

NEZ PERCE TRIBE CONTAMINATED SITE CLEANUP GUIDANCE

Section 1 – Introduction

§ 1-1 Declaration

The land and water of the Nez Perce Reservation is vital to the health and welfare of the Nez Perce Tribe. The Nez Perce people need a clean environment to support their culture and ways of life. The lands and waters of the Reservation supply many of the needs of the Tribe, from hunting and fishing, to water, farming and building supplies. Therefore, within the exterior boundaries of the Nez Perce Reservation, it is the public policy of the Nez Perce Tribe to promote the health and welfare of the Tribe and its members by assuring that releases of hazardous chemicals are cleaned up to levels that pose as little risk as possible to humans and the environment. In this way, the Nez Perce Tribe, as a sovereign government, will be protecting the health of its members, the health of the environment that is so critical to meeting the needs of its members, and the health of other Reservation residents.

§ 1-2 Purpose.

This Guidance is promulgated by the Water Resources Division (WRD) as authorized by the Nez Perce Tribe Environmental Protection Code. The goal of this Guidance is to implement Title 14-1 of the Nez Perce Code, by describing the cleanup process to be used in managing and remediating a variety of contaminated sites. This Guidance establishes processes and standards to identify, investigate, and clean up facilities where hazardous substances have come to be located, and defines the role of WRD in implementing the cleanup requirements.

This Guidance is meant to provide a workable process to accomplish effective and expeditious cleanups in a manner that protects human health and the environment on the Nez Perce Reservation. This process can be used to address (1) releases of hazardous substances caused by past activities, or (2) potential and ongoing releases of hazardous substances from current activities. While this system is set up based on the best available science, it will necessarily change as new information becomes available, or as WRD staff becomes more knowledgeable about the best procedures necessary to implement this process in an effective and efficient manner.

§ 1-3 Scope.

(a) General Scope. This Guidance applies to all facilities and sites within the Nez Perce Reservation where there has been a release or threatened release of a hazardous pollutant that may pose a threat to human health or the environment. Under this Guidance, WRD may take such actions necessary to investigate and remedy these releases.

(b) Prohibition on Release of Hazardous Pollution. In order to protect the people and

resources of the Nez Perce Reservation, in particular the water resources of the Reservation, the Nez Perce Tribe declared that Site Contamination is an environmental harm in 14-1-2-2 of the Nez Perce Tribal Code. This Guidance specifically applies where pollution, as defined in 14-1 of the Nez Perce Code, is deemed hazardous.

(c) Hazardous Pollution Defined. Hazardous pollution means:

(1) Any dangerous or extremely hazardous waste meeting the description below, or designated as dangerous or extremely hazardous by the NPT in furtherance of the purposes of Title 14.

(i) Dangerous Wastes. A dangerous waste means any discarded, useless, unwanted, or abandoned substances, including but not limited to certain pesticides, or any residues or containers of such substances which are disposed of in such quantity or concentration as to pose a substantial present or potential hazard to human health, wildlife, or the environment because such wastes or constituents or combinations of such wastes:

- (A)** Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or
- (B)** Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.

(ii) Extremely Hazardous Waste. Extremely hazardous waste means any dangerous waste which will persist in a hazardous form for several years or more at a disposal site and which in its persistent form presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic make-up of man or wildlife, and is highly toxic to man or wildlife and if disposed of at a disposal site in such quantities as would present an extreme hazard to man or the environment.

(2) Any hazardous substance as described herein, or as designated as hazardous by the NPT in furtherance of the purposes of Title 14-1. Hazardous substances means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the characteristics or criteria of hazardous waste as described in rules adopted under this chapter.

(3) Any substance that, on March 1, 1989, is a hazardous substance under Section 101(14) of the federal cleanup law, 42 U.S.C. § 9601(14);

(4) Petroleum or petroleum products; and

(5) Any substance or category of substances, including solid waste decomposition products, determined by WRD to present a threat to human health or the environment if released into the environment.

The term hazardous pollution does not include any of the following when contained in an underground storage tank from which there is not a release: Crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable tribal and federal laws.

