

Parrish, John

From: Parrish, John
Sent: Tuesday, November 15, 2005 3:44 PM
To: 'Barbara Byron'
Subject: RE: Transcripts from Hearings on the EPA Radiation ProtectionStandard for Yucca Mt.

Barbara --

During our conversation the other day, we discussed the advisability of establishing a monitoring well system to check the flow of potentially contaminated waters from Yucca Mountain. I agree that such a monitoring system is a good idea, especially in light of Inyo County studies that strongly suggest that their groundwater supplies may be affected by leakage from the Yucca Mountain storage area.

Regards -- JGP

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-----Original Message-----

From: Barbara Byron [mailto:Bbyron@energy.state.ca.us]
Sent: Tuesday, November 15, 2005 1:03 PM
To: Parrish, John; Ed Bailey; Jeff Wong; Harold Singer; Bob Pierotti; Stan Martinson
Subject: Transcripts from Hearings on the EPA Radiation ProtectionStandard for Yucca Mt.

FYI, attached are the transcripts for past hearings on the EPA Radiation Protection Standards for Yucca Mt.

Of interest is Inyo County's testimony provided on Oct. 20 by Andrew Remus (pages 41-44 of the Oct. 20 transcripts) on potential regional groundwater contamination issues. Mr. Remus said that Inyo, Nye and Esmeralda Counties jointly sponsored hydrologic research on the possible hydrologic connectivity between the Lower Carbonate Aquifer that underlies Yucca Mountain and surface water discharges in Death Valley National Park. Their studies indicate the Lower Carbonate Aquifer as a

source of surface waters manifesting themselves in Death Valley National Park. Their research also indicates that the Lower Carbonate Aquifer may extend to the communities of Death Valley Junction, Shoshone and Tecopa all of which rely exclusively on groundwater. He said that in the longterm potential groundwater contamination is the primary pathway for exposure of Inyo County residents to radioactive contamination from the Yucca site.

Inyo Co. recommended that if the repository is licensed, they should develop an array of monitoring wells at the periphery of the site extending into the Lower Carbonate Aquifer to determine whether the repository is in compliance with its design standard to provide early warning of contamination.

If you agree, we may want to refer to Inyo County's findings in our comments and also recommend that a series of monitoring wells be developed.

Barbara Byron

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re: Help with linking Barbara Byron.vcf
up with ...

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2 repository site. Thank you.

3 HEARING OFFICER: Thank you. Mr. Loux,
4 I want to make sure I heard you correctly. You
5 will be submitting more comments before November
6 26?

7 MR. LOUX: Yes.

8 HEARING OFFICER: Thank you. Is that
9 statement that you have today submitted for the
10 record, or will you do it all at one time?

11 MR. LOUX: We'll do it all at one time.

12 HEARING OFFICER: Thank you.

13 MR. LOUX: Thank you.

14 Is Andrew Remus here yet?

15 MR. REMUS: Yes.

16 HEARING OFFICER: Andrew, if you would
17 spell your last name.

18 MR. REMUS: R-e-m-u-s.

19 Inyo County has not taken a position
20 either in support of or opposition to the
21 repository project. We do however support EPA's
22 authority to set standards for Yucca Mountain and
23 the requirement of a groundwater specific standard
24 for use in designing and licensing the Yucca
25 Mountain repository.

1 Regional groundwater contamination is in

2 the long term the primary pathway for exposure of
3 Inyo County residents to radioactive contamination
4 originating from the site.

5 And we expect as a result of the rapid
6 expansion of the population now being experienced
7 by Las Vegas and Pahrump to see during the waste
8 emplacement phase a gradual and significant buildup
9 of population in the California portion of the
10 Amargosa Valley.

11 Inyo, Nye, and Esmeralda Counties have
12 jointly sponsored hydrologic research on the
13 question of possible hydrologic connectivity
14 between the Lower Carbonate Aquifer that underlies
15 Yucca Mountain and surface water discharges in
16 Death Valley National Park.

17 Our studies point to the Lower Carbonate
18 Aquifer as a source of surface waters manifesting
19 themselves in Death Valley National Park. And
20 Death Valley, besides being a national resource, is
21 the source of the majority of Inyo County's tax
22 revenue and key to the economic viability of the
23 region to the entities of both the California and
24 Nevada side of the border.

25 This same research also appears to
1 indicate that the Lower Carbonate Aquifer may

2 extend southwards to the communities of Death
3 Valley Junction, Shoshone and Tecopa all of which
4 rely exclusively on groundwater.

5 There may be other possible geologic
6 conduits for contamination from Yucca Mountain to
7 reach Inyo County populations, and Inyo County is
8 conducting further research on that.

9 We have produced two scientific
10 investigations. The first one was done in
11 conjunction with Esmeralda County titled An
12 Evaluation of the Hydrology of Yucca Mountain,
13 Lower Carbonate Aquifer and Amargosa River, and the
14 second release just this March, Death Valley
15 Springs Geochemical Investigation.

16 This research meets the scientific
17 standards established by the federal government and
18 is funded primarily by the Department of Energy.

19 These documents will be submitted in
20 conjunction with our formal comments by the Inyo
21 County Board of Supervisors.

22 If the repository should survive the
23 environmental review and licensing processes, the
24 application of a groundwater compliance standard to
25 the repository should be accompanied by the
1 development of an array of monitoring wells at the

2 periphery of the site extending into the Lower
3 Carbonate Aquifer.

4 Such a system should be designed to
5 determine whether the repository is in compliance
6 with its design standard to provide early warning
7 of contamination and to augment the data
8 requirements for the repository modeling of
9 groundwater flow and contaminant transport. Thank
10 you.

11 HEARING OFFICER: That exhausts the list
12 of those who signed up in advance to speak. I'm
13 wondering at this point has anybody arrived that
14 wishes to speak that didn't sign up in advance?

15 Do any of the speakers who addressed us
16 previously want to elaborate on their earlier
17 statements? We'll ask you to do that in ten-minute
18 increments to allow others --

19 Ian.

20 MR. ZABARTE: Ian Zabarte again for the
21 Western Shoshone National Council.

22 Just to go on a little bit more of what
23 our radiation -- actually nuclear risk management
24 project is about, we're down-winders. We're
25 survivors of a long, strained relationship with the
1 United States. This is just the latest in a long