Gulf Mineral Resources Co.

June 10 80

Secretary of the Commission U.S. Nuclear Regulatory Commission Attn: Docketing and Service Branch Washington, D.C. 20555

PROPOSED RULE PR-2045
(45 FR 18023)

RE: Standards for Protection Against Radiation; Advance Notice of Proposed Rulemaking, 45 FR 18023

USNAC

Gentlemen:

Gulf Mineral Resources Co. a division of Gulf Oil Corporation (Gulf), is pleased to submit the following comments in response to your notice in the Federal Register March 20, 1980.

Gulf agrees with the NRC on "the desirability of re-examining the adequacy of its existing radiation protection standards" (45 FR 18024). Gulf does, however, object to the apparent staff decision that the rules need overhaul simply because they were developed in the 1950's. There has been no change in the "fundamental approach to radiation protection embodied in the original publication" (45 FR 18024). Perhaps this was best stated by Lauriston S. Taylor, longtime president of the National Council on Radiation Protection and Measurements (NCRP), in a letter to Mr. F. Peter Libassi, Chairman, dated 26 March 1979 containing comments on the draft report of the Interagency Task Force on the Health Effects of Ionizing Radiation, hereafter referred to as the Libassi report, as follows:

On the other hand, I have found nothing in the report covering our basic knowledge of radiation effects or the principles of radiation protection that was new or surprising. (Emphasis added). The primary reason for this is that I have been associated with the National Council on Radiation Protection for many years and it has been part of the on-going program of the NCRP to keep under continual review all aspects of radiobiology and the biological effects of radiation. This has not been an off-again, on-again matter; the NCRP studies have been steady and uninterrrupted since the Committee was reconstituted in 1946. As a result of the first study beginning at that time, the NCRP Report No. 17 was prepared and, for all practical purposes, adopted by the ICRP in 1950. The basics of the science and technology covered in our report,

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and those of the ICRP, the NCRP, and the NAS since about 1950, have not shown any major breakthroughs in our knowledge nor identified any fundamentally new problems which might grossly influence our radiation protection posture. Numerous details and contradictions and confirmations, yes, but cause for major alarm, no. (Emphasis added). Throughout the past three decades it has been possible to take advantage of such studies as those of the Japanese survivors and various medical studies resulting from the deliberate exposure of people in radiation therapy. Definitive animal experimentation has also gone forward. And all of these things combined have served primarily to confirm, in more specific terms, what is already pretty well understood by, let us say, the middle 1950's - some of it in the middle 1930's. (Emphasis added).

Gulf also objects to the conclusion of the NRC staff that the Lebassi report "among other things, made recommendations for reducing radiation exposures" (45 FR 18024). From page 66 of the Libassi report:

C. Recommendations.

Throughout its report, the Work Group suggested measures that could be taken to reduce radiation exposure. Some of these measures may be practical, while others may not. Consequently, the Group's first recommendation was that the feasibility and cost effectiveness of each proposal be evaluated and that the proposal be implemented if found appropriate.

From page 103 of the report:

IX. Conclusion

In this Report, the Interagency Task Force on the Health Effects of Ionizing Radiation has presented a comprehensive program to address the concerns identified in the White House memorandum of May 9, 1978...proposals for steps that might reduce unnecessary radiation exposure in the future (emphasis added) have been identifed.

While it is important to respond to these concerns, it is also important not to lose sight of what has already been done. Much is known about radiation and many control measures are in place. At the same time, more can be done. . . .

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Further, from page 145 of the report of the Work Group on exposure reduction:

V. Recommendations

The Work Group has presented a series of opportunities for radiation exposure reduction, intended to "obtain reductions of risks and effects of radiation as low as is reasonably achievable". This ALARA principle includes consideration of the state of technology, the economics of improvements in relation to benefits to public health and safety, and other societal and socioeconomic conditions.

Thus the NRC staff conclusion is in error. There has been no demonstration that the present regulations are inadequate nor that the "fundamental approach to radiation protection" is wrong. Perhaps only a fine tuning of the current regulations is necessary as opposed to a major overhaul. Gulf urges caution not to confuse "improvement" with "change".

Comments on the specific staff proposals contained under "Essential Elements of the Radiation Protection Standards" and "Areas in Part 20 that Need Improvement" are attached.

Gulf appreciates the opportunity to comment and looks forward to working with the NRC staff in finetuning and improving where necessary the existing adequate radiation protection regulations.

Sincerely,

GULF MINERAL RESOURCES CO.

W. L. Roger's

Manager, Environmental Affairs

WLR: FWM: rw Attachment

COMMENTS OF

GULF MINERAL RESOURCES CO.

Essential Elements of the Radiation Protection Standards

- a(1) should be changed to read:
 - No practice or operation involving exposures to radiation should be adapted when its introduction produces a negative net benefit.

Reason

Many times it is difficult to demonstrate a positive net benefit in advance but it can be, with relative ease, demonstrated that there is no negative net benefit. It should also be clearly stated and understood that a change instituted solely for economic gain of industry is in fact a benefit. Care also should be exercised in adopting statements of scientific advisory bodies directly into the regulatory framework.

- a(4) The efforts of the NRC in publishing the Draft Regulatory Guide and Value/Impact Statement, "Instruction Concerning Risk from Occupational Radiation Exposure", Task 0H902-1, May 80, are appreciated and are certainly a major step in this direction.
- b(1) Care should be exercised in combining internal and external exposures to insure that each exposure is put on a common basis. A one rem external exposure to the whole body and an internal exposure of one rem to the liver may total to two rem exposure to the liver but does not equate to two rem whole body. Any combining of external and internal exposures should use a weighting system as is used in ICRP26.
- d(9 thru 13) Change wording to read "performance standards" or "criteria" instead of "procedures".

Reason

Regulated procedures frequently eliminate innovation and progress.

Areas in Part 20 that need improvement:

a(1) Should be changed to read:

"The radiation protection principles should be presented in terms understandable to laymen".

Reason

The statement as noticed in 45 FR 18025 leaves the impression that a radical change in the "fundamental approach to radiation protection" is being proposed. Time and scientific evidence show that the "fundamental approach" contained in the current 10 CFP. 20 is correct.

a(2) As written: The ALARA principle and requirements for both effluents and occupational exposures should be strengthened.

Comment: A principle is a principle. Gulf finds difficulty in understanding how a principle can be strengthened. If a new principle is contemplated, then it should be so stated. What is the demonstrated need for strengthening effluent and occupational exposure requirements?

As written: Quantitative occupational guidelines should be established whenever possible for NRC licensed facilities.

Comment: This is fine if guidelines, in the true sense of the word, are developed and then allowed to be implemented with a common sense approach on an individual facility basis. Little is to be garded if the usual practice of calling regulations by the term guidelines and then applying these "guidelines" in a rigid, unyielding manner to all facilities is used.

- b(1) The use of ICRP recommendations is fine, except where has it been demonstrated that the present dose limitations are inadequate?
- b(6) At the same time controls for "moonlighter", etc. are strengthened, the responsibilities of the employee for his/her own actions should also be addressed.
- f(1) Gulf fails to see how the adoption of SI units will contribute in any positive way to understanding by laymen. It's adoption will more than likely confuse them even more.
- f(3) This will be a welcome needed change.