(d) Other Cleanup Authorities. Nothing herein shall be construed to diminish the NPT's authority to address a release or threatened release under other applicable federal or tribal laws or regulations. The cleanup process and procedures under this Guidance and under other laws may be combined. The NPT may initiate a remedial action under this Guidance and may upon further analysis determine that another law is more appropriate, or vice versa.

If a hazardous pollutant remains at a facility after actions have been completed under other applicable federal or tribal laws or regulations, WRD may apply this Guidance to protect human health or the environment.

§ 1-4 Overview of the Administrative Process. This section provides an overview of the cleanup process that typically will occur at a site where a release of a hazardous pollutant has been discovered with an emphasis on sites being cleaned up under voluntary agreements, mandatory orders or consent decrees. If there are any inconsistencies between this section and any specifically referenced sections, the referenced section shall govern.

(a) Site Discovery. Site discovery includes:

(1) Release Reporting. An owner or operator who knows of or discovers a release of a hazardous pollutant due to past or ongoing activities must report the release to WRD as described in § 2-2.

(2) Initial Investigation. Within ninety days of learning of a hazardous substance release, the site owner/operator should conduct an initial investigation of the site under § 3-2. For sites that may need further remedial action, WRD may send an early notice letter to the owner, operator, and other potentially liable persons known to WRD, informing them of WRD's belief regarding the need for action.

(3) Hazardous Sites List. WRD will maintain a list of sites known as the "hazardous sites list" where further remedial action is needed. WRD will add sites to this list after the completion of a site hazard assessment. WRD will remove a site from the hazardous sites list if the site meets the guidelines for removal described in § 3-3(h).

(b) Determination and Abatement of Imminent Threat. Upon site discovery, the site owner/operator should carefully evaluate the available information to determine whether the site poses any imminent threat to human health or safety, or to the environment. Threats include, but are not limited to, impacts to water wells; vapors or odors in residential and commercial structures; concentrations approaching explosive levels; visual impacts to a surface waterbody; and impacts to wildlife, vegetation, or endangered species. If any imminent threats are identified,

the responsible party should notify WRD immediately and take immediate steps to abate the threat pursuant to § 3-1.

The site owner/operator should immediately initiate abatement actions if a site causes an immediate threat to human health and safety or the environment. Examples of abatement measures include taking action to prevent further release into the environment, provision of alternate water supply if drinking water wells are impacted, evacuation of residents/commercial workers if exposed to vapors at high concentrations, installation of booms on surface waterbodies with a sheen, or ventilation of utilities with vapors. Documentation of abatement activities and confirmation that imminent threats have been removed should be provided to WRD within 24 hours of the completion of the abatement activity.

(c) Detailed Site Assessment and Development of a Cleanup Action Plan. In order to be adequately protective, site owners should take the following steps to ensure that the proper method of cleanup is chosen for the site:

(1) Site Assessment. Unless it is determined to be unnecessary because of specific knowledge of the extent of the release and subsequent contamination, a site assessment should be performed at current and potential release sites under § 3-3. The purpose of this assessment is collect data and information necessary to define the extent of contamination and to characterize the site. The assessment process consists of two parts:

- (i) The initial investigation and hazard assessment, where data is collected from the site and chemical concentrations are compared to default cleanup standards; and
- (ii) An optional step, where a responsible party does not feel that default cleanup standards are appropriate for the site, involving a risk-based evaluation and development and validation of a site conceptual model.

The key elements of the site assessment are the release scenario(s) and chemicals of concern; the exposure model, which focuses on the receptors, pathways, and routes of exposure; the site stratigraphy and hydrogeology; and the spatial and temporal distribution of the chemicals of concern. An important part of this step is the collection of site-specific data.

(2) Cleanup Action Plan. Upon completion of initial abatement activities and the site assessment, the responsible party, in conjunction with WRD, should engage in a cleanup action planning process at release sites. The purpose of this process is to develop and evaluate alternative cleanup actions, and select a remediation strategy that will be adequately protective of human health and the environment. WRD may evaluate the site assessment and cleanup action plan to evaluate whether default or risk-based cleanup standards will be met upon completion of the tasks identified in the plan.

