

UNITED STATES  
ATOMIC ENERGY COMMISSION  
DIRECTORATE OF REGULATORY OPERATIONS  
REGION I  
970 BROAD STREET  
NEWARK, NEW JERSEY 07102

To: Files

NEW JERSEY STATE CONTRACT PROGRAM - MEETING AT OYSTER CREEK ON OCTOBER 24, 1972

A meeting was held on November 24, 1972 at Oyster Creek with New Jersey State personnel attending to discuss the implementation of the New Jersey State Contract Program at Oyster Creek. The entire State Contract Program was discussed including all the sampling that would be involved. Arrangements were made for the State to obtain split samples at the facility. Persons attending were:

Dave McCurdy, State of New Jersey  
Jim Ross, State of New Jersey  
John L. Sullivan, Jersey Central Power & Light Company, Technical Supervisor  
Don Reeves, Jersey Central Power & Light Company, Technical Engineer  
J. P. Stohr, RO:I  
Bernie Weiss, RO:HQ

The particular types of samples required, both on-site and off-site, were discussed.

On-Site Sampling

a. Liquid

It was decided that the on-site liquid sample would consist of a sample at the end of the month from the waste sample tank composite. Oyster Creek analyzes their sample in-house. Dick Pelrine is the radiochemist at Oyster Creek. The plant uses a three inch by three inch sodium iodide crystal for gamma spectrum analysis. Oyster Creek uses a cesium-137 source as a gross beta standard. If a waste tank is sampled rather than the waste sample tank composite, efforts will be made to grab a sample from the discharge canal when the waste sample tank is being released. The laundry waste may be sampled some time in the future also.

b. Gas

Oyster Creek uses the standard GE method for sampling off-gas. They

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normally pull an off-gas sample once a week for analysis. A preliminary off-gas sample was obtained during this inspection. The charcoal cartridge from the stack monitor is pulled every three days by Oyster Creek and counted initially after 24 hours and again one week later allowing decay time for Xenon. A charcoal cartridge will be obtained when Oyster Creek has completed counting it. Oyster Creek pulls the particulate filter once a week, takes an initial count, and saves the filters for a composite sampling. When the State obtains these filters for their counting and subsequent sending to Idaho for Idaho's counting, there will have to be instructions sent along with the filters which make it clear that the filter is to be returned to Oyster Creek for the composite analysis.

c. Spiked Samples

It was decided that a spiked liquid sample would be sent to the plant and to the State for their analysis and that both their results would be sent to me. I will discuss results during subsequent inspections. In addition to the spiked liquid sample, I later obtained a particulate filter from Oyster Creek which was sent to Idaho for spiking which was to be returned to Oyster Creek for their subsequent analysis. Both these spiked samples will have to be followed up on during the next visit.

Off-Site Sampling

a. External Radiation

Oyster Creek uses film badges which are supplied by Radiation Detection Company of California, environmental gamma monitoring. These film badges are changed once per month, and there are approximately 20 locations at which they are utilized. Attachment 1 shows survey stations around the Oyster Creek Nuclear Generating Station. The State of New Jersey uses TLD's supplied by Teledyne/Isotopes and the State's change frequency is once per quarter. The following station numbers were the ones which will be considered by the State for placement of the TLD's so as to coincide with Oyster Creek's film badge in locations Nos. 2, 4, 8, 13 and 16 as the background. The State will pick out the exact location and arrange for installation.

b. Air Particulate

Oyster Creek's air sampling station's are designated on Attachment 1. One interesting fact that came to light was that Oyster Creek does not have a charcoal cartridge used in their air sampling program. The plant changes the particulate filters on a monthly basis.

Dr. McCurdy stated that New Jersey will also change their's on a monthly frequency to coincide with the plant changes. The sampling station chosen as the one to check on Oyster Creek's results was site No. 2 which is located in the Bayville area along Route 9 at the Pinewall Substation. The background location will be at Lebanon State Forest which is approximately 35 miles to the west of the site. New Jersey stated that for counting the air particulate filters they normalize to a time of approximately 100 hours after collection.

c. Water

New Jersey has a continuous water sampler located at the first marina down stream from the nuclear plant on Oyster Creek. In addition to this sample, the state will split a bay water sample with Oyster Creek people. It will be a surface water sample which the plant will obtain. New Jersey will supply the sample containers to plant personnel.

d. Food

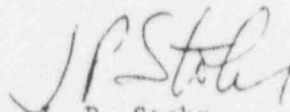
The food to be sampled will be clams. These will be obtained by Oyster Creek personnel from their designated sampling locations. A fisherman (Ahern) obtains these for the plant approximately once every three months. The State requested that 3 dozen be made available for their use.

e. Edible Vegetation

Oyster Creek people do not sample edible vegetation. They get grass samples instead. It was decided that for the State Contract no edible vegetation would be sampled by the State.

