

20/71



CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES QUALITY ASSURANCE SURVEILLANCE REPORT

PROJECT NO.: 20-1402-159 REPORT NO.: 99-15 PAGE 1 OF 1

SURVEILLANCE SCOPE: Surveillance on Expiration Dates of Chemicals in the CNWRA Labs.

REFERENCE DOCUMENTS: QAP-004 Surveillance Control Procedure; Good Laboratory Practices.

STARTING DATE: June 3, 1999 **ENDING DATE:** June 3, 1999

QA REPRESENTATIVE: Bruce Mabrito

PERSONS CONTACTED: Darrell Dunn, Yi-Ming Pan, Robert Cherrington, James Prikryl, Melissa Hill.

SATISFACTORY FINDINGS:
 This surveillance took place in various Laboratories of the CNWRA, in Buildings 57 and 51 on the SwRI grounds. This surveillance was conducted to determine whether out-of-date or expired chemical supplies were on the shelves in four of the CNWRA Laboratories.

Room L111, Corrosion Lab, Bldg. 57 - In three separate chemical storage cabinets, approximately 90 containers of chemicals and buffer solutions were checked. Most of the chemicals consisted of Ferric Chloride, Sodium Bicarbonate, Sodium Thiosulfate, Sodium Tetraborate, Sodium Molybdenum Oxide, Sodium Sulfite, Chromic Chloride, Calcium Chloride, Sodium Fluoride, Sodium Chloride, and Potassium Chloride Solution. The chemical manufacturer does not put expiration dates on the majority of the above chemicals. The buffer solutions do have expiration dates and during the surveillance two buffer solutions were found to have exceeded their expiration dates: a buffer solution pH 1.00 expired February 1999 and a Ceric Sulfate Solution N/10 had an expiration date of November 1991. Both were removed from the shelves during the surveillance. It was stated that the Ceric Sulfate Solution N/10 had never been used. The chemicals were stored on clean cabinets in Room L111 and the individuals present answered all questions asked.

Room L113, Materials Lab, Bldg. 57 - Three shelves of chemicals (approximately 40 individual containers) were checked and no expired chemicals or buffers were found exceeding an expiration date.

Room L106, Geochemistry Lab, Bldg. 57 - Three cabinets of three shelves each held the chemicals and buffers in the Geochemistry Lab. About 120 containers were checked and there were no chemicals or buffers which exceeded the expiration dates on the containers. The cabinets themselves were well marked and clean.

Hydraulic Characterization Lab, Bldg. 51 - The Lab was checked for chemicals and none were located.

UNSATISFACTORY FINDINGS: None
NONCONFORMANCE REPORT NO.: N/A

ATTACHMENTS: None.

RECOMMENDATIONS/ACTIONS: It was noted that most of the chemical containers have a "Received Date ___/___/___" on the label. Some of the containers had a received date written in by a CNWRA staff member, but a majority did not. A recommendation from this surveillance is to write on the chemical container label the date the chemical is received. Since many of the chemicals do not have an expiration date, this would provide a history on the container and we could ascertain whether the chemical has been on the CNWRA shelf six months or six years.

APPROVED: 
CENTER DIRECTOR OF QUALITY ASSURANCE

DATE: 6/4/99

DISTRIBUTION:
 ORIGINAL - CENTER QA DIRECTOR / QA Records
 ORIGINATOR B. Mabrito
 PRINCIPAL INVESTIGATOR N/A
 ALL ELEMENT MANAGERS
 B. Sagar, H. Garcia, M. Ehnstrom