From the DIRECTOR

A. G. HAZEN

Governmental regulations to control river and lake pollution have focused considerable attention on manure disposal from livestock operations.

Common sources of river pollution include the discharge from municipal waste systems, from factories, and to some extent from farming operations. Discharges from municipal waste systems and factories tend to be continuing, whereas feedlot discharges normally occur only when rainfall carries the pollutants from the lots. This intermittent flow of pollutants from feedlots plus the fact that only a very small per cent of the total manure accumulation is carried away suggests that feedlots often are not contributing as much pollution as occurs from other sources. Large size lots, however, may generate concentrations of pollutants at given points along rivers which can cause problems.

Questions about the extent of pollution in the runoff from feedlots make it difficult to determine standards which should be met by control systems. Research conducted in North Dakota is beginning to provide some of the answers to these questions for this area. The research was initiated about 10 years ago to look for ways to handle and dispose of manure with minimum labor and cost. Pollution control was considered in the original research, but operational efficiency received the major emphasis. During the past 10 years, growing concern about environmental quality has resulted in an intensification of emphasis toward pollution control in livestock manure disposal. This research is also a part of a coordinated regional research effort with other state Agricultural Experiment Stations in the North Central Region.

Bacteriologists, animal scientists, civil engineers, and agricultural engineers are cooperating in manure disposal research in progress in North Dakota. This work recognizes that waste can be deposited in waterways either by directly placing the manure in the water or by carrying the pollutants to the water along with dilution water.

To control pollution it seems obvious that dumping manure directly into waterways should be avoided.

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In This Issue

ON THE COVER

Mindful of another bountiful barley harvest this summer on North Dakota farms is this combine moving down the swath in the Red River Valley near Chaffee, Cass County.

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FROM THE DIRECTOR

(Continued from Page 2)

Conveying pollutants to rivers from livestock operations by dilution water can be accomplished in several ways. Some livestock production operations generate a considerable amount of dilution water in cleaning operations. One of the research projects emphasizes manure disposal from livestock confinement housing units and another emphasizes the disposal of wastes from feedlots.

Pollution control is a major objective of several agencies of the Federal and State Government. Because the effect of manure on the pollution of rivers and lakes is not fully understood, research results will provide the kind of data needed for maintaining adequate pollution control with systems which will also be well suited to livestock production enterprises.

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