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Environmental Management of Concentrated Animal Feeding Operations (CAFOs), Frank R. Spellman, Nancy E. Whiting. CRC Press, Taylor & Francis Group, Boca Raton, London, New York, USA (2007). 475 pp., Price: £79.99, ISBN-10: 0-8493-7098-1, ISBN-13: 978-0-8493-7098

Large farms, or better, "Concentrated Animal Feeding Operations," so called CAFOs, are part of a recent trend toward large-scale, corporate-owned and managed livestock production. CAFOs increase the production and lower the prices. But on the other hand, CAFOs can cause economic problems to small farms and the present farming culture in general. Furthermore they can cause ecological and environmental problems.

The purpose of the book is to provide practical information on the concepts and practices involved in the operation and maintenance of CAFOs from the U.S. point of view. Much attention is given to regulatory requirements and compliance, and the best available technology.

Both authors, Frank R. Spellman from Norfolk, Virginia, and Nancy E. Whiting from Columbia, Pennsylvania, are very experienced in waste treatment and environmental management. The book is divided into 12 chapters varying between 12 and 83 pages.

The first chapter (Introduction, 25 pp.) deals with some definitions and explanations. A CAFO must have 1000 animal units. An animal unit is defined with 1000 lb. of animal weight. That means 2500 hogs, 700 dairy cows, 1000 beef cattle, 100 000 broiler chicks or 82 000 layer hens are equal to 1000 animal units or one CAFO. More details to CAFOs are given in later chapters. Every topic described in the book, including CAFOs, has its own language for communication. In some cases it is not easy to follow the language and its abbreviations, esp. for readers from overseas. In the first chapter the authors provide a glossary of key terms.

The second chapter (45 pp.) deals with CAFO regulations and Comprehensive Nutrition Management Plans (CNMPs) in the USA. CNMPs are developed in accordance with the National Resource Conservation Service (NRCS) planning policy and rely on the planning processes and established conservation practice standards. Many regulations of CAFOs beginning with the Clean Water Act (CWA) are explained and described in the chapter. In some cases it is not easy for the readers from outside the USA to follow all explanations and details. Furthermore some values should be updated (e.g., Table 2.15. "Number of farms with livestock, livestock sales from 1997"). It would be also helpful to compare U.S. regulations with regulations in the "rest of the world" or to mention some examples from other countries.