

## **Chemigation**

Chemigation refers to the application of crop management materials through irrigation systems.<sup>15</sup> Injection of crop management materials such as fertilizers and agrichemicals into an irrigation system which is not carefully designed and safely managed can result in serious groundwater contamination and legal consequences of significant magnitude.

Application of safety equipment in preventing back-flow will substantially reduce the problems of contamination and subsequently the risks of exposure to liability.

Safety equipment is available that, when properly installed, can prevent back-flow and subsequent groundwater contamination. Presently, federal law has not specifically mandated the use of these safety devices. Additionally, few states have adequate laws, if any, requiring the installation of safety equipment.<sup>16</sup> Nevertheless, agriculturalists should consult state laws and local ordinances which in some instances may mandate the installation of equipment for back-flow prevention. Farmers seeking information on the installation and maintenance of back-flow preventors should contact their respective state extension agents.<sup>17</sup>

Although the farmer cannot be completely shielded against exposure to legal liability, the installation of safety equipment will reduce such exposure. It is presently estimated that the average expense of such installation is less than one percent of the total cost of the irrigation system.<sup>18</sup> Additional safeguards may include: the requirement that employees obtain and maintain certified applicator status; prechemigation water analysis at the water source and locations near the water source; consideration of run-off direction; knowledge of potential phytotoxicity in the preparation of chemical application schedules and dosage rates; following explicitly, calculated and recommended dosage rates; sound soil conservation; consultation with legal counsel on the advisability of purchasing workman's compensation insurance coverage and purchase of chemical liability insurance.<sup>19</sup>

By definition, chemigation would arguably be categorized as a point source of pollution and subject to the Clean Water Act.<sup>20</sup> Additionally, the common law actions of trespass, negligence, nuisance and strict liability as described in Chapter 1, may be levied against farmers for contaminating groundwater via chemigation.

## **Future Prospects**

Due to expansive federal jurisdiction over the nation's water-ways, agricultural operations which entail the application of fertilizers and pesticides would likely be classified as non-point water pollution sources as defined by the Clean Water Act. "Water-ways" is so broadly defined as to include almost every potential depression in which water is or may be carried.

As noted, agricultural operations classified as non-point sources of pollution are generally not yet under the rigid standards imposed by the Clean Water Act. The EPA, however, does retain the authority to develop and impose standards on non-point source operations. Farmers should stay abreast of any new developments through county extension agents or by contacting their state Environmental Regulatory Agency.