The cleanup action plan may include a combination of active and passive cleanup options

and activities and land use restrictions. The plan should include the type of technology to be used, any institutional controls, the time it may take to implement the plan, and data that will be collected to monitor the effectiveness of the cleanup action. It is important that during the implementation of the plan, sufficient data be collected and analyzed to evaluate the performance of the plan. No cleanup action plan should be implemented until approved by WRD.

(d) Site Cleanup. Once the appropriate cleanup action has been selected for the site, the actual cleanup should be performed in accordance with the Cleanup Action Plan.

(1) Cleanup Actions. Section 6 describes the design and construction provisions related to implementing the cleanup action plan.

(2) Compliance Monitoring and Review. The cleanup action should include compliance monitoring and in some cases periodic review to ensure the long-term effectiveness of the cleanup action. Monitoring and periodic review guidelines are discussed in § 6-8 and § 6-9.

(e) Site Closure. The primary objective of the cleanup action plan at any site is to ensure the long-term protection of human health, the environment, and natural resources under current and reasonable future conditions. When WRD is satisfied that the site concentrations meet the designated target risk levels, the site will be eligible for closure; or the level of cleanup action at the site may be reduced (e.g., continued monitoring may be necessary, but other activities can be discontinued). Closure typically involves a request by the responsible party for a no further action letter. There may be other activities or conditions associated with the site, not directly related to the achievement of target risk levels, that may also apply. Specific WRD or Federal programs (RCRA, CERCLA, etc.) may also have additional requirements prior to issuance of a no further action determination for the site.

(f) Alternative Procedures for Conducting Cleanup Actions.

(1) Cleanup Action Agreements. WRD has authority to enter into cleanup action agreement in order to encourage the use of voluntary agreements for investigation and cleanup of contaminated sites.

(2) Independent Cleanup Actions. Persons may conduct assessments and cleanups without WRD approval under this Guidance. However, WRD will use the guidelines in this Guidance when evaluating the adequacy of any independent cleanup action. Except as limited by the Guidance, nothing in this Guidance prohibits persons from conducting such; however, all interim and final cleanup actions should be reported to WRD. Furthermore, independent cleanup actions are conducted at the potentially liable person's own risk that the cleanup is adequately protective of human health and the environment. WRD encourages potentially liable parties to utilize this Guidance's Voluntary Cleanup Action Agreement to facilitate efficient and effective remediation activities.

(g) Leaking Underground Storage Tanks. Underground Storage Tank (UST) owners and operators are regulated under Title 14-1 of the Nez Perce Code, and Section 5 of the Nez Perce Tribe's Storage Tank Guidance. USTs may be required to perform specific actions in addition to what other site owners and operators would do under this Guidance. UST owners and operators should refer to Title 14-1 of the Nez Perce Code, and Section 5 of the Nez Perce Tribe's Storage Tank Guidance for a discussion of specific obligations and suggested actions.

§ 1-5 Principles Governing the Administrative Process. WRD should conduct or oversee remedial actions consistent with the provisions of this section.

(a) Information Sharing. It is the policy of WRD to make information about releases or threatened releases available to owners, operators or other persons with potential liability for a site in order to encourage them to conduct prompt cleanup action. It is also the policy of WRD to make the same information available to interested tribal members so they can follow the progress of site cleanup on the Reservation.

(b) Information Exchange. All persons are encouraged to contact WRD and seek assistance on the general administrative and technical provisions of this Guidance. Unless WRD is providing formal oversight on request of a landowner, any comments by WRD or its agents are advisory and not commitments or approvals binding on WRD. A person may not represent this advice as an approval of a remedial action. If the person requesting the advice is seeking binding commitments or approvals, then a written letter signed by the NPTEC Chairman is necessary.

(c) Preparation of Documents. Except for the initial investigation, any of the studies, reports, or plans used in the cleanup process can be prepared by either WRD or the potentially liable person. WRD retains the ability to review and verify the documents submitted and to make decisions based on the documents and other relevant information.