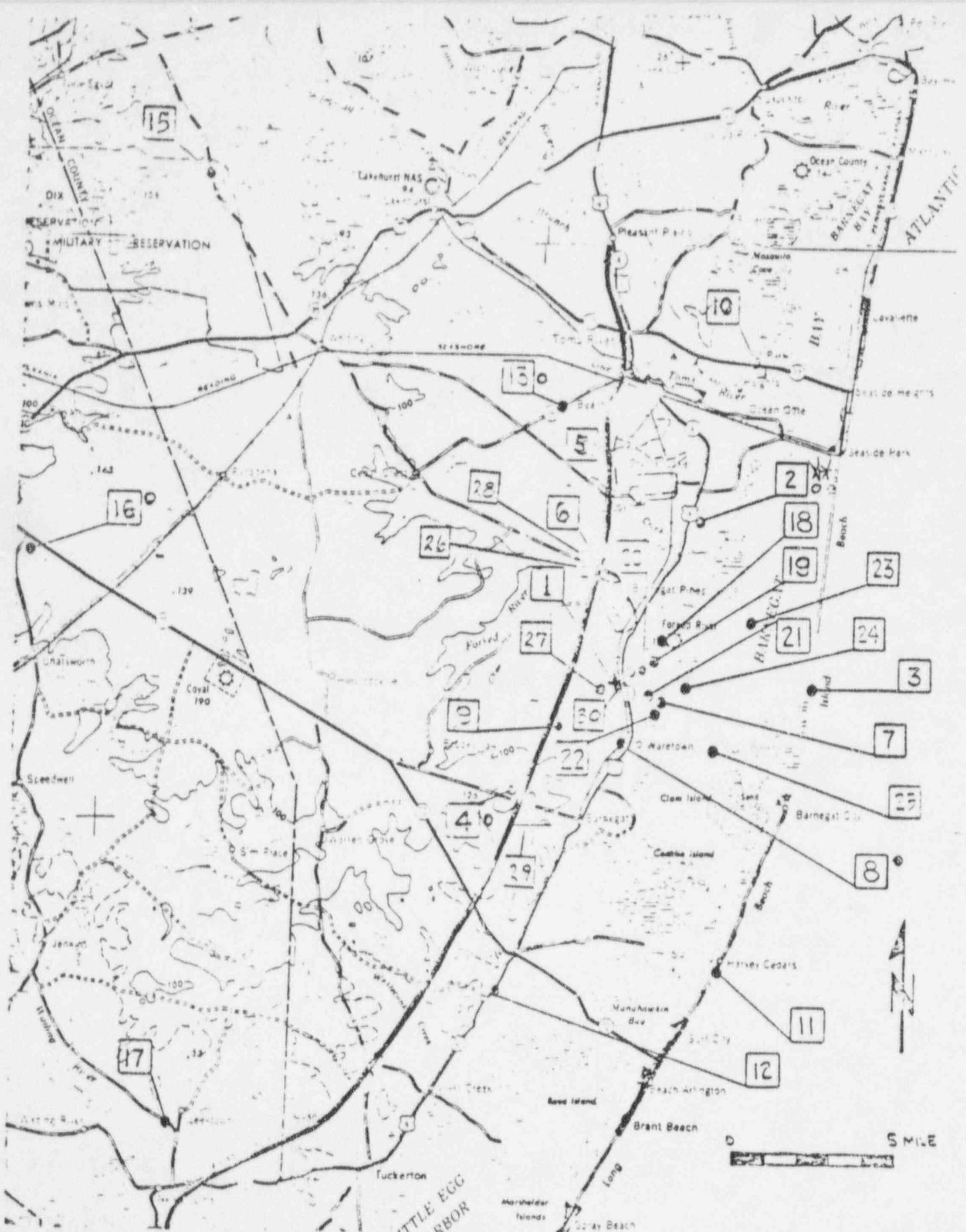
Environmental Data

It was decided that New Jersey State personnel will compare the environmental data. Mr. Sullivan will make this data available to the State personnel when they come to obtain samples. The State will then make all the data, both the State's and Oyster Creek's, available for our review.



J. P. Stohr  
Senior Radiation Specialist  
Environmental Section

cc: C. Pelletier, RO:HQ  
R. J. Everett



**ATTACHMENT I**  
**Radiation Survey Stations**  
Oyster Creek Nuclear Electric Generating Station

(6 month report)

\* 1-5 air fast track  
 \*\* 7.2 miles  
 o 1-17 Film Badg