

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

SEP 2 2 1980

WMUR:JER Docket No. 40-8714 SUA-1352, Amendment No. 2

DOCKET NO: 40-8714

LICENSEE: Cleveland Cliffs Iron Company

FACILITY: Collins Draw R&D In Situ Uranium Solution Extraction Facility, Campbell County, Wyoming

SUBJECT: EVALUATION OF REQUEST FOR LICENSE AMENDMENT TO AUTHORIZE USE OF OXYGEN AS OXIDANT IN EXTRACTION PROCESS

By letter dated July 14, 1980, Cleveland Cliffs Iron Company (CCIC) requested that Source Material License SUA-1352 be amended to authorize the use of gaseous oxygen in addition to or in place of hydrogen peroxide which is currently authorized for use as an oxidant in the in situ uranium extraction process. CCIC also requested approval to incinerate waste paper and waste cardboard at the Collins Draw site. As a result of negotiations between the applicant and the WY DEQ Air Quality Division, to whom CCIC had submitted a parallel request for permission to burn wastes, the incineration approval request was withdrawn.

The applicant claims and the staff concurs that the use of oxygen alone or in conjunction with hydrogen peroxide will produce no chemical effects or environmental impacts different from those produced by the use of hydrogen peroxide alone. The net effect of permitting the use of oxygen as an oxidant at the test facility would be to add the presence of a mobile liquid oxygen storage tank at the site and installation of some additiona' piping. The handling of liquid or gaseous oxygen is commonplace in industry and with standard safety precautions should not provide any unusual hazard.

Based upon review of the applicant's request, the staff concludes that issuance of an amendment authorizing the use of oxygen as an oxidant in the extraction process will not result in undue risk to the public health and safety and will not produce any increase in adverse environmental impact over that produced with the use of hydrogen peroxide. Because issuance of this amendment is not deemed a major federal action significantly affecting the quality of the environment, pursuant to 10 CFR 51.5(d)(4), no environmental impact statement, negative declaration, or environmental appraisal need be prepared.

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Approval of the requested amendment is recommended by revision of License Condition No. 10 to read as follows:

10. Authorized Use: For uranium recovery from uranium solution extraction studies in accordance with the statements, representations and conditions contained in (1) the licensee's application dated November 3, 1978, and supportive information attachments; (2) additional information transmittals dated January 16, 1979, March 21, 1980, and May 7, 1980; and (3) the information contained in the transmittal dated July 14, 1980, concerning use of oxygen as an oxidant in the extraction process.

JE Kothfleisch

Uranium Recovery Licensing Branch Division of Waste Management

Approved 10

H. O. Miller, Section Leader Uranium Recovery Licensing Branch