Meeting Minutes
Columbia River Comprehensive Impact Assessment
Weekly Management Meeting
May 28, 1996
Battelle's ETB Building, Columbia River Room, 1:00 - 4:00

Attendees(*)/Distribution(#):

Jim Becker, PNNL*#
Charlie Brandt, PNNL#
Amoret Bunn, Dames & Moore*#
Sandra Cannon, PNNL*#
Paul Danielson, NPT*#
Greg deBruler, HAB*#
Kevin Clarke, RL#
Roger Dirkes, PNNL*#
Sue Finch, PNNL*#
Larry Gadbois, EPA*#
Rose Gentry, Oregon#
Dick Gilbert, PNNL#
Stuart Harris, CTUIR#
RD Hildebrand, RL#
Dave Holland, Ecology*#
A Knepp, BHI#
Jay McConnaughey, WDFW#
Terri Miley, PNNL#
Dick Moos, BHI#
Nancy Myers, BHI*#
Bruce Napier, PNNL*#
Lino G. Niccoli, YIN*#
Roger Ovink, BHI#
Doug Palenshus, Ecology#
Ralph Patt, Oregon#
Stan Sobczyk, NPT#
Bob Stewart, RL*#
Mike Thompson, RL#
JR Wilkinson, CTUIR#
Thomas W. Woods, YIN#
Jerry Yokel, Ecology*#
Admin Records-CRCIA#

Summary of Discussions:

Schedule for Comprehensive Section

The schedule for the comprehensive sections is 2-3 weeks behind. It was decided to try to recover the schedule using the afternoon meetings rather than scheduling additional meetings. This will be revisited as needed.

Responses to Scenarios Report Comments

Bruce Napier handed out copies of the proposed resolutions to the comments on *Scenarios for the Screening Assessment* to the group. A total of 384 comments were received. The comments were grouped into 36 categories. The comments with an asterisk by the resolution number were thought to be of the most interest to the CRCIA team and were discussed more thoroughly. No significant comments regarding the proposed resolution were received from the team. An action was assigned to the CRCIA team to respond within two weeks (6/11/96) if any changes are requested to the proposed responses.

Final Comment Resolution on Contaminants Report

No further comments were received from the team. One of the technical peer reviewers has requested a telephone call on 6/21/96 regarding the response to not implement a comment that deals with references within references. Bob Stewart will keep the team informed of this issue.

Preface Discussion

An updated copy of the Preface was handed out to the team. Sandra explained the changes as well as some additional changes from Roger Dirkes that were not incorporated into the prior version. Thomas Woods was reached via speaker phone and resolution was reached on the DOE 1992 reference on page 2. When the preface was rewritten, the purpose of future phases of the CRCIA was deleted. However, the purpose of the screening assessment was also inadvertently deleted. It was agreed to add the following sentence to the preface: "The purpose of the screening assessment is to support clean-up decisions". It was noted that this purpose only applies to the screening assessment, not the entire project. Also, the

agreement was reached after many of the participants had left the meeting.

Review of CRCIA Purpose and Team Purpose

This discussion was deferred until 6/4/96.

Proposal for Public Outreach Team

This discussion was deferred until 6/4/96.

Hanford Update Article

A copy of the final article for the May/June issue of the *Hanford Update* was handed out.

Items Not on the Agenda

The Natural Resources Trustee Council workshop will be held on Wednesday, May 29 from 8:30 - 4:30 at the Atrium Building. CRCIA team members are welcome to attend. A presentation summarizing the workshop will be given to the CRCIA team at the 6/4/96 morning session.

Meeting minutes from the 5/14/96 meeting were handed out. An issue was raised as to whether the meeting minutes should have a footnote on them indicating that they are not official as they are not reviewed and signed by team members. The concern was raised because the minutes are part of the administrative records. Without full team review and concurrance, there is room for errors or omissions in the minutes. Bob Stewart was assigned an action to check with administrative records staff on this issue.

Comprehensive Chapter: None identified at this meeting.

Agreements: It was agreed to add the following sentence to the preface: "The purpose of the screening assessment is to support clean-up decisions".

