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Nez Perce Analysis of the Canyon Disposition Initiative Hanford Site, Washington

Nez Perce Tribe

Environmental Restoration and Waste Management Department

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NEZ PERCE ANALYSIS
OF THE
CANYON DISPOSITION INITIATIVE
HANFORD SITE, WASHINGTON

NEZ PERCE TRIBE
ENVIRONMENTAL RESTORATION
& WASTE MANAGEMENT (ERWM)

October 2005

(Supported by a grant from the Citizens' Monitoring and Technical Assessment Fund)

INTRODUCTION

In 2002, the Nez Perce Tribe, through its Environmental Restoration & Waste Management Program (ERWM), received a Citizen's Monitoring and Technical Assistance grant (MTA), which set to analyze the Canyon Disposition Initiative (CDI) 221-U Facility (U Plant) decision-making process. The ERWM analysis focused on the technical data being utilized by the Tri-Party agencies (Department of Energy, State of Washington-Department of Ecology, and the Environmental Protection Agency) in making its recommendations for the CDI. In 2005, the Environmental Protection Agency (EPA) released its Record of Decision (ROD), which presented the selected final remedial action chosen for the 221-U Facility (U Plant). This document finalized the selected alternative chosen by the Department of Energy.

Nez Perce Tribal Involvement at Hanford

The Hanford area has long been a common use area by Columbia River Plateau tribes, due to its central location on the Columbia near the confluences of the Snake and Yakima rivers. This site, through the Nez Perce Treaty of 1855, is a "usual and accustomed" (U & A) area, where the Nez Perce retained its right and privilege to hunt, fish, and gather within those U & A areas. Thus, the Nez Perce Tribe is involved in the activities that occur on the Hanford site, which has been reaffirmed through federal actions and laws in the area.

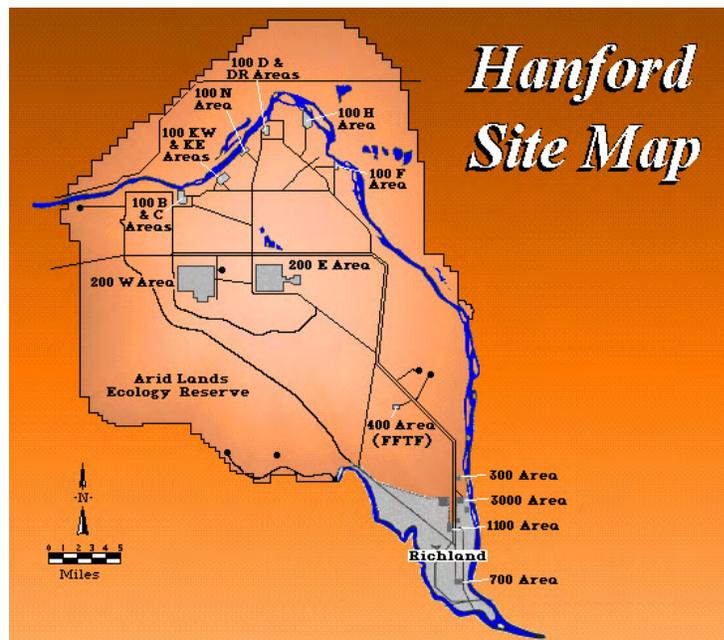
The current Nez Perce Tribal involvement at Hanford began with the Nuclear Waste Policy Act, where NWPA legislation declared the Nez Perce Tribe as one of three affected Hanford Tribes, along with the Confederated Tribes of the Umatilla (CTUIR) and the Yakama Nation. This determination aided in helping the Tribes to become involved in future Hanford actions and developments at Hanford, foremost the eventual cleanup of the Hanford Site. Thus, in 1989, the cleanup of the Site began with the Hanford Federal Facility and Consent Order, also known as the Tri-Party Agreement, which is the legal framework for cleanup of the Site. Through its original NWPA designation, the Tribes were recognized as a stakeholder in the cleanup process. In 1992, a cooperative agreement between the U.S. DOE-Headquarters and the Nez Perce Tribe was agreed upon to assist the Nez Perce Tribe participation and monitoring of the Hanford cleanup activities.

