

EPA'S New Guidelines in Dairy Waste Management

L. B. Baldwin¹

The Environmental Protection Agency (EPA) has recently issued guidelines for control of "Feedlot" wastes under the direction of an Act of Congress, October, 1972. On that date, Congress amended the Federal Water Pollution Control Act and established national goals for the virtual elimination of pollutant discharge to surface waters by 1985. The program is called the National Pollutant Discharge Elimination System (NPDES). It calls for increasingly stringent reduction of pollutant discharge, with an interim level to be reached by July 1977, and another by July 1983.

The Florida Department of Pollution Control has been studying the establishment of rules to protect Florida surface waters. While still in draft stages, the rules indicate that State guidelines will also sharply reduce or completely eliminate discharge of pollutants to most of the State's waterways. Despite recent trends - realization of the energy shortage; the kinks in regulatory red tape; executive impoundment of funds; and the inadequacy of some hastily contrived rules - it appears certain that the discharge of large quantities of pollutants will be prohibited. Both Federal and State programs are directed to this end.

The Federal program, NPDES, has developed guidelines for pollutant discharge by various industries, and instigated a permit system to inventory and control approved discharges. Permits will not be issued until dischargers meet the guidelines. For the dairy production industry, the guidelines² require limiting discharge to the overflow of the waste management system brought about by intense rainfall. At all other times, wastes are to be confined by the property and spread on the soil or otherwise disposed of. Specifically, by July 1977, feedlots (this includes dairy farms) are to confine all wastes except those that occur as a result of runoff from a storm exceeding once in ten year average frequency and 24-hour duration. By 1983, the waste management system is to be built to contain all runoff up to a storm of once in 25 year frequency and 24-hour duration. All new installations are to meet the 1983 Standard immediately.

Dairies in Florida have been under State guidelines concerning animal waste management for about 4 years. These guidelines require the retention of wastes on the property. Although the 10 year and 25 year storm requirements of NPDES may require upgrading of some existing waste management systems, it is not likely that major expense will be involved. Most Florida dairies have met State guidelines.

The NPDES permit system requires that all dairies having 700 or more mature cows (milking and dry) apply for a permit. By law, this was to be done

¹Asst. Professor, Agricultural Engineering, Extension. University of Florida, Gainesville.

²Published in Federal Register, February 14, 1974, Volume 39, No. 32, Feedlots, Point Source Category.

by April, 1973. Actually, neither the permit forms nor the final guidelines were available at that time. EPA now requests that all applications be in by August 1, 1974, in order that they may process them by their deadline, December 31, 1974.¹ Permit application forms may be obtained by writing:

Mr. Raymond D. Cozart
Coordinator, Administration Staff
Water Enforcement Branch
EPA, Region IV
1421 Peachtree Street, N.E.
Atlanta, Ga. 30309

Agricultural short form B, for feedlots should be requested.

Upon return of the completed form to EPA, receipt will be acknowledged. This fulfills the producers' obligation to apply for a permit. The application is then routed to the State EPA coordinator and the State's Department of Pollution Control. If the waste management system meets Federal and State guidelines, a permit will be issued.

There are several ways by which dairy wastes can be contained and spread on the land. The most common system in Florida uses lagoons, due to the fact that this is an economical facility for handling large volumes of waste water. Information about the design and construction of lagoons can be obtained from county Extension agents and from the Soil Conservation Service.

The NPDES permit system currently involves only discharge from "point sources". This is simply a definable source of pollutants with an identifiable discharge point, or points. The milking, holding, cow wash, and feeding areas of a dairy are considered a point source. Pastures are not point sources, but are being studied along with other crop producing areas as non-point sources of pollution. Overland runoff and seepage are examples of non-point discharge and are difficult to evaluate as to quantity and quality. We are concerned that the EPA's approach to non-point discharges be realistic and not detrimental to agricultural productivity. The Institute of Food and Agricultural Sciences is keeping up with developments regarding non-point sources and will make inputs to EPA as appropriate.

In summary, dairy producers having over 700 mature cows should apply for an NPDES permit by August 1, 1974. Waste management systems that Extension has been recommending should meet the requirements for a permit in most cases.

¹From correspondence with EPA