MEMORANDUM TO: Michael F. Weber, Chief
NMSS/DWM/LLDP

FROM: John H. Austin, Chief
NMSS/DWM/PAHL

SUBJECT: REVIEW OF FINAL SURVEY REPORTS FOR APOLLO SITE

PAHL staff has reviewed the final survey reports for the Babcock & Wilcox Co. (B&W) Apollo site. These reports include all the submitted survey reports by B&W, confirmatory measurements by Oak Ridge Institute for Science and Education (ORISE), and a confirmatory survey by Region I staff. The final surveys by B&W and ORISE cover 100 percent of the affected areas and portions of the unaffected areas surrounding the facility. The Region I confirmatory survey covers approximately 10 percent of the property. The three sets of surveys support the finding that the site meets the release criteria for unrestricted use.

PAHL staff compared measured average grid values between the B&W final survey reports and the ORISE confirmatory survey for numerous different locations on the site. Additionally, included in the ORISE report is a table of results from split samples. The similarity of both sets of data give confidence in the licensee's results and conclusions on the residual radioactivity levels present on the site.

As indicated in the ORISE report, although scattered individual samples were higher than release criteria, in general, the 25 ft by 25 ft grid average was less than the release criteria. Seven grids displayed average concentrations greater than the general release criteria of 1.1 Bq/g (30 pCi/g), but less than the "hot" grid upper limit of 2.2 Bq/g (60 pCi/g). Additionally, following the procedure for classifying "hot" grids, the adjacent grids were examined. None of the grids with elevated average concentrations found in the final survey require additional remediation.

The Region I confirmatory survey did not find any licensed residual contamination higher than release limits. A few scan results indicated potential hot spots but these were found to be caused by natural occurring material in limestone bedrock and backfill brought onto the site from a nearby quarry.

PAHL staff accepts the final survey provided by B&W for the Apollo facility. This acceptance is based on confirmatory surveys performed by ORISE and Region I staff. These surveys confirm that the site meets the residual radioactivity criteria for unrestricted use and can be considered remediated, in terms of surface soils. This finding supports the licensee's request to have its license terminated and the site released for unrestricted use.

CONTACT: C. McKenney, DWM/PAHL
415-6663

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 19, 1996

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