

**CHECKLIST  
FERTILIZER STORAGE AND HANDLING**

- ✓ Consult with local authorities and professional engineers for specific zoning ordinances and technical advice prior to site selection and construction.
- ✓ Separate storage areas for pesticides and fertilizers that are secured, and keep the products out of the weather (locate storage buildings at least 50 feet from other buildings).
- ✓ Provide secondary containment of the stored products.
- ✓ Provide a safe mixing and loading area away from water resources.

## **FERTILIZER STORAGE AND HANDLING**

Storage and handling of fertilizers in their concentrated forms pose the highest potential risk to ground or surface water from agricultural chemicals. For this reason, it is essential that facilities for the storage and handling of fertilizers be properly sited, designed, constructed, and operated.

Operators who use fertilizers should observe Best Management Practices (BMPs) for handling these concentrated products. Consult with local authorities and professional engineers for specific zoning ordinances and technical advice prior to site selection and construction.

Agricultural fertilizer facilities include storage and the mixing and loading sites. The size and function of these facilities will vary depending on whether operators are small private land owners or large commercial dealers. However, all operators need properly designed facilities which promote worker safety and environmental protection.

The ideal facility provides separate storage areas for pesticides and fertilizers that are secured and kept out of the weather (storage buildings should be located at least 50 feet from other buildings), secondary containment of the stored products, and a safe mixing and loading area away from water resources.

### **Site Selection**

Always consider human and environmental safety before locating fertilizer or pesticide facilities. Determine the potential vulnerability of the groundwater at the site by comparing aquifer depth and the permeability of the overlying material. To prevent surface water contamination, consider the distance, slope, and runoff at the site. Seek professional help if you are unsure how to meet local codes and evaluate environmental vulnerability.

### **Existing Sites**

Evaluate the existing site to determine its suitability for fertilizer storage and handling before building any new facilities. Determine baseline values for environmental contaminants on the construction site by testing soil, groundwater, and surface water. If these baseline values are not established and the site is later found to be contaminated, it will be difficult to determine if the contamination was a result of the old site or the new facilities. An environmental assessment may be a valuable tool to use in deciding where to locate a facility. The assessment will determine baseline information and the suitability of the site. It is intended to detect the presence of contamination, if any, and the extent of contamination. If any contamination is found, sample soil and groundwater to determine the full extent of the contamination.

### **New Sites**

Choose a new site based on the same concerns as an existing site. Environmental assessment of new sites is also recommended prior to purchase to determine suitability of the site for the operation. Consider the new location in relation to water supplies, populated areas, traffic patterns, and potential future development.

### **Facility Site Plan**

When considering the construction of a facility, sketch out a site plan and document the following: location of proposed chemical facilities in relation to surrounding property and traffic

patterns; soil type; depth to groundwater; depth and location of wells, both on the site and within 100 feet of the property; distance and direction to surface water; plan of construction; proximity to 100-year flood plain; drainage of water across the property during storms; and an operational plan for containment areas showing the containment strategy, handling of recovered chemicals and rinse water, and handling of precipitation accumulation and waste.

