

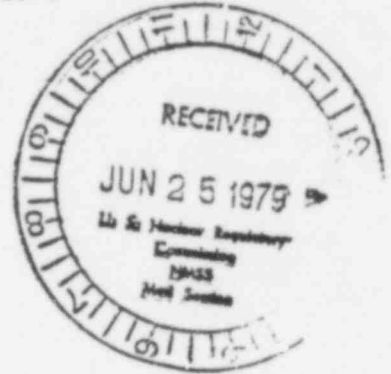
NUCLEAR DYNAMICS

ALBERT F. STOICK

VICE PRESIDENT, URANIUM EXPLORATION
MANAGER, NUBETH JOINT VENTURE

June 20, 1979

Dr. Raymond Cooperstein
Fuel Processing and Fabrication Branch
Division of Fuel Cycle and Material Safety
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555



RE: License No. SUA-1331, Docket No. 40-8663

Dear Dr. Cooperstein:

Thank you for your phone call on June 19th regarding the letter dated June 4, 1979, from Mr. Dennis Morrow, Wyoming Department of Environmental Quality, and sent to me concerning the leak that had occurred near the surface in the casing of Well I-1.

I am enclosing a copy of Mr. Morrow's June 4th letter as it was received by our Casper office on June 6, 1979. Upon my return to Casper on June 7th, I called Mr. Morrow and discussed the entire situation with him and what needed to be done to avoid any misunderstandings in the future.

On June 14th, I completed and sent to Mr. Morrow a complete report on this incident in question and I now enclose a copy of that letter-report to you. Also enclosed is a copy of Nuclear Dynamics' Operations Manager's report of the leak as made to Mr. Tom Mueller, Environmental Engineer, Wyoming Department of Environmental Quality, at Sheridan, Wyoming, on April 3, 1979.

Today I received a letter from Mr. Morrow stating that he had received my report and to complete the records I also enclose a copy of that letter.

As I had mentioned to you on the phone yesterday, and stated in my report to Mr. Morrow, I could not find any contamination associated with this incident. I did call Mr. Morrow on June 18, 1979, and obtained his verbal permission to put I-1 back on the injection system but with the understanding that it was not to be pressurized again and to keep the flow of fresh (789V-buffer water) restoration fluid going into I-1 at a depth of at least eighty feet from the collar of the well. This procedure allows restoration to continue with the free flow of water simply going inside of the 120 feet of new 4" liner, with packers, that has been installed at the top of Well I-1.

FEE EXEMPT

info only

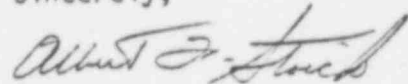
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Dr. Raymond Cooperstein
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June 20, 1979

I trust that this will update you on this matter and thank you for your continued and sincere interest in our project. Thank you.

Sincerely,



Albert F. Stoick
Manager, Nubeth Joint Venture

AFS:t1s

Enclosures

cc: U. S. Nuclear Regulatory Commission
Arlington, Texas
Mr. Kelsey Boltz, President
Nuclear Dynamics, Inc.
Mr. Walt Ackerman, Administrator
Wyoming Department of Environmental Quality
Cheyenne, Wyoming
Mr. Dennis Morrow, District IV Engineer
Wyoming Department of Environmental Quality
Sheridan, Wyoming (Letter only, June 20th)

NUCLEAR DYNAMICS

O. BOX 20766
P.O. Box 37

PHOENIX, ARIZONA 85036

802 / 267-0881

2871 SKY HARBOR BLVD. Moorcroft, WY 82721

April 3, 1979

Thomas J. Mueller
Environmental Engineer
Department of Environmental Quality
30 E. Grennell
Sheridan, WY 82801

RE: I-1 Injection Well

Dear Mr. Mueller:

On March 19, 1979, a trickle of water was noticed coming out of the bank where the piping from the plant goes underground to the well field. A sample of the water was analyzed. The assay returns showed 200 PPM H_2O_2 . This verified that the water was indeed injection solution rather than run off water from melting snow.

The injection wells were shut off immediately and excavating began. By pressurizing injection wells individually it was determined that I-1 injection system was leaking at the casing. A resistivity log was run on this well which indicated some irregularities 70 feet down from the collar. Corrective action to be taken for repairing the casing calls for the use of a 2 inch injection line used with inflatable packers to seal off the damaged section. All the water that could be picked up behind the plant was transferred to the plant.

Assay value of sample is as follows:

$CO_3^{=}$	=	4000 PPM
HCO_3^{-}	=	218 PPM
H_2O_2	=	217 PPM
U_3O_8	=	0.03 PPM

All monitor well assays to date do not indicate any chemical problems (staying at baseline). I will keep you informed of the final status of injection well I-1

Sincerely,

Donald P. Gray

Donald P. Gray
Operations Manager

cc: A.F.S. ✓
F.X.C.