Hanford History

The 586-square-mile Hanford Site is located along the Columbia River in southeastern Washington State. A plutonium production complex with nine nuclear reactors and associated processing facilities, Hanford played a pivotal role in the nation's defense for more than 40 years, beginning in the 1940s with the Manhattan Project. Today, under the direction of the U.S. Department of Energy (DOE), Hanford is engaged in the world's largest environmental cleanup project, with a number of overlapping technical, political, regulatory, financial and cultural issues.

Physical challenges at the Hanford Site include more than 53 million gallons of radioactive and chemically hazardous waste in 177 underground storage tanks, 2,300 tons (2,100 metric tons) of spent nuclear fuel, 9 tons (8 metric tons) of plutonium in various forms, about 25 million cubic feet (750,000 cubic meters) of buried or stored solid waste, and groundwater contaminated above drinking water standards, spread out over about 80 square miles (208 square kilometers), more than 1,700 waste sites, and about 500 contaminated facilities.

The Hanford Site has three National Priority List (NPL) sites. NPL sites are Superfund sites



Canyon Disposition Initiative

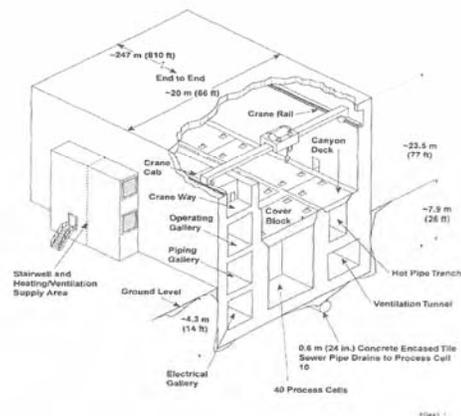
The Canyon Disposition Initiative is the result of a 1996 Agreement in Principle among the Tri-Parties to define the path forward for determining the final disposition for Hanford's five Canyon buildings. The purpose of the CDI is to investigate the potential for using the canyon buildings as disposal sites for Hanford Site remediation waste, rather than demolishing the structures and transferring the resulting waste to another disposal facility. The U Plant (221-U Facility), located in the 200 West Area, is the first canyon building to be addressed under the CDI. The process of disposition for the U Plant is highly considered to be a pilot project for the remaining four Canyon buildings, which consist of PUREX, REDOX, B Plant, and T Plant. However, because of varying amounts, types, and locations of radiological contamination within each of the five canyon buildings, the complexity and costs for implementation could vary significantly for each building. Therefore, remedial alternatives and the selected remedy for the U Plant may not be the same as those to be determined for the other canyon buildings.

The U Plant is a large concrete structure approximately 800 feet long, 70 feet wide, and 80 feet high (approximately 30 feet of which is below grade, or underground). The reinforced concrete walls and floor range from approximately 3 to 9 feet thick. One large room extends the entire length with galleries on the other side of a dividing wall from this room. Covered processing cells reside below the deck in the large room. Because the facility has this long, expansive room, it is often referred to as a “Canyon Building”. (see diagram below)

Through the *Final Feasibility Study for the Canyon Disposition Initiative (DOE/RL-2001-11 Rev.0)*, seven alternatives for disposition of the U Plant were identified, with one alternative being a baseline (no action alternative), which the other alternatives will be measured against. The seven alternatives were as follows:

- Alternative 0 – No Action
- Alternative 1 – Full Removal and Disposal
- Alternative 2 – Decontaminate and Leave in Place
- Alternative 3 – Entombment with Internal Waste Disposal
- Alternative 4 – Entombment with Internal/External Waste Disposal
- Alternative 5 – Close in Place – Standing Structure
- Alternative 6 – Close in Place – Collapsed Structure

Figure 3. Cross Section of the 221-U Facility.



Of the six viable alternatives, four were further moved forward for consideration through the *Proposed Plan for the Remediation of the 221-U Facility (Canyon Disposition Initiative) (DOE/RL-2001-29 Rev. 0)*. The four were Alternative 1, 3, 4, and 6, where Alternative 6 was restructured to Close in Place – Partially Demolished Structure. Also, Alternative 6 was advanced chosen as the preferred alternative by the DOE. Subsequently, through the ROD for the 221-U, Alternative 6 was the selected remedy.