(d) Inter-Agency Coordination. In order to provide for expeditious cleanup actions, all federal, state, local agencies, and tribes are encouraged to coordinate. If WRD is conducting or overseeing remedial actions, it shall ensure appropriate local, state, and federal agencies and tribal governments are kept informed and, as appropriate, involved in the development and implementation of remedial actions. WRD may ask a potentially liable person to undertake this responsibility. Whenever reasonable, WRD shall coordinate and combine its activities with other agencies and tribes to minimize the duplication of activity.

Section 2 – Site Discovery and Reporting

§ 2-1 Introduction. The risk evaluation and cleanup process starts with initial discovery of the site, and continues until all regulatory issues associated with the release have been resolved to the satisfaction of WRD and the Nez Perce Tribe. As part of a program to identify hazardous waste sites, this section sets forth provisions related to reporting a release of a hazardous pollutant due to past activities, whether discovered before or after the effective date of this Guidance, which is

termed a site discovery. Site discovery can be triggered by a number of events or activities, which can include, but are not limited to: routine inspection by WRD or Nez Perce Tribal personnel, accidental releases, complaints or referrals from other agencies or the public, activities associated with real estate transactions, and discovery of chemicals in surface water, water use wells, etc...

This section also sets forth the provisions related to reporting independent remedial actions. This section does not limit the ability of WRD to take any other actions it deems appropriate to identify potential hazardous waste sites consistent with the environmental protection mandate of Nez Perce Environmental Code Title 14-1.

§ 2-2 Release Report. Any owner or operator who has information that a hazardous substance has been released to the environment at the owner or operator's facility and may be a threat to human health or the environment shall report such information to WRD within ten days of discovery. Releases from underground storage tanks shall be reported by the owner or operator of the underground storage tank within twenty-four hours of release confirmation, in accordance with Section 4-2(b) of the Nez Perce Tribe's Storage Tank Guidance.

(a) To the extent known, the report should include: the identification and location of the hazardous substance; circumstances of the release and the discovery; and any remedial actions planned, completed, or underway. All persons are encouraged to report such information to WRD.

(b) Persons should use best professional judgment in deciding whether a release of a hazardous substance may be a threat or potential threat to human health or the environment. The following, which is not an exhaustive list, are examples of situations that generally should be reported under this section:

(1) Contamination in a water supply well.

(2) Contaminated seeps, sediment or surface water.

(3) Vapors in a building, utility vault or other structure that appear to be entering the structure from nearby contaminated soil or groundwater.

(4) Free product such as petroleum product or other organic liquids on the surface of the ground or in the groundwater.

(5) Any contaminated soil or unpermitted disposal of waste materials that would be classified as a hazardous waste under federal law.

(6) Any abandoned containers such as drums or tanks, above ground or buried, still containing more than trace residuals of hazardous substances.

(7) Sites where unpermitted industrial waste disposal has occurred.

(8) Sites where hazardous substances have leaked or been dumped on the ground.

(9) Leaking petroleum storage tanks not already reported under Section 4-2(b) of the Nez Perce Tribe's Storage Tank Guidance.

(10) A visible petroleum sheen on surface water.

(11) A fuel spill of twenty-five (25) gallons or more.

(c) Exemptions. The following releases are exempt from these notification provisions:

(1) Application of pesticides and fertilizers for their intended purposes and according to label instructions (this does not include the uncontrolled release of pesticides or fertilizers to the environment from storage containers or facilities);

(2) A release in accordance with a permit that authorizes the release;

(3) A release previously reported to WRD in fulfillment of a reporting requirement in this chapter or in another law or regulation;

(4) A release previously reported to the United States Environmental Protection Agency under CERCLA, Section 103(c) (42 U.S.C. Sec. 9603(c));

(5) Releases discovered in public water systems; or

(6) An allowable release to a permitted wastewater treatment facility.

An exemption from the notification provisions in this section does not imply a release from potential liability under Title 14-1.

(d) WRD Response. Within ninety days of receiving information under this section, WRD shall determine whether an initial site investigation is warranted. If WRD determines that an initial site investigation is warranted, the site owner/operator should conduct an initial investigation in accordance with Chapter 3-2.

(e) Other Obligations. Nothing in this section shall eliminate any obligations to comply with reporting requirements that may exist in a permit or under other applicable laws.

