Initial Communication Survey Results for the Hanford Environmental Dose Reconstruction Project

D. M. Beck

March 1991

Prepared for the Technical Steering Panel

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INITIAL COMMUNICATION SURVEY RESULTS
FOR THE HANFORD ENVIRONMENTAL DOSE
RECONSTRUCTION PROJECT

D. M. Beck

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Pacific Northwest Laboratory
Richland, Washington 99352

**INITIAL COMMUNICATION SURVEY RESULTS FOR THE
HANFORD ENVIRONMENTAL DOSE RECONSTRUCTION
PROJECT**

March 1991

This document has been reviewed
and approved by the Technical Steering Panel.

John E. Till, Chairman
Technical Steering Panel
Hanford Environmental
Dose Reconstruction Project

March 7, 1991

Date

SUMMARY

To support the public communication efforts of the Technical Steering Panel of the Hanford Environmental Dose Reconstruction (HEDR) Project, a public survey was conducted. The survey was intended to provide information about the public's knowledge and interest in the project and the best ways to communicate project results.

Questions about the project were included as part of an omnibus survey conducted by Washington State University. The survey was conducted by phone to Washington State residents in the spring of 1990. This report gives the HEDR-related questions and summary data of responses.

Questions associated with the HEDR Project were grouped into four categories:

- knowledge of the HEDR Project
- interest in the project
- preferred ways of receiving information about the project (including public information meetings, a newsletter mailed to homes, presentations to civic groups in the respondent's community, a computer bulletin board respondent could access with a modem, information displays at public buildings and shopping malls, and an information video sent to respondent)
- level of concern over past exposure from Hanford operations.

Questions about whom state residents are most likely to trust about radiation issues were also part of the omnibus survey, and responses are included in this report.

CONTENTS

SUMMARY.	iii
INTRODUCTION	1
SURVEY DESIGN AND IMPLEMENTATION	3
SURVEY RESULTS	5
KNOWLEDGE OF THE HEDR PROJECT	5
INTEREST IN THE HEDR PROJECT	6
CONCERN OVER PAST EXPOSURE	9
WHOM RESPONDENTS TRUST	10
DEMOGRAPHICS.	12

INTRODUCTION

The Hanford Environmental Dose Reconstruction (HEDR) Project Technical Steering Panel (TSP) is charged with the responsibility to communicate project results to the general public. To support the TSP's communication efforts, a survey of Washington State residents was conducted to solicit citizen knowledge and to determine interest in the HEDR Project and to determine the best ways to communicate results to the public. The purpose of this document is to present the initial results of this survey. Survey design and implementation is discussed in Section 2.0, while results of the survey are presented in Section 3.0. Sections detailing an analysis of the survey data and survey conclusions will be added at a later date.

SURVEY DESIGN AND IMPLEMENTATION

The survey was conducted as part of an omnibus survey conducted by the Social and Economic Sciences Research Center (SESRC) at Washington State University (WSU). The HEDR questions were developed by PNL staff using the Total Design Method developed by Don Dillman at WSU. The survey was conducted by telephone to residents of Washington State between March 27 and April 30, 1990. The sample was drawn to obtain a representative sample of the entire population of Washington State using a random digit dialing (RDD) sampling frame. Pretests of the questionnaire were conducted on March 21, 1990 to resolve any problems with wording. The data collected in the pre-tests are not included in the final results. The interviews were conducted from the Public Opinion Laboratory of the SESRC using a microcomputer-assisted telephone interviewing (MATI) facility. The cooperation rate (the ratio of completed interviews to the total number of completed interviews, plus refusals, plus partially completed interviews) was 56.6%.

SURVEY RESULTS

KNOWLEDGE OF THE HEDR PROJECT

Questions 1-5 were asked to determine what percentage of respondents had heard of the HEDR Project. One of the projects asked about, the Atmospheric Reclamation and Reconstruction Project, is a fictitious project. It was asked to get a crude indicator of what percentage of respondents would say they heard about a particular project even though in fact they had not. This type of bias is referred to as "social desirability bias."

Q1-Q5. At the Hanford Site a variety of research projects are under way. We would like to know if people such as yourself have heard about any of these projects. I'm going to read you a list of projects and I'd like you to tell me if you have SEEN, HEARD, or READ anything about the project. The first project is the N-Reactor shutdown. Have you seen, heard, or read anything about this project?