Action Items:

Action Description	Assigned To	Due Date
Review proposed responses on the *Scenarios for Screening Assessment* and provide any requested changes to Bruce Napier or Sandra Cannon.	CRCIA Team	6/11/96
Call administrative records staff to determine if a footnote needs to be added to the minutes that identifies that the minutes have not been reviewed and signed.	Bob Stewart	6/4/96

Attachments (file only - copies available upon request):

- 5/28/96 meeting agenda
- Resolution of Comments on *Scenarios for Screening Assessment*, dated 5/28/96
- Preface
- Final Article for the May/June issue of the *Hanford Update*

Prepared by SM Finch on 6/3/96

AGENDA
Columbia River Comprehensive Impact Assessment
Weekly Project Management Team

Scheduled from 9:00 - 12:00 p.m., May 28, 1996
Bechtel Building, 3350 George Washington Way, 2A01 Conference Room

Scheduled from 1:00 - 4:00, May 28, 1996
Battelle's ETB Building, Columbia River Room

Morning Session

1. 9:00 - Comprehensive Section
   - Thomas Woods - Introduction - Presenters will facilitate the discussions below by recording issues and concerns on each subject area (following the example provided last week by Thomas Woods).
   - Revisit/solicit issues and concerns on first two presentations (inventories and sources, containment beach)
   - Larry Gadbois/Dan Landeen - Habitat & Critical Locations Requirements
   - Larry Gadbois/Dan Landeen - Receptor Exposure Pathways Requirements
   - Stuart Harris/Dan Landeen - Dose-to-Receptor Calculation Requirements
   - Thomas Woods - Develop Scenario Requirements

Afternoon Session

1. 1:00 - Bob Stewart - Introduction

2. 1:05 - Thomas Woods - Schedule for Comprehensive Section
   - Discuss need for additional meetings to get back on schedule.

3. 1:15 - Bruce Napier - Responses to Scenarios Report Comments
   - Present proposed responses to key comments. Reach team agreement on proposed responses or an alternate response.

4. 2:15 - Bruce Napier - Final Comment Resolution on Contaminants Report
   - The complete package of comment responses to all comments received was handed out at the 5/14/96 meeting. Any final comments from the team on this package can be made at this time.

5. 2:20 - Sandra Cannon - Preface Discussion
   - Changes received have been received and incorporated. An updated preface will be handed out.
   - Team members are requested to bring samples of maps that contain information/layout, etc, they would like to see in the up-front project map.

6. 2:45 - Thomas Woods - Review of CRCIA Purpose and Team Purpose
   - Concern regarding changes made to the preface

7. 3:15 - Rose Gentry - Proposal for Public Outreach Team
   - At the 4/23/96 meeting, a proposal for the Public Outreach Team was handed out and discussed. The proposal was briefly discussed at the 4/30/96 meeting. An updated proposal will be presented to the team for agreement at the 5/28/96 meeting.

8. 3:30 - Nancy Meyers - Hanford Update Article
   - Provide the team with a copy of the Hanford Update Article that was submitted.

9. 3:45 - Review of Upcoming Meetings

6/4/96 - Morning - Bechtel Building, Room 2A01

- Revisit/solicit issues and concerns on third and fourth presentations (transport to river, and waste entry to the river)
- Greg deBruler - Impact Tolerance Calculation Requirements
- Thomas Woods - Develop Technical B/L Requirements
- Team review of text on Inventories and Sources Requirements and the Containment Breach Requirements before turning over for edit.
- Team Review of text on Abstract, Purpose, Uses before turning over for edit.
- Team Review of text on Transport-to-River Requirements before turning over for edit.

6/4/96 - Afternoon - EESB Columbia River Room

- Charlie Brandt/Jim Becker - Present proposed responses to key comments on the Species Report

6/11/96 - Morning - Bechtel Building, Room 2A01

- Thomas Woods - Develop Common Requirements
- Lino Niccoli - Analysis Architecture & Integration Requirements
- Team Review of text on Waste Entry to River Requirements before turning over for edit.

6/11/96 - Afternoon -ETB Columbia River Room

- Charlie Brandt - EHQs Presentation

Resolution of Comments on *Scenarios for Screening Assessment*
Columbia River Comprehensive Impact Assessment
28 May 1996

Resolution No.	Comment Category	Resolution of Comment No.	Resolution
1	Proliferation of scenarios		Number of scenarios will not be reduced; specific scenarios are included to address various concerns of different audiences
2	General clarity of explanation	2 25 27 29 30 31 50 51 55 56 60 65 67 68 69 70 71 73 74 75 76 78 79 86 87 89 91 98 99 100 101 102 105 106 116 119 120 123 125 127 135 150 154 156 159 161 162 163 166 172 176 183 187 188 197 199 200 202 207 209 210 220 223-235 242-245 247 253 254 255 259 264 268 269 270 272 273 274 275 279 280 288 290 291 292 293 294 308 309 310 312-319 323 324 329 331 333 337 341 342 343 346 354 356 357 358 359 361 373 381 382	Changes will be made to enhance clarity
3	Fuller explanation of scenarios	4 95 104 121 122 137 185 193 195 196 351 370	Scenario descriptions will be enhanced
4*	Scenario additivity	9 19 53 59 82 83 84 97 236 282	The scenarios are anticipated to provide information about specific activities to guide decision making; examples will be included for those who wish to fractionally add scenario results to approximate a lifestyle; however, providing individually tailored scenarios is not a goal of this screening assessment