Section 3 – Site Assessment and Determination of Cleanup Standards

§ 3-1 Abatement of Imminent Threats

(a) Identification of Imminent Threat. When there is a confirmed release or a suspicion of a release, the first step is to determine if any imminent threats to human health or the environment exist. If there is an imminent threat, or uncertainty regarding potential threats associated with a release, call WRD. Examples of imminent threats are impacts to existing water supply wells, contaminant vapors in inhabited enclosed spaces at levels that could result in an explosion, and free product on a surface water body. In some cases, imminent threats may be identified prior to discovery of the source of the contaminant release. It is the policy of the Nez Perce Tribe to protect human health and the environment to the greatest extent practicable, therefore, responsible parties and/or WRD should err on the side of protecting human health and the environment when determining if a release poses an imminent threat.

(b) Notification of Imminent Threat. Actions addressing imminent threats, and emergency response actions are conducted under this section. Upon discovery of an emergency involving a hazardous pollutant, any person having control over a hazardous substance should contact the Nez Perce Tribe as soon as possible.

(c) Initial Response Action to Abate Imminent Threats. After a release is reported, WRD will evaluate whether an imminent threat exists and if so, will work with the landowner to design such reasonable actions as may be necessary to end a imminent threat. Upon discovery that a site may contain potential contamination, all available information must be carefully evaluated to determine if the site poses any imminent threat to human health, safety or the environment. Actions to address imminent threats may also be referred to as emergency actions.

(1) Criteria Used to Determine Appropriate Abatement Action. The following issues should be evaluated to properly determine if an imminent threat exists: actual or potential threats to drinking water supplies (private or public groundwater or surface water) and sensitive ecosystems; threat of fire and explosion; actual or potential threat of release to a surface water body; high levels of chemicals in surface soils that can migrate in a vapor, dissolved or nonaqueous phase; actual or potential exposure to nearby human populations, animals or the food chain; and weather conditions that may cause hazardous contaminants to be released or migrate.

(2) Actions to Mitigate Immediate Impacts. Specific mitigation actions depend on the nature of the imminent threat. For example, if a drinking water well were impacted, actions should include immediate notification to the users of the well and provision of an alternative water supply. Identification of vapors in a structure may necessitate immediate evacuation of any individuals in the structure, ventilation of the structure, and restrictions on entry until the threat has been adequately abated.

Another example is where a site is identified where oil-based wood preservative has leaked from a tank and is puddled on the ground and floating on the water table. Run-off from adjacent properties passes through the site, and neighborhood children have been seen on the site. In this case, several interim actions would be appropriate before fully defining the extent of the distribution of hazardous substances at the site and selecting a cleanup action. These interim actions might consist of removing the tank, fencing the site, rerouting run-off, and removing the product puddled on the ground and floating on the water table. Further studies under the site assessment process would then determine what additional soil and groundwater cleanup would be needed.

(3) Actions to Prevent Further Deterioration. After abatement of an immediate threat(s), actions should be taken to prevent further deterioration of the site. Examples of such actions are: identifying the product or chemicals released and the source of release, careful handling of any excavated materials or other contaminated media to avoid human contact as well as to avoid spreading contamination; removal of any light, nonaqueous phase product floating on groundwater or surface water or that has collected in excavations, and/or preventing further spread of the release.

(4) Actions to Prevent Long-Term Impacts. After abatement of imminent threat(s), the owner/operator should begin activities to prevent long-term adverse impacts. Actions may include the continued provision of alternate water supplies to the affected parties or a detailed site characterization and the performance any needed cleanup activities based on failure to meet default or risk-based cleanup standards. Some of these actions may involve periodic activities over an extended period of time. Examples include: periodic testing of water supply well(s); periodic testing of vapors in impacted structures; and removal of free product.

(d) Documentation of Initial Response Activities. If requested, a written report should be submitted to WRD that documents the activities and confirms that all imminent threats have been abated. The responsible party may also be requested to include recommendations for any additional work necessary for the continued protection of human health and the environment. Imminent threats should be abated before a site assessment or Cleanup Action Plan is finalized.