Descriptions of Alternative 1 & 6 are as follows:

Alternative 1: Full Removal and Disposal

The 221-U structure and contents would be demolished, including the foundation below existing grade level. Structural material, facility contents, and associated soil above risk-based standards would be disposed at the Environmental Restoration Disposal Facility (ERDF). An estimated 8,000 m³ of debris and soil would be disposed to the ERDF.

Under Alternative 1, the ERDF would need to be expanded by about 12% of one cell to accommodate 221-U Facility waste. Most wastes would be expected to meet the waste acceptance criteria established for ERDF. If the EDF waste acceptance criteria cannot be achieved, waste treatment to meet the ERDF waste acceptance criteria or disposal at another disposal facility would be required. Material to be disposed of would be segregated, evaluated for safe and economical reuse or recycle, and packaged and shipped to the disposal facility if it cannot be recycled or reused. The demolition excavation would then be backfilled to surrounding grade, and the disturbed area would be reseeded or otherwise resurfaced consistent with future land-use decisions. Alternative 1 would require approximately 89,000 m³ of backfill materials. Institutional controls to maintain industrial land use would be required if unrestricted cleanup levels are not achieved by this alternative.

Alternative 6: Close in Place – Partially Demolished Structure

This alternative would require that approximately 3,400 m³ of existing contaminated equipment from the canyon deck be size-reduced, disposed to the process cells, and grouted. The upper part of the U plant would then be demolished to approximately the level of the canyon deck. The concrete debris from building demolition would be placed on the canyon deck and on the ground adjacent other building. Cementitious grout would be placed around waste, including the pumping of grout into the cell drain header and into tanks containing residual materials, to minimize the potential for void spaces and to reduce the mobility, solubility, and /or toxicity of the grouted waste. Unlike Alternatives 3 and 4, Alternative 6 would not include disposal of imported Hanford Site remediation wastes inside or around the outside of the U plant. An estimated 9,600 m³ of waste generated during building preparation for demolition, as well as soil from remediation of impacted adjacent waste sites and debris from demolition of impacted ancillary facilities would be disposed at the ERDF. These wastes would be sent rather than disposed in the canyon due to considerations for optimum handling and scheduling. The use of inert, uncontaminated rubble from other nearby CERCLA demolition activities, such as the ancillary facilities, suitable for fill material in the engineered barrier, will be considered during remedial design.

The partially demolished building and concrete debris would be covered with an engineered barrier as in Alternatives 3 and 4; however, the engineered barrier would be smaller in dimension as a result of the decreased height of the structure. Approximately 460,000 m³ of borrow materials would be required under this alternative to construct the engineered barrier. The facility, after placement of the barrier, would be approximately 370 m in length by 159 m in width by 12m high.

ERWM Analytical Process

The ERWM analysis of the 221-U Facility (CDI) project has been undertaken through the NEPA (National Environmental Protection Act) guidelines. The CDI project, disposition of the 221-U Facility, is a CERCLA project under NEPA. The ERWM analysis of the CDI relied on the CERCLA supporting documents; the *Final Feasibility Study for the*

221-U Facility (Canyon Disposition Initiative) and the Proposed Plan for the 221-U (Canyon Disposition Initiative)(DOE/RL -2001-29) and the final document, the Record of Decision for the 221-U Facility.

The review and analysis of the CDI project followed the CERCLA guidelines, see appendix C, where CERCLA gives nine criteria to review in order to make a determination of the remedial actions being sought. Both, Alternative 1 and 6, met the criteria for further consideration.