Resolution No.	Comment Category	Resolution of Comment No.	Resolution
5	Fuller explanation of individual factors	1 63 66 92 96 107 110 111 112 113 114 116 128 129 131 132 136 139 144 164 168 169 186 190 191 192 208 216 217 218 219 246 247 248 249 251 260 261 295 369 374 375 383	Additional explanation of the use and/or derivation of many of the parameters will be included, particularly for inhalation rates
6	Parameters as annual averages	96 111 118 325 326	All values are intended to be averages over the exposure duration and thus less than any one-time maximum; additional explanation will be incorporated
7	Suggested revisions to individual parameters	115 117 118 132 133 134 139 141 142 143 144 146 147 148 149 151 170 173 214 215 216 217 250 263 271 284 285 286 296 297 298 325 326 328 338 339 343 345 346 376 379 384	All parameter values will be reviewed, and where applicable the ranges will be extended to capture the variability suggested
8	Recreation scenario parameters	271 286 335 336	The recreation scenario was taken from HSRAM; exposure frequencies of 70 days for the hunter/fisher will be extended to an avid recreation scenario; also a survey of river use would help refine the scenarios; such a survey is a candidate for remaining work
9	References for individual parameters	14 103 108 109 130 145 166 167 171 241 276 289 292 328 352 369 377 378	References for parameter values will be included
10*	Ranges on additional parameters	3 5 66 88 103 137 194	Ranges for exposure duration and frequency will be included
11	Scope/future releases	7 21	The scenarios are only intended to convey potential uses under current conditions; scenarios for future contaminant conditions might require additional development

Resolution No.	Comment Category	Resolution of Comment No.	Resolution
12	Scope/current conditions - future uses	8 26 46 174 211 380	The intent is to evaluate current impact (using a range of possible near-term uses) not future uses or past conditions; the purpose is to determine the need for remedial actions relative to the Columbia River environment
13*	Future uses of these scenarios	152 160 165 175 182 184 239 257 380	The scenarios are defined for the screening assessment; the intent is to alert potential future users of these scenarios of the need to consult with Tribal representatives before adopting them for other uses
14	Use of groundwater in scenarios	31 51 60 61 104	The focus of the screening assessment is on the impact to the river; although, in the calculations, groundwater may be used as a surrogate for seep/springs, the pathways of groundwater use away from the river are not part of the current scope
15	Integration of this report with the final document	6 16 17 24 153 168	Placing this chapter into the context of the final report should alleviate these questions
16	Preface	223 224 228 265 299 366	Incorporation of this chapter into the final report should eliminate the problem
17	Glossary definitions	33 34 35 36-49 231 300-307	The suggestions will be considered in revising the glossary
18*	Additional pathways - Native American scenarios	178 179 180 278	Milk, eggs, breast milk were discussed in the report but not included because data were not available; to be resolved by additional discussion with tribal representatives
19	Additional pathways - ecology	a)320 322 323 b)324 330 332 c)340	Consumption rates will be revisited and the following considered for inclusion if consumption is not within existing ranges of wildlife consumption a) Crayfish and bullfrogs b) Additional bird species c) Breast milk
20	Native American scenario - cultural media	22 65 69 77 80 85 94	Cultural media have been included because the concern is applicable regardless of exposure magnitude
21	Native American tribal rights issues	158	This assessment addresses the exercise of tribally reserved rights; no preconceived answers are assumed

Resolution No.	Comment Category	Resolution of Comment No.	Resolution
22	Conservatisms	23 57 58 72 80 140 168 184 221 256 284 363 371	Reviewers recommended both increasing and decreasing conservatism; the ranges recommended will be incorporated into the stochastic analyses; the individual deterministic values are generally the result of CRCIA Team consensus
23	Scenario consensus	11 12 18 66 124 134 157 173 184 363 367	Some reviewers wanted additional justification for including or excluding selected scenarios; the scenarios are based on CRCIA Team consensus of what needed to be addressed
24	Uncertainty/scenario similarities	11 12 13 124 134 138 157 205 368 372	Uncertainties do not expand exponentially; generally they tend to only slightly exceed those of the most sensitive parameters; this is a result of the statistical "Central Limit Theorem"; inclusion of scenarios is based on consensus of the CRCIA Team
25	Population involved	15 17 20	The assessment focuses only on individuals
26	Age/sex differences	103 137 203 358 365	Age and sex specific differences are being addressed in the screening assessment at the level of detail shown in the tables; generally, exposures for children are overestimated by using the adult exposure parameters - when this is not true, such as for soil ingestion, specific parameters for children are included
27	External dose factors	206 287	Exposures to sediments and soils will be modeled as an infinite slab source, modified with geometry or shielding corrections, not as a thin infinite plane
28	Contaminant synergisms	10 46	Because of data limitations, the impact of multiple contaminants can only be addressed by addition at this time
29	Body burdens/prior exposures	76 81 156	The simple models available deal with average exposures across long time periods; to approximate the lifetime risk of exposure to the Columbia River, it is not necessary to consider the existing body burden of a contaminant prior to exposure to the river