595 224 13257



Department of Environmental Quality

LAND QUALITY DIVISION

DISTRICT IV OFFICE

30 EAST GRINNELL STREET

TELEPHONE 307-672-6488

SHERIDAN, WYOMING 82801

June 4, 1979

Albert F. Stoick
Manager, Nubeth Joint Venture
Nuclear Dynamics
200 S. Lowell
Casper, Wyoming 82601

RE: Nuclear Dynamics, LE19

Dear Mr. Stoick:

We have reviewed the Fourth Quarterly Report for the Nubeth Joint Venture which was submitted with your letter of May 25, 1979. We are concerned about the loss of injection fluid from Well I-1 which was discovered on March 19, 1979. The Land Quality Division was not notified of this escape of injection fluid. In the future, we require notification to the Land Quality Division by phone within 48 hours, and written confirmation to follow in one week.

We would like more information on the escape of injection fluid as follows:

1. Estimate of the extent of the area contaminated.
2. Complete analysis of the water which was leaked.
3. Well logs for Well I-1 including all logs run since the leak was discovered.
4. Time schedule for corrective repairs to Well I-1.

The Land Quality Division requests that notification be given prior to any resumption of the injection system. Your prompt response is requested. If you have any questions, please call.

Sincerely,

Dennis Morrow
Dennis Morrow
District IV Engineer

cc: W.C. Ackerman
Roger Peterson
Dr. Ray Cooperstein
Tom Mueller

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NUCLEAR DYNAMICS

ALBERT F. STOICK

VICE PRESIDENT, URANIUM EXPLORATION
MANAGER, NUBETH JOINT VENTURE

June 14, 1979

Mr. Dennis Morrow
District IV Engineer
Department of Environmental Quality
Land Quality Division
District IV Office
30 East Grinnell Street
Sheridan, Wyoming 82801

RE: Nuclear Dynamics, LE19

Dear Mr. Morrow:

This report is my written response to your letter of June 4, 1979, and which I discussed with you over the phone on June 7, 1979.

On behalf of Nuclear Dynamics, I do wish to apologize once again for the misunderstanding in reporting this incidence to you as our Operations Manager, Mr. Don Gray, felt that he had given proper notice in sending his letter-report to Mr. Tom Mueller there in your Sheridan office.

To answer the four questions in your letter, I to the best of my knowledge, wish to make the following statements:

1. "Estimate of the extent of the area contaminated." Again, as I explained to you on the phone, this appears to be quite limited and can only be estimated to be from the well head along the buried pipe some 110 feet and then out onto the surface for perhaps another 100 feet. I have personally checked the entire area for several hundred feet from where the buried pipe, and leak, came out of the dirt bank and could not detect any radioactivity above normal background and there is not any evidence of any "salts" or anything of that nature.
2. "Complete analysis of the water which was leaked." Dennis, I feel that here the most accurate data would be on the injection fluid going into the well field on March 19th. Assays on the sample reported by Mr. Gray, as picked up behind the plant, could be somewhat diluted by water from the melting snow and only served

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Mr. Dennis Morrow
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the purpose of verifying that some injection solution was being leaked.

Composite Assay Values (3 ea. 8 hr. composite samples) March 19, 1979.

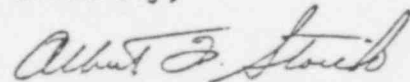
pH	10.8
Conductivity	14,271 μ mhos/cm
Fe	0.4 ppm
Ca	4.0 ppm
CO ₃ ⁻	4845 ppm
HCO ₃ ⁻	564 ppm
U ₃ O ₈	0.03 ppm
H ₂ O ₂	710 ppm

3. "Well logs for Well I-1 including all logs run since the leak was discovered." I am enclosing the resistivity log run on I-1 after the break was discovered and it illustrates a discontinuity somewhere between 50 and 70 feet, probably at 65' from the surface.
4. "Time schedule for corrective repairs to Well I-1." On May, 23rd, I supervised the installation of 120 feet of 4" I.D. P.V.C. liner pipe, with three packers in tandem on the bottom of the 120 feet liner, into the top of the 5" I.D. casing of I-1. The area between the 4" liner and 5" casing was filled with a bentonitic slurry.

Well I-1 is now waiting on a drill rig for another cleaning and is scheduled to be put back on injection during the week of June 18, 1979. Only fresh buffer water is being put into the well field as all addition of chemicals was stopped on March 30, 1979, and the well field has been under restoration since that time.

I trust that this will answer your concerns and give you proper notification and information regarding Well I-1. Thank you.

Sincerely,



Albert F. Stoick, Manager
Nubeth Joint Venture

AFS:tls

Enclosures

cc: Mr. Kelsey Boltz
President
Nuclear Dynamics, Inc.

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ED HERSCHLER
GOVERNOR*Department of Environmental Quality*

LAND QUALITY DIVISION

DISTRICT IV OFFICE

30 EAST GRINNELL STREET

TELEPHONE 307-672-6488

SHERIDAN, WYOMING 82801

June 19, 1979

Mr. Albert F. Stoick, Manager
Nuclear Dynamics, Inc.
Nubeth Joint Venture
200 South Lowell
Casper, Wyoming 82601

RE: Nubeth Joint Venture, LE19

Dear Mr. Stoick:

We have reviewed your letter of June 14, 1979 which concerns the leak of injection fluid from Well I-1. Thank you for bringing us up-to-date on this matter. Please keep us informed on any irregularities encountered in the future.

Sincerely,

A handwritten signature in cursive script that reads "Dennis Morrow".

Dennis Morrow
District IV Engineer

DM/kn

cc: Roger Peterson
Ray Cooperstein

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