

ABB COMBUSTION ENGINEERING

3 OCTOBER 1995

MEETING PARTICIPANTS

Combustion Engineering

Bill Sharkey - Manager, Regulatory Compliance
Gil Page - Manager, Assembly Operations
Earl Saito - Health Physicist

NMSS Fuel Cycle Licensing Branch

Mike Tokar - Section Leader, Licensing Section 2
Sean Soong - Licensing Program Manager

NMSS Fuel Cycle Operations Branch

Jerry Roth - Inspections Section Leader
Bill Troskoski - Senior Inspector, Chemical Safety

Region III

C. Pederson
G. Shear
J. Jacobson

S-30

ATTACHMENT

ABB Combustion Engineering Nuclear Fuel
Review of September 1, 1995 Final Survey Plan

Review Comments

- 1) The licensee states it is their goal to remediate the site creek to an average contamination level of 30pCi/g with no single sample above 90pCi/g.

First, the goal should be to remediate to an average value less than the guideline value, not to the value itself. Second, NUREG-5849 allows activity to exceed the guideline value (i.e., 30pCi/g) by up to a factor of three (i.e., 90pCi/g). However, the upper limit is dependent on the area of the activity. That is, the activity can only exceed the guideline value if the activity is less than $(100/A)^{1/2}$ times the guideline value, where A is the area of activity in square meters. (This is based on a 10 X 10 meter square grid.) Additionally, the activity at any location can not exceed three times the guideline value. As a result, any soil samples in excess of 30pCi/g may require additional sampling to define the size of the area of activity in excess of the guideline value to determine if it is acceptable to leave as found or if further remediation would be required.

- 2) Figure 1 provides the sample locations for site creek characterization.

Examination of this Figure shows that for approximately 15 meters of the creek, the samples are being collected essentially on the east and west edges. I would recommend at least three samples be collected in the center of the creek through this stretch. *~ have to sample in middle of creek*

- 3) The Plan states that "Soil activity values are average values with no background subtraction (uranium background is approximately 2 pCi/g) for the entire survey unit of 600 m²".

Subtraction of background is acceptable based on NUREG-5849.

NUREG-5849 (Section 8.5.4) specifies the soil activity average values for the survey unit are based on 100 m² grids, not the entire area, which in this case is given as 600 m².

- 4) The NUREG-5849 methodology specifies the collection of samples in "unaffected" areas surrounding the "affected" area. The "unaffected" area is typically a 10 meter area surrounding the "affected" area.

The Plan as submitted does not indicate that any samples will be taken in areas surrounding the site creek where remediation took place as means of assuring the areal extent of the remediation was adequate.

Agenda

- Site Creek (Saito)

system upsets due to growth in the base population of the sewage treatment plant.

- cause

- corrective actions *- increased septer system clean outs; new plant built*
- cleaned up site creek.

- final release survey *- plan to use KPA analysis; they have more confidence*
clean up of junk yard

- Investment projects (Sharkey)

- Incinerator status (Sharkey)

- Hazards analysis (Sharkey)

- Organization Amendment (Sharkey)

- Retention Ponds Clean-up (Saito) *90-1300 pCi/g - confirms previous study.*

- Dose reduction (Saito) *- worker awareness*
- engineering controls
downward trend identified currently
2.7 R exposure per year
↳ Radon dose - why shouldn't they sleep?..?

COMBUSTION ENGINEERING INC.

ROUTINE UPDATE TO NRC RIII
ON CENO HEMATITE FUEL OPERATIONS

OCTOBER 3, 1995

Agenda

- Site Creek (Saito)
- Investment projects (Sharkey)
- Incinerator status (Sharkey)
- Hazards analysis (Sharkey)
- Organization Amendment (Sharkey)
- Retention Ponds Clean-up (Saito)
- Dose reduction (Saito)

John to keep track of.

Investment Projects

- Erbium Blender - *reconfiguration* - improved mixing, improved personnel
 - Oxide Plant Reactor I and II upgrade - *replace R-2 + R-3*
 - Pellet Grinder Upgrade - *replace all 3 furnaces*
 - Powder Preparation upgrade - *adding buffer stage between slugger and pellet press.*
 - Environment Improvements
 - Decontamination Area
- favorable geometry*
radiation safety
addition of air conditioning
addition of vacuum fans.
- want to go to dry vaporizers*
- 5 people working to clean junk yard.*

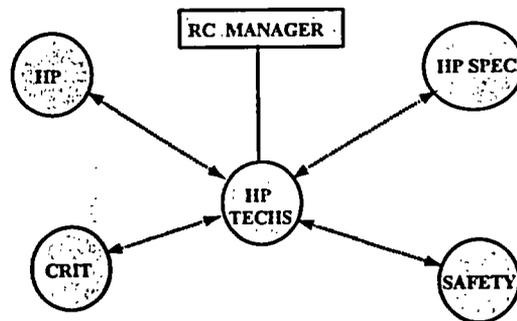
Incinerator

- Installation complete
- Start-up testing found several small deficiencies
- Acceptance testing scheduled to commence shortly

Hazards Analysis

- Conversion
 - P&IDs being generated
 - Complete March 31, 1996
- Recycle recovery May 1997
- Pelletizing December 1997
- Building 230 September 1998
- Miscellaneous December 1998

Organization Amendment



Remove HP supervisor now to HP Spec.

Full staff of 6 or 7

*Mark
Michaelson - to USEC*