Resolution No.	Comment Category	Resolution of Comment No.	Resolution
30	Sensitivity analyses	64 90 93 100 137 283 289	The most important parameter in a multiplicative chain with additive branches is not always obvious; the screening assessment will include sensitivity analyses; that is why the parameter ranges are included in this report; results will be displayed, including the deterministic value
31*	Cobalt-60 particles	183-183 279 348-350	This scenario description was adapted from a previous analysis without all of the background from that analysis; all parameters and equations will be checked and documented; presentation of the Co-60 particle results will differ from other contaminants in the final report because the end-point of the analysis (i.e., skin lesions) differs
32	Accurate reflection of upper bound	308 311	Typically, the use of multiple upper range parameters will result in deterministic estimates toward the upper stochastic range
33*	Policy matters/uses of information	24 281	The CRCIA screening assessment will provide input to decision makers; the ultimate use of the information will be decided by the Tri-Party agencies; incorporation of the scenarios report into the compilation report will help place it in the context of the CRCIA study
34	No response necessary	62 189 197 204 212 222 266 267 277	Thank you for the comment
35	Disagree; change not incorporated	126 140 177 181 213 252 360 361	126 - revised instead per comment number 272 140, 361- not appropriate 177 - these types of materials are not under consideration in the screening assessment (see section on selection of contaminants) 181 - sweat lodges are included with parameters only for adults 213 - CRCIA Team selected name 252 - success rate is implicit; see section 3.2, paragraph 2 360 - will be covered in ecological assessment section

Resolution No.	Comment Category	Resolution of Comment No.	Resolution
36	Repeated comments	28 - repeat of 23 52 - repeat of 24 54 - repeat of 31 124- repeat of 12 201- repeat of 199 251- repeat of 249 258- repeat of 256 262- repeat of 257 353- repeat of 352 355- repeat of 328	

Preface

The Columbia River is a critical resource for residents of the Pacific Northwest. It provides for basic needs and is interrelated with the life style and quality of life for Columbia Basin's many human and non-human residents. This resource drew the Manhattan Project's planners to the site now called Hanford to produce nuclear weapon materials (see Figure P.1 [figure showing topography and sources of contaminants for compilation report but not data report]). Production of those materials has left behind a legacy of chemical and radioactive contamination and materials that have, are, and will continue to pose a potential threat to the Columbia River for the foreseeable future.

To evaluate the impact to the river from this Hanford-derived contamination, the U.S. Department of Energy, U.S. Environmental Protection Agency, and State of Washington Department of Ecology (the Tri-Party agencies) initiated a study referred to as the Columbia River Comprehensive Impact Assessment (CRCIA). To address concerns about the scope and direction of CRCIA as well as enhance regulator, stakeholder, tribal, and public involvement, the CRCIA Management Team was formed in August 1995. The CRCIA Team meets to share information and provide input to decisions made by the Tri-Party agencies concerning CRCIA. Representatives from the Confederated Tribes of the Umatilla Indian Reservation, Hanford Advisory Board, Nez Perce Tribe, Oregon State Department of Energy, Yakama Indian Nation, Tri-Party agencies, and contractors are active participants on the team.

A major CRCIA Team decision was to organize CRCIA into phases, with additional phases to ~~potentially~~ be identified as warranted after completion of the initial phase. The initial phase is comprised of two parts: 1) a screening assessment to evaluate the current impact to the river resulting from Hanford-derived contamination (Figure P.1 - [SG96030040.1 map in the data report only]) and 2) identification of requirements considered necessary by the CRCIA Management Team for a comprehensive assessment of impact to the river.

This *Data for the Screening Assessment Report* is the fourth in a series of reports which have been issued as part of the initial phase. Figure P.2 [SG96050234.1 document diagram will be Figure P.2 in compilation report as well] depicts the documents which have been and will be issued in the initial phase. After the data report and three previously published reports have been revised, they will be incorporated into a two-part report which will document the results of the two parts of the initial phase of CRCIA: the screening assessment results and the requirements for a comprehensive assessment. [Will be changed for compilation report.]