The ERWM communicated with the general Nez Perce membership through the development of a brochure outlining the Canyon Disposition Initiative. This brochure was made available through public meetings (i.e. General Council, public forums, the ERWM informational booth (kiosk), and NPTEC Natural Resources Subcommittee). (Appendix E)

In 2005, the NPTEC passed Resolution 04-000, see Appendix D, which identified a Hanford End State Vision for the Nez Perce Tribe (Appendix E). This End State Vision encompasses the following tenets:

1. *The Nez Perce Tribe will continue to work with DOE via its Cooperative Agreement on cleanup issues to ensure that treaty rights and cultural and natural resources are being protected and that interim cleanup decisions are protective of human health and the environment.*
2. *This goal will require the responsibility of future generations until it is finally completed.*
3. *Technology to cleanup or dispose of some contaminants may not be currently available, but as it becomes available the Nez Perce Tribe will work with the Federal government to further reduce the levels of any residual contamination.*
4. *Based on the history of man, we do not believe that institutional controls are necessarily a viable option to be used until land and water can be cleaned up.*

This particular grant helped in the development of the End State Vision because there was no internal tribal guidance regarding the Hanford Site.

The ERWM, through its review of the documents, believes that both Alternative 1-Full Removal and Alternative 6-Close in Place (Partially Collapsed Structure) are both viable options. Yet, Alternative 6 requires the performance of Institutional Controls into the future, which by tenet #4 of the NPT Hanford End State Vision; the tribe has stated that IC is not a viable option for the Tribe. Thus Alternative 1 is the preferred alternative of the Tribe, as it would permanently remove the facility and leave the surface environment in a more natural state. Unfortunately, for the U Plant, the ROD has selected Alternative 6, which was supported by the Tri-Parties.

Conclusion & Path Forward

In conclusion, the Nez Perce Tribe needs to develop a clear set of guidelines that address the cleanup standards of the federal environmental regulations, Comprehensive Environmental, Restoration, Compensation, and Liability Act (CERCLA) and Resource Conservation Recovery Act (RCRA) and the process by which the federal cleanup actions are sought, National Environmental Protection Act (NEPA). This project was instrumental in identifying a gap in policy or guidance concerning Hanford by the Tribe, which makes it difficult to respond to DOE queries on the cleanup decisions at the Hanford Site. Therefore, further development of the NPT Hanford End State Vision must continue, adding guidance on the numerous variables of cleanup, which make the Hanford cleanup diverse and complex in the interrelationship between DOE, the regulators, and the stakeholders.

In reviewing the CDI Project, a major question that has come forward, and is a major debating point of CERCLA, is “how clean is clean.” The Nez Perce Hanford End State Vision takes a broad look at this question, yet more specifics are needed concerning various areas around the Site, i.e. the Canyon facilities. As seen through the chosen cleanup alternative through the analysis done by the DOE, the U Plant will be remediated to a level that leaves an unnatural scar on the Hanford surface environment. A large cap, which will require, will project from the Hanford Site into the future for an infinite amount of future generations.

APPENDIX A



February 1, 2005

Nez Perce

ENVIRONMENTAL RESTORATION & WASTE MANAGEMENT
P.O. BOX 365 · LAPWAI, IDAHO 83540-0365 · (208) 843-7375 / FAX: 843-7378

Kevin Leary
Richland Operations Office
United States Department of Energy
PO. Box 550, MSIN A6-38
Richland, WA. 99352

Re: *Proposed Plan for Remediation of the 221-U Facility (Canyon Disposition Initiative)*

Dear Mr. Leary;

The Nez Perce Tribe's Environmental Restoration and Waste Management Program (ERWM) has reviewed the above-mentioned document.

Since 1855, reserved treaty rights of the Nez Perce Tribe in the Mid-Columbia have been recognized and affirmed through a series of Federal and State actions. These actions protect Nez Perce rights to utilize their usual and accustomed resources and resource areas in the Hanford Reach of the Columbia River and elsewhere. Accordingly, the ERWM responds to actions that impact the Hanford ecosystem.

ERWM Philosophy of Hanford Cleanup

In order to understand our specific comments on disposition of the 221-U Facility we feel it necessary to provide a brief background of the tribe's philosophy concerning cleanup of the Hanford Site. Whenever the tribe is asked to comment on a Hanford cleanup action, the question that always arises is, How Clean is Clean? What level of cleanup should occur at Hanford?

