HANFORD ENVIRONMENTAL COUNCIL

June 6, 1983 Meeting Minutes

Attendees:

P. A. Eddy, PNL
M. W. Leale, PNL
K. R. Price, PNL
M. J. Sula, PNL
H. A. Haerer, Rockwell
R. E. Wheeler, Rockwell
L. J. Moor, HEHF
R. B. Hall, WHC
P. A. Carlson, UNC
J. J. Dorian, UNC
D. R. Elle, DOE-SQA
R. E. Austin, DOE-SQA

The Hanford Environmental Council met on June 6, 1983, hosted by J. J. Dorian, Manager, Environmental Control Subsection, UNC Nuclear Industries. The Council covened at the 100-N Area in trailer 1117-N conference room. Those in attendance are listed above and the topics discussed are summarized below:

Environmental Surveillance at the 100-N Area

J. J. Dorian discussed the sources and effluents at N-Reactor. The origin of the main offsite dose contributor is Ar-41 released from the 116-N 200 foot stack. Argon forty-one released via the stack contributes about 120.00 Ci/yr. or about 4 man-rem per year. Sample of the stack effluent are taken at the 50 foot level.

Water intake at the 100-N Area is potentially $1x10^6$ gal/minute - a combination of water intake for the N-Reactor and the Hanford Generating Plant. Normally, the 181-N water intake draws in about $3x10^5$ gal/minute and this is used almost exclusively as cooling water. It is returned to the river via the 102 inch line at about 10^oF above ambient river water temperature or about 50 mega watts thermal. The 42" discharge pipe is an emergency discharge which normally returns about 200 gal/minute of raw water but potentially can return up to 30,000 gal/minute. The 36" raw water return pipe normally discharges about 1,000 gal/minute, from the 182-N tank farm overflow. The 102" line is sampled continuously and the 36" and 42" lines are sampled annually for radionuclides and bi-weekly and monthly for non-rad parameters.

The 1301-N crib and trench receives about 2,000 gal/minute along with several thousand curies. The crib and trench is about 800 feet from the river. The N-springs flow at about 1,000 gal/minute and release, typically, 200 Ci of tritium and a few curies of ^{90}Sr and ^{131}I. The N-springs are sampled continuously.

The attendees visited the recently covered trench and the springs.

The next Hanford Environmental Council meeting will be with either Rockwell pesticide program (Walt Haerer) or with HEHF (Loren Maas). More information will be forth coming in July.

D. R. Elle, Ph.D., Chairman
Hanford Environmental Council

SQA:REA