Q1. N-REACTOR SHUTDOWN PROJECT

<u>VAR71</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
Yes	367	70.3	367	70.3
No	155	29.7	522	100.0

Frequency Missing = 25

Q2. MOLECULAR SCIENCES RESEARCH PROJECT

<u>VAR72</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
Yes	84	16.2	84	16.2
No	434	83.8	518	100.0

Frequency Missing = 29

Q3. DOSE RECONSTRUCTION PROJECT

<u>VAR73</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
Yes	145	28.1	145	28.1
No	371	71.9	516	100.0

Frequency Missing = 31

Q4. FAST FLUX TEST FACILITY PROJECT

<u>VAR74</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
Yes	125	24.1	125	24.1
No	393	75.9	518	100.0

Frequency Missing = 29

Q5. ATMOSPHERIC RECLAMATION/RECONSTRUCTION

<u>VAR75</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
Yes	77	14.9	77	14.9
No	441	85.1	518	100.0

Frequency Missing = 29

INTEREST IN THE HEDR PROJECT

Now I would like to ask you a few questions about an ongoing project at Hanford called the Environmental Dose Reconstruction Project. The purpose of this project is to determine what level of radiation people in the state may have been exposed to from 1944-1970 due to Hanford activities.

Q-6. Which of the following best describes your interest in receiving more information about the Hanford Environmental Dose Reconstruction Project?

<u>VAR76</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY INTERESTED	16	61.9	166	31.9
SOMEWHAT INT	268	51.5	434	83.5
NOT INT	86	16.5	520	100.0

Frequency Missing = 27

Q7-Q14. There are a variety of ways of getting information about the Hanford Environmental Dose Reconstruction Project to interested members of the public, such as yourself. For each of the following ways, tell me whether it would be very useful, somewhat useful, of little use, or of no use, to you personally. The first way is THROUGH PUBLIC INFORMATION MEETINGS HELD IN THE TRI-CITIES AREA. Would you personally find this way of obtaining information very useful, somewhat useful, little use, or of no use at all?

Q7. PUBLIC INFO MEETINGS IN TRI-CITIES

<u>VAR77</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY USEFUL	41	9.5	41	9.5
SOMEWHAT USEFUL	55	12.7	96	22.2
LITTLE USE	114	26.3	210	48.5
NO USE	223	51.5	433	100.0

Frequency Missing = 114

Q8. PUBLIC INFO MEETINGS IN YOUR TOWN

<u>VAR78</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY USEFUL	130	30.0	130	30.0
SOMEWHAT USEFUL	187	43.1	317	73.0
LITTLE USE	75	17.3	392	90.3
NO USE	42	9.7	434	100.0

Frequency Missing = 113

Q9. AN INFORMATION NEWSLETTER MAILED DIRECTLY TO YOUR HOME

<u>VAR79</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY USEFUL	294	67.7	294	67.7
SOMEWHAT USEFUL	114	26.3	408	94.0
LITTLE USE	13	3.0	421	97.0
NO USE	13	3.0	434	100.0

Frequency Missing = 113

Q10. PRESENTATIONS TO CIVIC GROUPS IN YOUR COMMUNITY (e.g., KIWANIS, ROTARY, PTA, GRANGE, etc.)

<u>VAR80</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY USEFUL	103	23.8	103	23.8
SOMEWHAT USEFUL	175	40.5	278	64.4
LITTLE USE	86	19.9	364	84.3
NO USE	68	15.7	432	100.0

Frequency Missing = 115

Q11. A COMPUTER BULLETIN BOARD YOU COULD ACCESS WITH A MODEM

<u>VAR81</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY USEFUL	49	11.5	49	11.5
SOMEWHAT USEFUL	76	17.8	125	29.3
LITTLE USE	88	20.6	213	49.9
NO USE	214	50.1	427	100.0

Frequency Missing = 120

Q12. INFORMATION DISPLAYS AT PUBLIC LIBRARIES AND OTHER PUBLIC BUILDINGS

<u>VAR82</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY USEFUL	145	33.6	145	33.6
SOMEWHAT USEFUL	171	39.6	316	73.1
LITTLE USE	67	15.5	383	88.7
NO USE	49	11.3	432	100.0

Frequency Missing = 115

Q13. INFO DISPLAYS AT LOCAL SHOPPING MALLS

<u>VAR83</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY USEFUL	112	25.9	112	25.9
SOMEWHAT USEFUL	169	39.0	281	64.9
LITTLE USE	79	18.2	360	83.1
NO USE	73	16.9	433	100.0

Frequency Missing = 114

Q14. AN INFORMATION VIDEO THAT COULD BE SENT TO YOU

<u>VAR84</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY USEFUL	170	39.4	170	39.4
SOMEWHAT USEFUL	130	30.2	300	69.6
LITTLE USE	52	12.1	352	81.7
NO USE	79	18.3	431	100.0

Frequency Missing = 116

CONCERN OVER PAST EXPOSURE

Q-15. Due to operations at Hanford from 1944 to 1970, radiation was released to the environment. Some people are concerned that they may have been exposed to this radiation, while others are not concerned. Which of the following best describes YOUR concern over past exposure?

<u>VAR86</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY CONCERNED	95	18.5	95	18.5
SOMEWHAT CONCERN	161	31.4	256	49.9
NOT CONCERNED	219	42.7	475	92.6
NOT LIVE IN WASH	38	7.4	513	100.0

Frequency Missing = 34

WHOM RESPONDENTS TRUST

The following questions were asked as part of a series of questions on radioactive waste and waste disposal. However, because the answers suggest whom state residents are most likely to trust about radiation issues, they are reproduced here.