In general, ERWM believes that the ultimate goal of the Hanford cleanup including the canyons should be to restore the land to a safe, unrestricted use condition. ERWM has long held that our ultimate goal for the Hanford site is unrestricted use with no risk to human life and the ecosystems associated with the site. ERWM believes that this level of cleanup is necessary for the Nez Perce Tribe to be able to utilize the site for their usual and accustomed activities. Our view is that the majority of cleanup actions at Hanford are interim measures only. ERWM recognizes the difficulties in accomplishing this goal and are aware of many of the obstacles that must be overcome. To accomplish this long term cleanup goal ERWM recognizes the following:

1. This goal may require several generations before it is finally attained.
2. The Nez Perce Tribe will continue to work with DOE via its cooperative agreement on cleanup issues to ensure that treaty rights, cultural and natural resources are being protected and that cleanup decisions are protective of human health and the environment.

3. Technology to cleanup or dispose of some contaminants may not yet exist, but as the Department of Energy continues to develop these technologies and they become available, the Nez Perce Tribe will work with the federal government to further reduce the levels of any residual contamination.

221-U Canyon Initiative Comments

The ERWM has reviewed the 221-U Canyon Initiative and feels that of all the alternatives, alternatives one and six are the most reasonable measures to consider.

ERWM believes the best way to avoid future risk to people and the environment is to remove all contaminants. This would mean complete demolition and removal of the building and all the ancillary equipment, and it would require removal and disposal of the radioactive and hazardous materials. ERWM recognizes that such removal (Alternative 1) constitutes a high short-term worker risk and that it is currently impossible to eliminate many of these contaminants. These radionuclides and chemicals will remain a long term risk, as an ERDF-type disposal will not protect in perpetuity.

However, with some modification Alternative 6 may be the most appropriate resolution. Short term risk is reduced. Long-term risk is reduced and eventually eliminated when adding the commitment to Alternative 6 to continue research and development of technologies with the goal to render radioactive and chemical hazards harmless. From this perspective, we see Alternative 6 as a reasonable interim remediation action, but not as final clean up for this canyon facility

ERWM also wants to go on record as stating that we do not believe the process of closure for the 221-U Canyon, which is the least contaminated facility, should be necessarily used as a template for closure of the other four canyon facilities at Hanford. Each canyon will need to be treated separately and appropriate remedial actions determined.

The ERWM staff appreciates the attention you give to our comments and will continue to monitor and participate in the Canyon Disposition Initiative. If you have any questions or comments you wish to address to us, please contact John Stanfill, of my staff at 208-843-7375, ext. 2369 or e-mail him johns@nezperce.org.

Sincerely;



Gabriel Bohnee
ERWM Interim Director

Cc: Craig Cameron
Stuart Harris
Russell Jim
Kevin Clarke

APPENDIX B

Traditionally, the Nez Perce have frequently visited areas in the Northern Great Basin, Northwest Coast, Plateau, and Plains for the purpose of fishing, hunting, raiding, recreation, and trade. Observation from early explorers recurrently witnessed the Nez Perce in places such as the southern Idaho, the Willamette Valley, the western plains, at the confluences of the Spokane and the Little Spokane, the Snake and Columbia, the Deschutes and Columbia, The John Day and Columbia, the Yakima and Columbia Rivers. They were also seen at principle fisheries such as those found at Celilo, Kettle Falls, Willamette, and Spokane Falls. The Nez Perce territory may have adequate for most of the tribal needs, however seasonal and annual fluctuations required regular exploitations of fisheries throughout the plateau. The Nez Perce were attracted to the fish down river on the Columbia because of the ease to harvest large numbers of fish. This also opened opportunities for the Tribe to trade Buffalo robes and other plains items that they obtained in Montana and Wyoming.

Oral histories have justified these claims that the Nez Perce traveled and utilized these areas from time immemorial. Coyote from traditional legends has mentioned these areas often giving those names from what they may look like or what had happened there. More specifically, Alice Fletcher made note of a specific place in her research of ethnology of the Nez Perce, "On the Columbia River some distance from Wallula is a mountain called Le-leek-pa. This name was given by Coyote. There are three or four smaller mountains, and then the Yakima River. There used to be a great lake, called E-way-tah, there, which was always icy, and it was never warm". In Fletcher's notes it also tells the story of a boy that travels to Le-leek-pa for the use of spiritual guidance.

