 ft or more). Areas where bedrock is close to the land surface make poor wastewater application sites. Cracks in the bedrock can serve as direct channels for the wastewater constituents to be transported to the groundwater.
7. Select a site where the soils are suitable for growing the intended crops and where those crops can use the manure nutrients.
8. Select a site where soils are not too sandy. The clays and organic matter in soils help hold the nutrients and metals found in the manure, restricting their movement to groundwater and maximizing their potential for plant uptake.

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