

# Environotes from TVA

By John E. Culp

TVA engineers and regional managers are constantly asked to provide information on secondary containment methods and structures. Major concerns are relative costs of possible containment construction materials.

TVA staff provide such information and emphasize the need to manage a containment system properly to assure that it operates as it should. Installment and management of a system must be accompanied by a commitment of all plant personnel to protect the environment.

## Lessons from ESAs

Managers face a variety of decisions in establishing an environmentally sound operation. The starting point is an assessment of existing conditions, done through an environmental site assessment (ESA).

Findings in an ESA can contribute a great deal of information to help a manager plan for and invest in modernizing a facility to bring it into regulatory compliance. Correcting the problems noted in an ESA can substantially reduce environmental liabilities and assure that releases from the plant operation do not contaminate surface and groundwater.

## Retailer Concerns

TVA's regional managers work closely with the agricultural retailers across the country. Their objective is to introduce TVA-developed environmental technologies and assist the retailers in using that technology.

Here are some concerns retailers are expressing:

- In some areas, such as the Corn Belt, the main issue is remediation. Retailers are wondering what the states' rules will be—will they have to clean up any sites? Will they be able to transfer their prop-

erty? Will there be any value remaining in their property?

- Containment is an important issue in many states. It has been accepted as a way of doing business by many retailers. Where there are no containment regulations—or discussions about regulations—little is being done. Few doubt, however, that proper containment will be a standard of agricultural chemical operations in the future.
- It is difficult for many retailers to keep track of all the rules and regulations that apply to them. Reporting, permitting, and recordkeeping require a great deal of time and study of regulations. Many state regulations are not well known, but the burden is on the retailer to know them. Some dealers are hiring consultants to keep track of regulatory requirements. Others have an “in-house” person dedicated to environmental reporting issues.

## Large Tank Containment

TVA engineers have worked with several retailers in large tank containment. We define large tanks as those with a volume greater than 100,000 gallons. Many solutions for containing large tanks have been proposed—and many meet state regulations. Bladders have been used in place of dikes. Steel false bottoms can be used in some large tanks for detection. Some states will allow automatic electronic liquid level monitoring as a form of leak detection. Some states have permeability requirements which prohibit use of natural clay soils or clay liners. Other states permitting higher permeability will probably have many earthen dikes. Regulations vary widely, as do solutions to problems. ■

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