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MEMORANDUM OF PROCESS STANDARDS 9-16M
SODIUM DICHROMATE AND PH REQUIREMENTS
K REACTORS

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SODIUM DICHROMATE AND PH REQUIREMENTS
K REACTORS

R. W. Reid

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MEMORANDUM OF PROCESS STANDARDS 9-16M
SODIUM DICHROMATE AND PH REQUIREMENTS
K REACTORS

- References: 1) Process Standard-Water Plant 183-A-010, Section 10.01 B
2) Process Standard-Water Plant 183-A-020, Section 20.01
3) DUN-6463, "Dichromate Evaluation," PA Carlson, November 4, 1969,
(Secret)

The reference standards specify the sodium dichromate and pH requirements to inhibit corrosion of reactor components and fuel elements.

The purpose of this memorandum is to provide interim limits for a lower sodium dichromate feed to reduce water treatment costs. The interim limits are a function of exit water temperature and pH. The process standards will be revised when current studies on the effects of dichromate reduction are completed.

The sodium dichromate and pH requirements of the reference standards are replaced by the table shown below.

<u>Bulk Outlet</u> <u>Coolant Temperature</u>	<u>Maximum</u> <u>pH</u>	<u>Minimum</u> <u>Dichromate, ppm*</u>
90 - 95 C	6.6	1.0
85 - 90 C	6.7	0.5
less than 85 C	6.8	0.5

For an operating margin, the upper pH and the lower dichromate should not be exceeded except for short periods of time; i.e., one to four hours.

MTL:bw

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* Daily 24-hour average.

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