In 1805 Lewis and Clark first enter this area by way of journeying down the Clearwater to it's confluence with the Snake, then continuing on to the Columbia. They were guided by the Nez Perce Chief Twisted Hair and his sons. As they traveled along the river many Indians from the Cayuse and the Walla Walla tribes stood watching them. At this time of the year salmon season was almost over and little fresh fish was available. However, many members of the exploring party had stomach troubles and blamed it on the fish. Soon, many of the group chose to eat roasted dog that they traded Indians with.

The Nez Perce and other plateau groups utilized a number of mechanisms to help facilitate trade at annual trade fairs held in places such as the Junction of the Snake and Columbia Rivers and its tributaries, the Yakima Valley, Dalles-Celilo area, the Missouri, and the Upper Snake river in southern Idaho. Angelo Anastasio observed, "the many intergroup activities of the Plateau were possibly because of a series of mechanisms which allowed interaction for all sorts of tasks. There were intergroup norms which limited the use of warfare as a mechanism of intergroup relations and permitted the settlement of intergroup disputes by discussion, arbitration, and agreement. There norms permitting the co-utilizations of resource sites and the peaceful congregation of groups for ceremonies, conferences and games. There was group responsibility for the welfare of person and property of visiting members of other groups. There were norms for the exchange of goods and services and the extension of kinship and friendship ties across groups. Such patterns of agreement and interaction can hardly be seen was a result of fortuitous and haphazard contacts. They were established, maintained, and ease ordered by consensus. Therefore, we would say that the norms of intergroup relations and the relevant beliefs and values formed part of an intergroup culture. The component groups were bound together by their acceptance of this culture."

These cultural patterns have also been recognized within the Treaties between the United States Government and the Tribes. In June 1855, the United State Government and the Nez Perce entered into negotiations to form a treaty between two sovereign nations. During the negotiations Governor Isaac I. Stevens made these observations: "I need say nothing more. It (the Treaty of 1855) is designed to make the same provision for all the tribes and for each Indian of every tribe.

The people of one tribe are as much the people of the Great father as the people of another tribe; the red man are as much his children as the white man”; Governor Stevens had also proposed various provisions included within the Treaty: “You will be allowed to pasture your animals on land not claimed or occupied by settlers, white men. You will be allowed to go on roads, to take your things to market, your horses and cattle. You will be allowed to go to the usual fishing places and fish in common with the white, and to get roots and berries and to kill game on land not occupied by the whites; all this outside the reservation”

Nearly a hundred years later on January 16, 1943, General Leslie Groves, the military leader of the Manhattan Project, chose Hanford to be the world's first large nuclear reactor. This area offered key elements such as plenty of water and electricity from the Columbia River dams, and sufficient isolation. Within about two and a half years the first nuclear Reactor had made enough plutonium to destroy Nagasaki, Japan, on August 9, 1945. During this time, the indigenous people were promptly banned from their homes and from religious, fishing and medicine-gathering sites.

In 1982, the United States Congress passes the Nuclear Waste Policy Act (NWPA). The Nez Perce Tribe passes a resolution to formally requests to be designated as an “affected Indian Tribe” under the NWPA. This is justified by reserved rights retained within the Treaty of 1855 and 1863 and falls within the definition of “Indian Tribe” under section 2(15) of the NWPA. It states; the tribe must possess congressionally ratified treaty rights outside the boundaries of the Indian Reservation; and that the Secretary must find that these treaty rights may be substantially and adversely affected by the location of a nuclear waste repository at the Basalt Waste Isolation Project site (BWIP). On September 17, 1984, the Assistant Secretary of Indian Affairs wrote a letter to the Secretary of Energy explaining that the Nez Perce Tribe needs to be designated as an “Affected Indian Tribe” under the NWPA. December 1984, Secretary of Energy approves Nez Perce Tribes’ request.

