Alberta Feedlot Management Guide Facility Design to Protect the Environment

Tennis Marx and Robert Borg Albert Agriculture Food and Rural Development 103, 5015-50 Ave. Camrose, AB T4V 3P7 tennis.marx@gov.ab.ca robert.borg@gov.ab.ca

Abstract The second edition of the Alberta Feedlot Management Guide was printed September 2000. The guide includes a facilities and environment design section for modern feedlots. Included in the design section are plans and recommendations for:

- Site Selection, including environmental sustainability issues and acceptable levels of impact on neighboring land uses.
- Water Supply includes volume and water quality requirements for cattle.
- Protecting Surface and Groundwater Quality looks at environmental risks from manure runoff.
- Pen and Runoff Management, includes designs that control runoff and seepage and systems to store runoff until it can be utilized by cropland.
- Utilization of Feedlot Manure looks at the proper application of manure to crops and manure nutrient utilization.
- Composting Animal Manures describes the mechanics, advantages, and some of the drawbacks associated with composting.

A survey of users of the first edition of the Alberta Feedlot Management Guide (1996) showed that the facilities and environment section was one of the most used parts of the guide. 75% of users found the environment section valuable, and 100% of users found the facilities section of value.

Updates to the 2000 Code of Practice for Responsible Livestock Development and Manure Management with respect to estimating the runoff from open lots were made according to design data from the Alberta Feedlot Management Guide.