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EG&G ROCKY FLATS

EG&G ROCKY FLATS, INC.
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

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November 15, 1991

Paul Frohardt
Walter Quality Control Commission
State of Colorado
4210 East 11th Avenue
Denver, Colorado 80220

COMMENTS ADDRESSING THE DEVELOPMENT OF BIOCRITERIA AND WETLAND STANDARDS FOR THE STATE - HAW-018-91

Rocky Flats Plant (RFP) is participating in the Colorado Water Quality Control Commission work group meeting for biocriteria, wetlands, and sediment standards.

The following is a list of issues that RFP has identified based on the extensive environmental monitoring implemented on plant site to date. If you have any questions, feel free to call me at 966-6683, or Georgene Porter at 966-7083.

Holly A. Wolaver

H. A. Wolaver
Surface Water Division

HAW:vbs

Attachment:
List of Issues

ADMIN RECORD

SW-A-002961

A. Biological Criteria Development

1. Due to previous domestic, agricultural, and industrial influences on the streams and rivers of Colorado, it will be difficult to define what waterways are truly representative for reference. Is it possible that this factor will promote extrapolations of existing ecosystems to expected ecosystems that are overstated?

2. It is our experience that with standard operating procedures for biocriteria inventories, it is inevitable that different individuals over different years will take samples in varying ways. Consistency is difficult to attain. It is of concern that the narrative and/or numerical standards will be so narrowly defined that even relatively clean streams and rivers will at times not meet the standards due to variations in sampling technique.

3. During sampling, accurate field identification of species may be difficult and lab identification may be required. This practice may inadvertently cause the death of endangered species.

4. RFP does not continually release water from the terminal ponds, and will, therefore, not be able to maintain a "normal" aquatic ecosystem below the terminal holding ponds.

5. Would constructed systems be exempt? If so, how would biocriteria standards be applied to created water retention facilities for surge protection or wetlands created for water treatment?

6. The use of fecal coliforms as a standard may be directly adverse to natural conditions. Waterfowl areas have very high fecal coliform counts.

7. Noticably, the states with existing biocriteria standards are not subject to the western states' water rights provisions of often over 100% utilization. The maintenance of sufficient flow for acceptable biocriteria may be in direct conflict with established water rights agreements and contracts.

B. Wetlands

1. Wetlands are part of the surface water and ground water hydrology that are monitored for chemical specific standards. Why is it necessary to create a completely separate list of chemical specific standards for the natural and created wetlands?

2. It is not unusual to create wetlands specifically for effective and natural water treatment. Would the inclusion of these created wetlands into the standards criteria prohibit their use?

C. Sediment Toxicity

1. Sediment toxicity has been frequently measured in the sediments of the Great Lakes and Puget Sound. It is questionable how ecosystems so different from the benthic ecology of Colorado rivers and streams can be used to extrapolate methods to represent the toxicity of Colorado sediments. It will probably be necessary to implement a couple of years of monitoring to determine what methods are most representative.

2. Many areas of Colorado have high levels of naturally-occurring heavy metals, which could cause sediment toxicity. Therefore, even pristine areas may "fail" a sediment toxicity test if compared to standards from other states that do not have the same geology as Colorado.

D. General

1. Will aquarian areas also be subject to these provisions or will they only be industry-specific or industrial-area specific? Aquarian practices can have a greater impact to water quality than many industries.

2. Who will be responsible for the wetlands and aquatic systems that are affected by acid mine drainage from abondoned mines? Permittees downstream of acid mine drainage should not be responsible for the biological and chemical effects on the wetlands or aquatic environments.

November 21, 1991

Paul D. Frohardt
Colorado Water Quality Control Commission
4210 East 11th Avenue
Denver, CO 80220

I have attended two of the work group meetings for the development of biological criteria, and adoption of wetlands water quality standards since they began in September 1991. I submitted a list of issues concerning biocriteria, wetlands, and sediment standards dated November 15, 1991, at the November 18th workshop (see attachment).

I am an environmental engineer employed at EG&G Rocky Flats Plant that takes an interest in investigating methods for industry to physically and economically meet Environmental Protection Agency (EPA) and state regulations. The response that I submitted at the November 18th meeting represents my personal ideas. These ideas do not necessarily represent the position or opinions of EG&G Rocky Flats or the Department of Energy.

Holly A. Wolaver

Holly A. Wolaver, Environmental Engineer
EG&G Rocky Flats, Inc.

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Attachment:
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