The Basalt Waste isolation Project (BWIP) site location was identified in 1978 and was estimated to cover 47 square kilometers. This would include what is currently known as the 200 west area. BWIP was intended to be a storage repository for high level waste. In 1982 and 1983 DOE began construction on the Near-Surface Test Facility in which they (DOE) drilled boreholes into Gable Mountain to assess the feasibility of radioactive waste storage in basalt formation. The affected Indian Tribes voice their concerns to DOE letting them know that they are extremely concerned that the activities on Gable Mountain are detrimentally affecting the religious nature of that site. In 1987. Congress terminated BWIP and the facilities have subsequently been decommissioned.

In the late 1980s, the federal government finally acknowledged its responsibility for Hanford and other similar sites around the country and began the largest, most expensive and most challenging environmental cleanup program in US history. Over the following fifty years, until it was closed down in 1990, Hanford's 570-square-mile nuclear complex continued to produce not just plutonium but massive contamination.

APPENDIX C

CERCLA Threshold Criteria

1. Overall Protection of Human Health and the Environment, a threshold criterion, is the primary objective of the remedial action and addresses whether a remedial action provides adequate overall protection of human health and the environment. This criterion must be met for a remedial alternative to be eligible for consideration.
2. Compliance with Applicable or Relevant and Appropriate Requirements, a threshold criterion, addresses whether a remedial action will meet all of the applicable or relevant and appropriate requirements and other federal and state environmental statutes, or provides grounds for invoking a waiver of the requirements. This criterion must be met for a remedial alternative to be eligible for consideration.
3. Long-Term Effectiveness and Permanence, a primary balancing criterion, refers to the magnitude of residual risk and the ability of a remedial action to maintain long-term, reliable protection of human health and the environment after remedial goals have been met.
4. Reduction of Toxicity, Mobility, or Volume through Treatment, a primary balancing criterion, refers to an evaluation of the anticipated performance of the treatment technologies that may be employed in a remedy. Reduction of toxicity, mobility, and/or volume contributes toward overall protectiveness.
5. Short-Term Effectiveness, a primary balancing criterion, refers to evaluation of the speed with which the remedy achieves protection. It also refers to any potential adverse effects on human health and the environment during the construction and implementation phases of a remedial action.
6. Implement ability, a primary balancing criterion, refers to the technical and administrative feasibility of a remedial action, including the availability of materials and services needed to implement the selected solution.
7. Cost, a primary balancing criterion, refers to an evaluation of the capital, operation and maintenance, and monitoring costs for each alternative.
8. State Acceptance, a modifying criterion, indicates whether the state concurs with, opposes, or has no comment on the preferred alternative based on review of the feasibility study and the proposed plan.
9. Community Acceptance, a modifying criterion, assesses the general public response to the Proposed Plan, following a review of the public comments received during the public comment period and open community meetings. The remedial action is selected only after consideration of this criterion.

APPENDIX D



Nez Perce

TRIBAL EXECUTIVE COMMITTEE

P.O. BOX 305 • LAPWAI, IDAHO 83540 • (208) 843-2253

Nez Perce Hanford End-State Vision

Policy Statement and Conditions

The Nez Perce Tribe believes that the Endstate Vision of the Hanford Site should allow for Nez Perce Tribal members to utilize the area in compliance with the Usual and Accustomed treaty rights reserved and guaranteed in the 1855 treaty between the United State Government and the Nez Perce Tribe.

The Nez Perce Tribe believes that the ultimate goal of the Hanford cleanup should be to restore the land to uncontaminated pre-Hanford conditions for unrestricted use. This includes air, soil, groundwater, and surface water. Tribal members, ecological resources, and cultural resources within Usual and Accustomed areas should not be exposed to any potential adverse risk above that which has always existed for the tribe prior to the establishment of the federal government projects and facilities at Hanford in 1942.

To accomplish this long term cleanup goal the Nez Perce Tribe recognizes the following:

1. The Nez Perce Tribe will continue to work with DOE via its cooperative agreement on cleanup issues to ensure that treaty rights and cultural and natural resources are being protected and that interim cleanup decisions are protective of human health and the environment.
2. This goal will require the responsibility of future generations until it is finally completed.
3. Technology to cleanup or dispose of some contaminants may not be currently available, but as it becomes available the Nez Perce Tribe will work with the Federal government to further reduce the levels of any residual contamination.
4. Based on the history of man, we do not believe that institutional controls are necessarily a viable option to be used until land and water can be cleaned up.