Background

The Hanford Site occupies 1456 square kilometers (560 square miles) in the south central portion of the State of Washington. It is located northeast of the Tri-Cities of Richland, Kennewick, and Pasco. The site is partially bordered on the north and east by the Columbia River and includes a relatively narrow buffer zone north of the river referred to as the Waluke or North Slope. The Hanford Site is located on land ceded in 1855 by treaties with the Confederated Tribes of the Umatilla Indian Reservation and the Yakama Indian Nation. The Nez Perce Tribe has treaty rights on the Columbia River. The tribes were guaranteed the right to fish at all usual and accustomed places and the privilege to hunt, gather roots and berries, and pasture horses and cattle on open and unclaimed land.

From 1944-1987, the U.S. Department of Energy (DOE) conducted nuclear production operations at the Hanford Site along the Hanford Reach of the Columbia River. The Hanford Reach extends 85 kilometers (51 miles) downstream from Priest Rapids Dam to the head of the McNary Pool near the city of Richland, Washington. These past nuclear operations resulted in the release of hazardous chemicals and radionuclides to the Columbia River and into the soil. These operations also resulted in the storage of wastes and nuclear materials, some of which have escaped containment or have the potential for doing so. Current conditions of the Columbia River reflect that contamination is reaching the river primarily via the groundwater pathway.

In addition to contamination resulting from past Hanford operations, there is the potential for more contamination because the Hanford Site is being used for storage and disposal of nuclear materials, radioactive waste, chemically hazardous waste, and mixed waste (nuclear materials mixed with hazardous chemicals). For example, presently two-thirds of the nation's defense nuclear waste is being stored at the Hanford Site with continuing shipments of nuclear waste being received (DOE 1992). Much of this nuclear waste may remain at the Hanford Site. The storage of these nuclear wastes could potentially contribute to the contamination of the Columbia River (depending on the performance of the chosen isolation solution) for thousands of years.

As a result of the known contamination, four areas of the Hanford Site (the 100, 200, 300, and 1100 Areas) have been placed by the U.S. Environmental Protection Agency (EPA) on the national priorities list for cleanup. The national priorities list is a component of the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) (42 USC 9601) enacted by the U.S. Congress.

To address the cleanup needs mandated by CERCLA and to address the requirements for handling currently stored/generated wastes as mandated by the Resources Conservation and Recovery Act (RCRA) (42 USC 6901), DOE entered into a *Federal Facility Agreement and Compliance Order* (unofficially known as the Tri-Party Agreement) (Ecology et al. 1994) in 1989 with EPA and the State of Washington. Milestones have been adopted for the Tri-Party Agreement that identify actions needed to ensure acceptable progress toward Hanford Site compliance with CERCLA, RCRA, and the *Washington State Hazardous Waste Management Act* (RCW 1985).

During 1993, the Tri-Party agencies began work toward a comprehensive assessment of the impact of past nuclear operations on the current conditions of the Columbia River (DOE 1994). In January 1994, the Tri-Party Agreement was revised to reflect this project. This revision included a new Milestone, M-13-80B (later changed to M-15-80), that established CRCIA. In December 1995, the CRCIA milestone was revised, enhancing the review process and specifying target dates. In April 1996, another change to the Tri-Party Agreement provided additional time to perform the work in the initial phase.

Scope of the Screening Assessment [To remain for Data Report; to be moved to introduction of Part I for the compilation report]

The scope of the screening assessment is to evaluate the current risk to humans and the environment resulting from Hanford-derived contaminants. The screening assessment has the primary components of:

- identifying contaminants to be assessed
- identifying a variety of exposure scenarios to evaluate human contaminant exposure
- identifying a variety of other species to evaluate ecological contaminant exposure
- assessing risks posed by exposure of humans and other species to the contaminants

~~Because of the known contamination emanating from the Hanford Site to the Hanford Reach, that section of the Columbia River from Priest Rapids Dam (first dam upstream of the Hanford Site) to McNary Dam (first dam downstream of the Hanford Site) was selected as the study area for the screening assessment~~ The study area for the screening assessment was defined to extend from upstream of the Hanford Site in areas unaffected by Hanford Site operations to McNary Dam, which is the first dam downstream of the Hanford Site. Historical data indicate that the concentrations of contaminants in the media of concern are as high or higher in this reach of the Columbia River than in areas downstream of McNary Dam. Other factors determining the study area include the availability of appropriate environmental data to conduct the screening assessment, the lack of such data downstream of McNary Dam, the known discharge of contaminants into the river (primarily via groundwater seepage) along the Hanford Site, and the resource constraints (time and dollars) originally imposed on the

screening assessment (see Figure P.2 [SG96030040.1 - for use in preface of Data report only not in preface of compilation report]). The parameters of the scope are:

Area:	Columbia River (vicinity of Priest Rapids Dam to McNary Dam), groundwater (up to 0.8 kilometer/0.5 mile in from the river), and adjacent riparian zone
Time:	January 1990 - February 1996 (date data were received for use in the screening assessment) with data gaps filled by earlier data where available
Contaminants:	Published in Napier et al. (1995) (to be modified)
Scenarios:	Published in Napier et al. (1996) (to be modified)
Receptor Species:	Published in Becker et al. (1996) (to be modified)
Measured Media:	Surface water, sediment, seeps , groundwater, external radiation, biota, cobalt-60 particles, drive point water, N Springs punch point water, and pore water

The primary contractor conducting the screening assessment is the Pacific Northwest National Laboratory. Bechtel Hanford, Inc. provides technical and public involvement coordination with environmental restoration activities. Technical peer reviewers are evaluating the work under the guidance of the Directors of the Oregon Water Resources Research Institute and State of Washington Water Research Center.

Work Integration and Documentation

The results of the initial phase of CRCIA are reported in a series of reports (see Figure P.1 and Table P.1). These reports reflect the process involved in the screening assessment of current risk. The reports published first as drafts will be compiled into one document on the screening assessment and requirements for a comprehensive assessment.

The process involved in the screening assessment was to first identify the documents containing pertinent data. That information was published in two reports (Eslinger et al. 1994 and Miley and Huesties 1995), which were issued as final documents.

These data documents helped to identify the most significant Hanford Site contaminants that affect the Columbia River. The winnowing process used to determine which of those contaminants should be evaluated in the screening assessment of risk was published in Napier et al. (1995) as a draft. The comments on the draft are being incorporated, and the contaminants information will appear as a section in the draft of the report on the screening assessment and requirements for a comprehensive assessment.

Next, groups of people with potentially different exposures to the Columbia River were identified. With information from the Hanford Site Risk Assessment Methodology (DOE 1995) and with input from the CRCIA Team, scenarios were written defining the potential pathways and exposures for the various groups. Input from the scenarios will be used in the screening assessment of human risk. The scenarios are described in Napier et al. (1996), which was published as a draft. The comments on the draft are being incorporated, and the scenarios information will appear as a section in the draft of the report on the screening assessment and requirements for a comprehensive assessment.

Simultaneously, the most significant receptor species were identified and those to be evaluated in the screening assessment of ecological risk were selected. The species to be used in the screening assessment and the process used to select them are described in Becker et al. (1996), which was published as a draft. The comments on the draft are being incorporated, and the species information will appear as a section in the draft of the report on the screening assessment and requirements for a comprehensive assessment.

The monitoring data available, the lists of contaminants and species to be evaluated, and the selection rules developed by the CRCIA Team determined which data were selected for use in the screening assessment of human and ecological risk. The data to be used in the screening assessment and the process used to select them are presented in this draft report. The comments on the draft will be incorporated, and the data information will appear as a section in the draft of the report on the screening assessment and requirements for a comprehensive assessment.

The draft report on the screening assessment and requirements for a comprehensive assessment will provide the results of the screening assessment and a definition of the essential work remaining to provide an acceptable comprehensive river impact assessment. The comments on the draft will be incorporated and the screening assessment and requirements for a comprehensive assessment will be published as a final report.

[References used in Preface]

42 USC 6901 et seq. (as amended). October 31, 1976. *Resource Conservation and Recovery Act of 1976*. Public Law 94-580.

42 USC 9601 et seq (as amended). December 11, 1980. *Comprehensive Environmental Response, Compensation, and Liability Act of 1980*. Public Law 96-510.

Becker, J.M., C.A. Brandt, D.D. Dauble, A.D. Maughan, and T.K. O'Neil. 1996. *Species for the Screening Assessment: Columbia River Comprehensive Impact Assessment*. DOE/RL-96-16-b, U.S. Department of Energy, Richland, Washington.

DOE - U.S. Department of Energy. 1992. *Integrated Database for 1992: U.S. Spent Fuel and Radioactive Waste Inventories, Projects and Characteristics*. DOE/RW-006, Rev. 8, Oak Ridge, Tennessee.

DOE - U.S. Department of Energy. 1994. *Columbia River Impact Evaluation Plan*. DOE/RL-92-28, Rev. 1, Richland, Washington.

DOE - U.S. Department of Energy. 1995. *Hanford Site Risk Assessment Methodology*. DOE/RL-91-45, Rev. 3, Richland, Washington.