Q16-Q23. When it comes to providing information about radioactive waste and waste disposal, how much would you trust each of the following to provide reliable information? For each one, tell me if you would trust them VERY MUCH, A LITTLE, NOT TOO MUCH, OR NOT AT ALL. The first one is FEDERAL NUCLEAR AGENCIES. Would you trust them very much, a little, not too much, or not at all?

Q16. FEDERAL NUCLEAR AGENCIES

<u>VAR62</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY MUCH	76	14.8	76	14.8
A LITTLE	229	44.6	305	59.3
NOT TOO MUCH	148	28.8	453	88.1
NOT AT ALL	61	11.9	514	100.0

Frequency Missing = 33

Q17. UNIVERSITY SCIENTISTS

<u>VAR69</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY MUCH	337	65.7	337	65.7
A LITTLE	152	29.6	489	95.3
NOT TOO MUCH	11	2.1	500	97.5
NOT AT ALL	13	2.5	513	100.0

Frequency Missing = 34

Q18. INDEPENDENT CITIZEN GROUPS

<u>VAR63</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY MUCH	181	35.1	181	35.1
A LITTLE	230	44.6	411	79.7
NOT TOO MUCH	70	13.6	481	93.2
NOT AT ALL	35	6.8	516	100.0

Frequency Missing = 31

Q19. FEDERAL ENVIRONMENTAL AGENCIES

<u>VAR64</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY MUCH	135	26.2	135	26.2
A LITTLE	245	47.5	380	73.6
NOT TOO MUCH	99	19.2	479	92.8
NOT AT ALL	37	7.2	516	100.0

Frequency Missing = 31

Q20. UTILITY OFFICIALS IN YOUR COMMUNITY

<u>VAR65</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY MUCH	102	19.9	102	19.9
A LITTLE	234	45.7	336	65.6
NOT TOO MUCH	107	20.9	443	86.5
NOT AT ALL	69	13.5	512	100.0

Frequency Missing = 35

Q21. WASHINGTON STATE AGENCIES

<u>VAR66</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY MUCH	148	29.1	148	29.1
A LITTLE	266	52.4	414	81.5
NOT TOO MUCH	65	12.8	479	94.3
NOT AT ALL	29	5.7	508	100.0

Frequency Missing = 39

Q22. OFFICIALS IN YOUR COUNTY AND CITY

<u>VAR67</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY MUCH	114	22.2	114	22.2
A LITTLE	262	51.0	376	73.2
NOT TOO MUCH	86	16.7	462	89.9
NOT AT ALL	52	10.1	514	100.0

Frequency Missing = 33

Q23. ENVIRONMENTAL ORGANIZATIONS

<u>VAR68</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
VERY MUCH	210	41.1	210	41.1
A LITTLE	223	43.6	433	84.7
NOT TOO MUCH	53	10.4	486	95.1
NOT AT ALL	25	4.9	511	100.0

Frequency Missing = 36

DEMOGRAPHICS

Q24. SEX

<u>VAR87</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
MALE	245	47.4	245	47.4
FEMALE	272	52.6	517	100.0

Frequency Missing = 30

Q25. EDUCATION

<u>VAR113</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
MISSING	3			
SKIP	29			
NO HIGH SCHOOL DIPLOMA	57	11.1	57	11.1
HS GRAD/GED	115	22.3	172	33.4
SOME COLLEGE	132	25.6	304	59.0
ASSOC DEGREE	43	8.3	347	67.4
BA, AB OR BS	112	21.7	459	89.1
PROF. MA OR PHD	56	10.9	515	100.0

Q26. RACE

<u>VAR114</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
WHITE	484	93.6	484	93.6
BLACK	4	0.8	488	94.4
AM IND	6	1.2	494	95.6
ASIAN /ISL	6	1.2	500	96.7
OTHER	17	3.3	517	100.0

Frequency Missing = 30

Q27. AGE

<u>VAR87</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
MISSING	41			
18 TO 29	89	17.6	89	17.6
30 TO 39	138	27.3	227	44.9
40 to 49	101	20.0	328	64.8
50 to 59	60	11.9	388	76.7
60 to 69	63	12.5	451	89.1
70 AND OVER	55	10.9	506	100.0

Q28. INCOME

<u>VAR87</u>	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
DON'T KNOW	4			
MISSING	15			
REFUSE	17			
SKIP	29			
LESS THAN \$10000	31	6.4	31	6.4
\$10000 TO \$20000	98	20.3	129	26.8
\$20000 TO \$30000	100	20.7	229	47.5
\$30000 TO \$40000	89	18.5	318	66.0
\$40000 TO \$50000	53	11.0	371	77.0
\$50000 TO \$60000	45	9.3	416	86.3
\$60000 TO \$80000	31	6.4	447	92.7
OVER \$80000	35	7.3	482	100.0

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