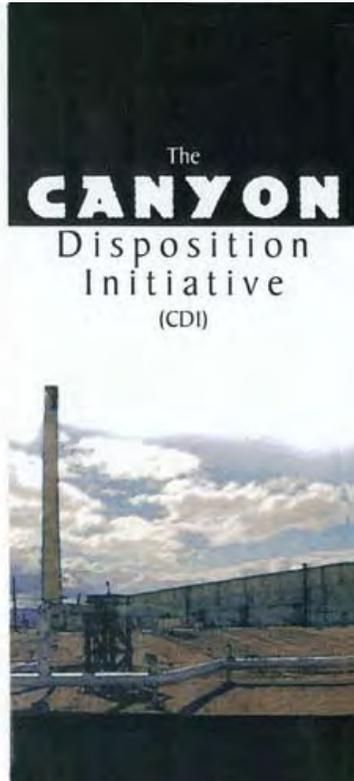
APPENDIX E



The Hanford Site is a 586 square mile facility located in southeastern Washington State along the Columbia River. From 1943 to 1990, the primary mission of the Hanford Site was the production of nuclear materials (plutonium) for national defense. In July 1989, the Hanford Site was placed on the National Priorities List (NPL) pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, i.e. Superfund. The Hanford Site currently includes three NPL sites consisting of the 100, 200, and 300 Areas.



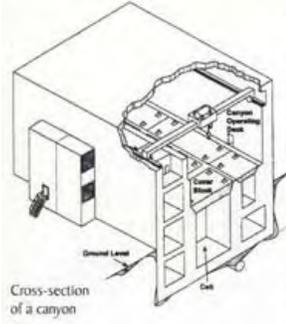
For More Information Contact:
 Environmental Restoration
 and Waste Management
 (ERWM)
 P.O. Box 365 Lapwai, ID 83540
 208-843-7375, Office
 208-843-7378, Fax
 Visit our web page at:
<http://www.nezperce.org/~erwm>



CANYON DISPOSITION INITIATIVE

The Canyon Disposition Initiative (CDI) is the joint effort of the Tri-Parties (U.S. Department of Energy, U.S. Environmental Protection Agency, and the Washington State Department of Ecology) to investigate the potential for using the retired Plutonium Production Facilities, also referred to as Canyons, as disposal sites for Hanford Site contaminated waste. The radioactive and chemical waste must be isolated from the environment. This effort would be in lieu of demolishing the Canyon buildings and transferring the resulting nuclear waste to another on-site disposal facility.

The term "Canyon" refers to the five Plutonium Production Facilities that were built in Central Plateau (200 Area) of the Hanford Site. These mammoth buildings average about 3 football fields long, and 5 stories high, and have 4 foot thick reinforced concrete walls. The Canyons include U plant, T Plant, and REDOX (Reduction Oxidation) Plant in the 200 West Complex, and B Plant and PLUREX (Plutonium-Uranium Extraction) Plant in the 200 East Complex. Within these facilities, plutonium was extracted from irradiated uranium fuel rods that had been processed through one of the nine nuclear reactors located on the banks of the Columbia River known as the Hanford Reach.



The 221-U Process Canyon Building (U Plant) disposition process is considered to be the pilot project for this effort that will guide the disposition of the other four canyon facilities. The U Plant was mainly used for uranium recovery, but ultimately was retired in the mid-1950's. It was used as a storage building for legacy Hanford waste (tools, equipment, etc). The current planning for the U Plant structure will be to knock down the Canyon walls, filling the cells on the Canyon deck (see diagram) with waste, and then putting an environmental barrier or cap over the remaining structure.

Currently, the CDI is being integrated with waste sites in the vicinity of the U Plant to become the U Plant Regional Closure Project. This response is due to the mandate from U.S. DOE Headquarters in Washington, D.C. to accelerate the clean-up of the Hanford Site. Combining of remediation work concurrently with the CDI should save the DOE much needed time and budget dollars.