Ecology - Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy. 1994. *Hanford Federal Facility Agreement and Consent Order*. Document No. 89-10, Rev. 3 (The Tri-Party Agreement), Ecology, Olympia, Washington.

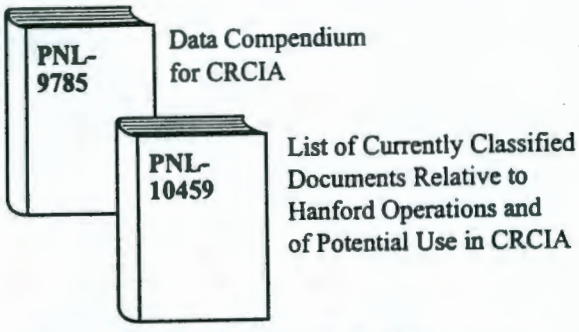
Eslinger, P.W., L.R. Huesties, A.D. Maughan, T.B. Miley, and W.H. Walters. 1994. *Data Compendium for the Columbia River Comprehensive Impact Assessment*. PNL-9785, Pacific Northwest Laboratory, Richland, Washington.

Miley, T.B., and L.R. Huesties. 1995. *List of Currently Classified Documents Relative to Hanford Operations and of Potential Use in the Columbia River Comprehensive Impact Assessment, January 1, 1973-June 20, 1994*. PNL-10459, Pacific Northwest Laboratory, Richland, Washington.

Napier, B.A., N.C. Batishko, D.A. Heise-Craff, M.F. Jarvis, and S.F. Synder. 1995. *Identification of Contaminants of Concern*. PNL-10400, Pacific Northwest Laboratory, Richland, Washington.

Napier, B.A., B.L. Harper, N.K. Lane, D.L. Strenge, and R.B. Spivey. 1996. *Human Scenarios for the Screening Assessment: Columbia River Comprehensive Impact Assessment*. DOE/RL-96-16-a, U.S. Department of Energy, Richland, Washington.

RCW - Revised Code of Washington. 1985. "Hazardous Waste Management Act." RCW 70.105, Olympia, Washington.



