

## **Texas Department of Health**

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Radiation Control (512) 834-6688

October 22, 1999

UNITED STATES NUCLEAR REGULATORY COMMISSION ATTN PAUL H LOHAUS DIRECTOR OFFICE OF STATE PROGRAMS MAIL STOP 03H20 WASHINGTON D C 20555

Dear Mr. Lohaus:

This letter is in response to your request for clarification of information sent to you regarding the request for concurrence of termination of the Westinghouse (WEC) Uranium Projects, Radioactive Material Licence (RML) L02537. In the information sent there was an indication that the Texas Natural Resource Conservation Commission (TNRCC) had an action pending relating to the termination of the project. The pending action was the termination of the of the RML by the TNRCC. Since that report was written the authority to license uranium mining projects (and to terminate) was transferred to the Texas Department of Health (TDH). When the program was transferred to TDH the pending action was also transferred and has been sent to you for concurrence.

Regarding the concerns raised in the TNRCC report included with our termination concurrence request I would like to address those that have been brought to our attention as needing further clarification. After a careful review of the WEC file and conversations with the parties involved it is my conclusion that the issues raised by TNRCC have all been addressed or had no bearing on the release of the site. To address specific concerns I submit the following information:

TNRCC raised a concern about an area with a reading of 10,000 cpm that was located during the TDH concurrence survey. According to the personnel who performed the survey the spot was very small and was removed by the licensee during the survey. A follow up survey of the area failed to detect any contamination above background. TDH personnel felt that it would have been a waste of resources to sample the area involved since it was apparent that the contamination had been removed. Additionally TNRCC personnel attempted to located the hot spot and were unable to do so.

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TNRCC raised a concern about the number of samples taken from the former plant pad area. According to the personnel who performed the survey the entire plant pad area was subjected to a very detailed gamma survey (on their hands and knees was the phrase used by the surveyors) utilizing Ix1 Sodium Iodide and pancake probes. Their were 2 issues which dictated that only one sample be taken from the area:

- 1. The survey was very intense and failed to detect any contamination; and
- 2. The area of the former plant pad was a very hard packed caliche material which was incredibly difficult to sample. It was felt that because of the relatively impermeable nature of the caliche it was improbable that contamination was able to penetrate the pad and only one sample was needed.

TNRCC also raised concerns about buildings left on the site at the landowners request. All buildings were surveyed by TDH personnel at the time of the concurrence survey and swipe samples were taken where appropriate. No contamination was found during TDH's concurrence survey as was stated in our report. Also according to our records and the licensee only 3 buildings remain on site not 6. TDH does not require that a licensee request concurrence for release equipment or material from the site. As the licensee dismantled the buildings and the material surveyed the material prior to disposal TDH would not have performed a concurrence survey.

Regarding the wellfield samples discussed on the first page of the TDH memo of December 6, 1993 the following should be noted:

- 1. When sampling a wellfield natural uranium is generally not the isotope of concern. It has been found in the past that if radium concentrations meet the release criteria uranium concentrations will as well.
- 2. Uranium concentrations are determined on all samples taken and a site will not be released unless all parameters meet release criteria.

Finally there seems to be some confusion regarding the first paragraph of the second page of the letter dated January 20, 1999. Upon review it appears the cause of the confusion was the attempt to consolidate all of the surveys in one paragraph and the use of a standard "boilerplate" paragraph. I would like to submit the two revised paragraphs below to reflect a more exact description of the release process.

In May 1993, TDH personnel performed confirmatory surveys of the wellfield. The surveys were performed using one-by-one sodium iodide probes and Ludlum 14C survey meters. The survey was performed by walking 10 meters apart moving across the wellfield pattern (Regulatory Guide 5.10, Guidelines for Conducting Close Out Surveys of Open Lands and Requesting Release for Unrestricted Use). Background readings were approximately 1200 cpm on all meters. Survey readings across the wellfield were fairly uniform ranging from 3000 to 5000 cpm. The wellfield had been decontaminated using an approved soil washing method and the "washed" soil spread evenly across the wellfield (samples of the "washed" soil at the end of the process indicated that average radium and uranium concentrations were below or equal to the release criteria of 5 pCi/g and 30 pCi/g, respectively) which explains the uniform survey readings across the wellfield. Soil samples were taken from a ten meter by ten meter area around four areas in the wellfield. Analysis of 3 samples indicated that average radium and uranium concentrations were below or equal to the release criteria of 5 pCi/g and 30 pCi/g, respectively.

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> One sample exceeded the release criteria of 5 pCi/g for radium and was decontaminated by the licensee and later resampled by TDH personnel. Analysis of the sample indicated that average radium and uranium concentrations were below or equal to the release criteria of 5 pCi/g and 30 pCi/g, respectively

2. In August 1993, TDH personnel performed confirmatory surveys of the plant facilities. The surveys were performed using one-by-one sodium iodide and GM pancake probes and Ludium 14C survey meters. The survey was performed by walking 10 meters apart moving across the wellfield pattern (Regulatory Guide 5.10, Guidelines for Conducting Close Out Surveys of Open Lands and Requesting Release for Unrestricted Use). Background readings were approximately 1200 cpm on all meters. Survey readings across the facility ranged from 1000 to 5000 cpm. Soil samples were taken from a ten meter by ten meter area around five areas in the facility and one area in the center of the plant pad. Analysis of all samples indicated that average radium and uranium concentrations were below or equal to the release criteria of 5 pCi/g and 30 pCi/g, respectively.

As maintaining this site places an undue economic burden and hardship on the licensee we request expeditious processing of this request.

If you have any questions, please call me at (512) 834-6688 extension 2208.

Sincerely.

Eugene (Gene) Forrer

Chief, Uranium Licensing Project

Division of Licensing,

Registration, and Standards

Bureau of Radiation Control