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030-03732 DNMS

Mr. Arthur T. Howell, III
Director, Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region IV
612 East Lamar Boulevard, Suite 400
Arlington, TX 76011-4125

Subject: Project Status Update and Advance Notification to Allow NRC Opportunity
to Perform Confirmatory Soil Samples

Dear Mr. Howell:

As part of our effort to execute Revision 2 of the Plutonium Spill Recovery Work Plan, we are updating you on our current status and projected schedule. We also want to provide you with sufficient notice to arrange for independent confirmatory soil samples in the excavated areas.

Outside Excavation

During the week of February 2, we excavated and removed a 4 ft length of the sink drain pipe, within 1 ft of exiting the Room 2124A foundation wall to the outside. Both pipe ends are capped, and the excavation pit is covered and protected from the weather. We will not back-fill this protected pit until the interior excavation has been completed and we have installed a new drain pipe. We will coordinate with you, and not back-fill this or any other exterior excavation, until you have had the opportunity to obtain your necessary confirmatory soil samples. All of our soil samples in this pit were negative for the presence of source material. The pipes were found intact and in excellent condition.

That initial excavation covered the area from the building exterior wall, up to the sidewalk located 5 ft 6 in away from the wall. The capped pipe end that goes to the common drain header is located within the existing pit. By probing inside that pipe, we know that it continues straight under the sidewalk for 8 ft, perpendicular to the building, then makes a 90 degree turn to the right within 1 ft of the other side of the sidewalk. Sediment was seen in that elbow with a camera, and it was sampled using an extender pole, with ~ 200 pCi of source material per gram of sediment.

Last Friday we excavated an area of 8 ft x 16 ft, to a uniform depth of 2 & 1/2 ft, immediately on the other side of the sidewalk where this next pipe section lies. Today we will continue excavating a trench where that pipe is located, parallel to the sidewalk. We will uncover that pipe section, breach it, and remove it up to the next pipe section. The pipe sections will be wrapped and transferred to the inter-modal steel box as radioactive waste for disposal. We expect the subsequent pipe sections to be straight for most, if not all, of the ~ 90 ft length to where it drains to a point covered by a "manhole cover" near the end of the wing. That pipe runs parallel to the wing, about 12 ft away from it. We will continue to excavate this pipe to gain access for sampling, and will remove additional pipe sections as necessary, up to the point of the "manhole cover". This long straight section of pipe that we will encounter next, after turning the corner of this elbow, will afford access for sampling and viewing with a camera if we do not encounter any more pipe bends. That will allow us to assess the need for further excavation.

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Inside Excavation

Rooms 2124 and 2124A have been emptied of all movable equipment and items. In addition, the overhead Fan Coil Units (FCUs), light fixtures, radiators, and electrical raceways have been removed. We are in the process of removing the wall between 2124 and 2124A. This week we will finish gutting these two rooms and removing the common wall. This past weekend we took 25 representative smears in Room 2124, with the highest result of 34 dpm alpha per 100 cm². By the end of this week we expect to no longer require the use of respirators within any of the rooms, including these two rooms, which will then be one common room. It will then take about three additional weeks of cleaning and surveying within 2124 to get to the point where the room can be de-posted, and we can allow access for the concrete cutting contractors. We expect to cut the floor in that room on the weekend of March 21, with excavation of the sink drain pipe that following week.

The pipe under the floor slab has been found to be in excellent condition, we know its exact location under the slab, and we know the contamination levels inside the pipe from sampling both ends. The pipe stub from the sink drain end inside the room has several nCi of source material per gram of scale. From the excavated pit outside the room we were able to obtain samples from as far as 40 ft inside the pipe. Those samples were all in the range of 5 to 25 pCi of source material per gram of sample. Due to the low contamination levels inside the pipe, the known condition of the pipe, and the negative soil samples that we have obtained to date, we intend to use the same contractors who cut and remove the floor to manually excavate the soil beneath the floor, with direct oversight and sampling by EnergySolutions personnel.

We would like to back-fill the excavation inside the room and restore the concrete floor as soon as possible after removing the sink drain pipe, to keep the project on schedule, and also to stop possible radon ingress from the soil. We request that you make arrangements to conduct your confirmatory soil samples within the Room 2124 excavation to coincide with our schedule. Please plan to take your confirmatory soil samples inside Room 2124 during the 1st week of April.

Summary

We will protect exterior excavation areas from the weather and keep access available for you to do sampling. We expect the exterior excavation to be completed by the 1st week of April, so if you plan for a site visit the 1st week of April, that should coincide with an opportunity to complete all necessary soil sampling both inside and outside, so that we may then complete our back-filling of all excavated areas. If our schedule changes we will update you so that you can make appropriate adjustments to your own schedule.

Sincerely,



Richard F. Kayser
Chief Scientist