



December 16, 1999

Mr. Donald Pryor
Gulf of Mexico Hypoxia Working Group
National Oceanic and Atmospheric Administration
National Center for Coastal Ocean Science
Room 9127
1305 East-West Highway
Silver Spring, MD 20910

Re: COMMENTS ON THE INTEGRATED ASSESSMENT ON
THE CAUSES AND CONSEQUENCES OF HYPOXIA IN THE
GULF OF MEXICO

Dear Mr. Pryor:

The Natural Resources Defense Council is a national, non-profit organization of scientists, lawyers and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 400,000 members nationwide, served from offices in New York, Washington, Los Angeles and San Francisco. NRDC appreciates the opportunity to comment on the Integrated Assessment on the Causes and Consequences of Hypoxia in the Gulf of Mexico.

In general, NRDC endorses the comments of the Gulf Restoration Network, which discuss the array of issues covered by the Integrated Assessment, and we wish to restate the point in those comments that "the Assessment makes important initial findings regarding the relationship between nitrogen and the Dead Zone, sources of nitrogen entering the Mississippi River Basin, and potential strategies for reducing the level of nitrogen reaching the Gulf." The comments below are intended to discuss one aspect of the Integrated Assessment—its focus on pollution from livestock operations.

Concentrated Animal Feeding Operations (CAFOs) can contribute to nutrient pollution through their emissions of ammonia and the often excessive and concentrated application of manure onto the land. Additionally, CAFOs often utilize enormous lagoons to store their waste and these lagoons often break or spill into surface waters, or leach into ground and surface waters. Pollution problems are compounded since these operations tend to

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congregate around processing plants, with the result that more waste is generated in certain counties and regions than can be taken up by the crops.

To its credit, the Integrated Assessment recommends that manure be more carefully applied and be better managed when it is stored. In fact, the Integrated Assessment notes that improved management of feedlot runoff is one of the three changes in agricultural management practices that could have the greatest estimated potential to reduce nitrogen sources to streams and rivers

However, unlike the Draft Hypoxia Assessment Reports, the Integrated Assessment appears to ignore altogether the increased concentration in the livestock sector and the potential for CAFOs to pollute. Nor is there any interest in learning more about the problem -- the recommendation in Draft Assessment Report Topic 4 that "there is a great need for research on the impacts of large scale confined animal feeding operations and for studies on ways to minimize these impacts" (Draft Assessment Report Topic 4, p. 72) was not included in the Integrated Assessment. Finally, Table 2.1 leads the reader to the conclusion that the problem of animal manure is not significant (15% of the total N flux to the Gulf), but fails to add the footnote that was included in Table 6.4 of Draft Assessment Report 3 -- that the 15% is a very uncertain number. The lack of certainty about the contribution from CAFOs to the Gulf of Mexico was also noted by Dr. Otto Doering in his presentation on Draft Assessment Report Topic 6. Mr. Doering asserted that the threat of nutrient pollution was more significant than the calculations of manure suggest. He further indicated that this was due to the concentrated industrial manner in which animal are now raised and their waste disposed. Dr. Doering's conclusion finds support in recent publications. See Carey, et al. "The Role of the Mississippi River in the Gulf of Mexico Hypoxia," p. 27 (Environmental Institute Report 70, May 1999); Clean Water Network and the Natural Resources Defense Council, America's Animal Factories: How States Fail to Prevent Pollution from Livestock Waste (Washington, D.C., December 1998).

Much like the Draft Assessment reports, the Integrated Assessment ignores contributions to water quality impairment from CAFOs besides manure applications onto the land. These contributors include manure that is leached by CAFO lagoons into groundwater that connects with surface water, and lagoon failures. In a recent analysis of factory farm pollution in 1999 alone:

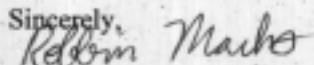
- Spills and dumping of manure and other waste products occurred over 100 times at factory farms in the ten surveyed states, including: Arkansas, Illinois, Iowa, North Carolina, Ohio, Minnesota, Missouri, Oklahoma, Wisconsin, and Virginia.
- More than four and a half million gallons of manure were spilled or leaked into water resources. This grossly underestimates the volume spilled, since the amount spilled is often unknown.
- Public health and wildlife were threatened by pollution of our rivers, lakes, and coastal waters.

See: Spilling Swill: A Survey of Factory Farm Water Pollution in 1999" Clean Water Network and the Izaak Walton League of America (Washington, D.C., December 1999).

Policy recommendations that are missing from the Integrated Assessment, but that could help to reduce pollution from CAFOs, include banning open air lagoons and other liquid manure systems to address lagoon breaks, spills and leaching; supporting sustainable livestock systems -- that do not concentrate and dispose of the waste in liquid form; and requiring water quality monitoring and reporting by CAFOs to measure pollution contributions and ensure compliance with pollution controls.

In conclusion, while the Integrated Assessment makes some strong and helpful policy points in a number of areas, the document needs to a better job of assessing the impact of and making recommendations to reduce the pollution from CAFOs.

Sincerely,



Robbin Marks

Senior Resource Specialist