Original CRCIA Reference Documents

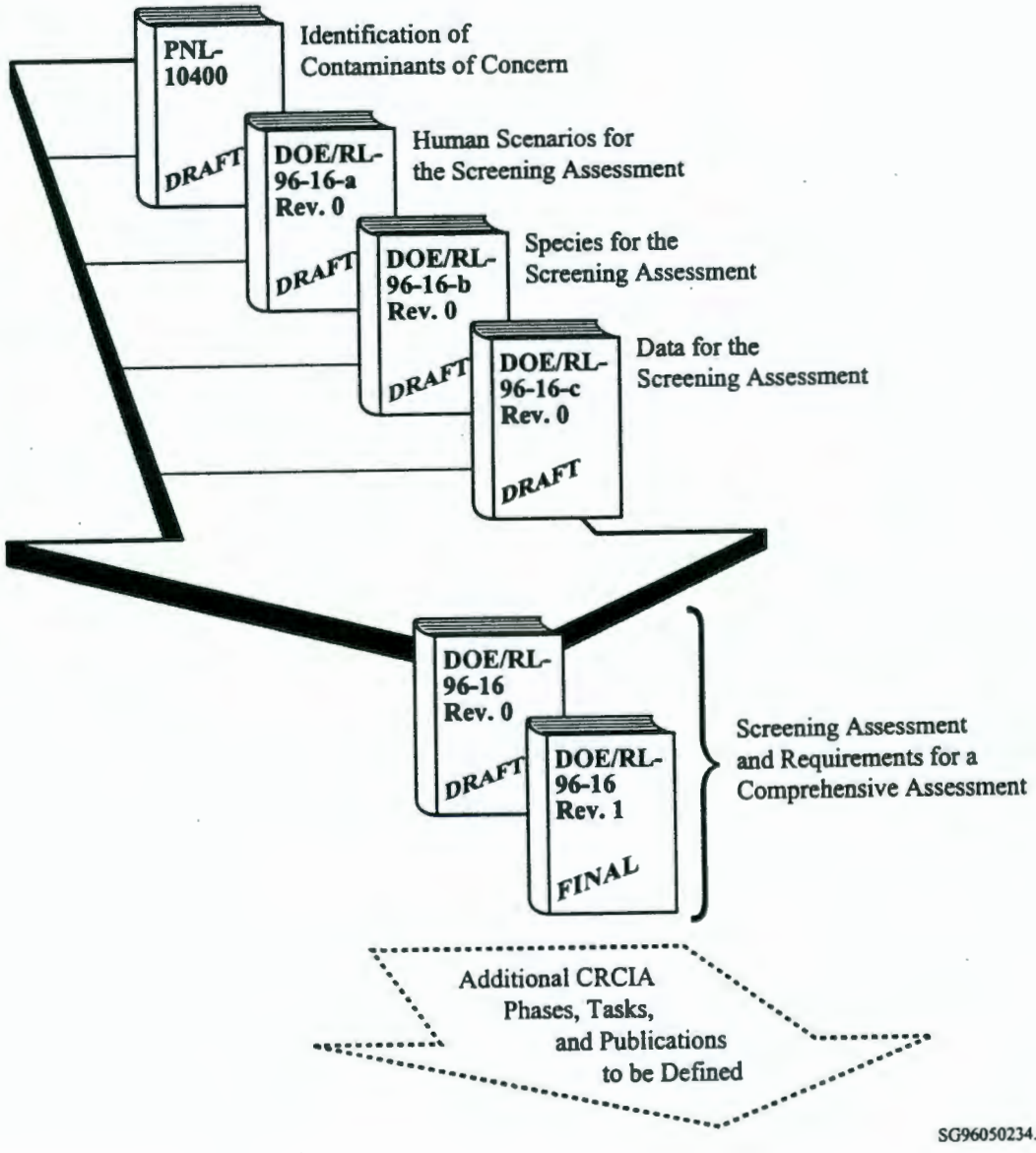


Figure P.2 Publications in the Initial Phase of the Columbia River Comprehensive Impact Assessment

Table P.1. Documents in Initial Phase of Columbia River Comprehensive Impact Assessment
[Use bold to highlight title of document in which this table appears and update the text in the "Status" column.]

Title	Document No.	Publication Date	Status
Data Compendium for the Columbia River Comprehensive Impact Assessment (Eslinger et al. 1994)	PNL-9785	April 1994	Final publication
List of Currently Classified Documents Relative to Hanford Operations and of Potential Use in the Columbia River Comprehensive Impact Assessment January 1, 1973 - June 20, 1994 (Miley and Huesties 1995)	PNL-10459	February 1995	Final publication
Identification of Contaminants of Concern (Napier et al. 1995)	PNL-10400	January 1995	Published as a draft - Issued first in January 1995 for review, then again in January 1996; comments from both review periods will be addressed and report will be a section in the *Screening Assessment and Requirements for a Comprehensive Assessment* report
Human Scenarios for the Screening Assessment: Columbia River Comprehensive Impact Assessment (Napier et al. 1996)	DOE/RL-96-16-a Rev.0	March 1996	Published as a draft - Then comments will be addressed and report will be a section in the *Screening Assessment and Requirements for a Comprehensive Assessment* report
Species for the Screening Assessment: Columbia River Comprehensive Impact Assessment (Becker et al. 1996)	DOE/RL-96-16-b Rev. 0	March 1996	Published as a draft - Then comments will be addressed and report will be a section in the *Screening Assessment and Requirements for a Comprehensive Assessment* report
Data for the Screening Assessment: Columbia River Comprehensive Impact Assessment	DOE/RL-96-16-c Rev.0	June 1996	To be published as a draft - Then comments will be addressed and report will be a section in the *Screening Assessment and Requirements for a Comprehensive Assessment* report
Screening Assessment and Requirements for a Comprehensive Assessment: Columbia River Comprehensive Impact Assessment	DOE/RL-96-16 Rev.0	December 1996	To be published as a draft - Will incorporate all previous draft publications (not those published as final) plus sections on site characterization, screening assessment of risk, and CRCIA Team statement of work to be done after the initial phase
Screening Assessment and Requirements for a Comprehensive Assessment: Columbia River Comprehensive Impact Assessment	DOE/RL-96-16 Rev.1	April 1997	To be published final - Will incorporate responses to comments and minority opinions should any comments not be reconciled

Article for the May/June issue of the *Hanford Update*

RIVER ASSESSMENT: DATA REPORT AVAILABLE

The Columbia River Comprehensive Impact Assessment will be releasing its fourth report for public comment. The two-volume *Data for the Screening Assessment* report contains data to be used in the screening assessment and describes how data was selected and processed. The public comment period will be from June 17 through July 17, 1996. The public will be able to comment a second time on this report when it appears later this year in the draft final document, *Screening Assessment and Requirements for a Comprehensive Assessment: Columbia River Comprehensive Impact Assessment*. No public meetings are scheduled on the report, but public meetings are under consideration for the draft final document.

For more information, contact Bob Stewart, USDOE (509) 376-6192; Larry Gadbois, EPA (509) 376-9884; or Dave Holland, Ecology (509) 736-3027.