§ 3-2 Initial Site Investigation

(a) Purpose. An initial investigation is an inspection of a suspected site by the owner/operator or his agent(s) and documentation of conditions observed during that site inspection. The purpose of the initial investigation is to determine whether a release or threatened release of a hazardous substance may have occurred that warrants further action under this chapter. The initial site investigation should be similar in scope and substance to a Phase One Environmental Assessment. In some situations, WRD staff may attend the initial investigation inspection, therefore the site owner/operator should coordinate the timing of the initial investigation with WRD.

(b) Applicability and Timing. Whenever WRD receives information and has a reasonable basis to believe that there may be a release or a threatened release of a hazardous substance that may pose a threat to human health or the environment, WRD shall recommend that the site owner/operator conduct an initial investigation to be completed within ninety days.

(c) Exemptions. WRD shall not recommend an initial investigation when:

(1) The circumstances associated with the release or threatened release are known to WRD and have previously been or currently are being evaluated by WRD or other government agency to the satisfaction of WRD;

(2) The release is permitted; or

(3) The release is exempt from reporting under § 2-1(c).

(d) Nez Perce Tribe Deferral to Others. The Nez Perce Tribe may rely on another government agency to conduct an initial investigation on its behalf, provided the Tribe determines such an agency is not suspected to have contributed to the release or threatened release of a hazardous substance and that no conflict of interest exists.

(e) Water Resources Division Decision. Based on the information obtained about the site, WRD shall, within thirty days of completion of the initial investigation, make one or more of the following recommendations:

(1) A site hazard assessment is needed;

(2) Emergency remedial action is needed;

(3) Interim action is needed to address potential imminent threats to human health or the environment; or

(4) The site needs no further action under this Title at this time because either:

(i) There has been no release or threatened release of a hazardous substance; or

(ii) A release or threatened release of a hazardous substance has occurred, but in WRD's judgment, does not pose a threat to human health or the environment; or

(iii) WRD determines that action under another authority is appropriate. A decision for a particular follow-up action does not preclude WRD from recommending some other action in the future based on reevaluation of the site or additional information.

(f) Notification for Sites Requiring Further Remedial Action. For sites needing further remedial action under this Guidance, WRD should notify the owner, operator, and any

potentially liable person known to WRD of its recommendations. This notification may be in the form of an "Early Notice Letter," mailed to the responsible party. The letter should include the following information:

- (1) The basis for WRD's recommendations;
- (2) Information on the cleanup process provided for in this Guidance;
- (3) A statement that it is WRD's policy to work cooperatively with persons to accomplish prompt and effective cleanups;
- (4) A person or office of the Nez Perce Tribe to contact regarding the contents of the letter; and
- (5) A statement that the letter is not a determination of liability and that cooperating with WRD in planning or conducting a remedial action is not an admission of guilt or liability.

(g) Notification for Sites Not Requiring Further Remedial Action. For sites requiring no further remedial action under this Guidance, if requested by the owner or operator, WRD shall notify the owner or operator, in writing, that no further action is necessary at the site.

§ 3-3 Site Hazard Assessment

(a) Purpose. Within the risk evaluation process, the site hazard assessment is performed upon completion of any actions to address imminent threats to human health or the environment. The overall objective of the site hazard assessment is, at a minimum, to identify the maximum chemical concentrations at the site for each of the affected media. These maximum concentrations are then compared with default or risk-based cleanup standards to determine the need for further action. The site hazard assessment should provide sufficient sampling data and other information for WRD to:

- (1) Confirm or rule out that a release or threatened release of a hazardous pollutant has occurred;
- (2) Identify the hazardous pollutant and provide some information regarding the extent and concentration of the substance;
- (3) Identify site characteristics that could result in the hazardous substance entering and moving through the pollution; and
- (4) Evaluate the potential for the threat to human health and the environment.

(b) Timing. Generally, a site hazard assessment should be completed before proceeding to any

subsequent phase of remedial action, other than an emergency abatement activity.

(c) Scope and Content. A site hazard assessment is an early study to provide preliminary data regarding the relative potential hazard of the site. A site hazard assessment should be extensive enough to fulfill generally accepted “all appropriate inquiry” requirements. A site hazard assessment is not intended to be a detailed site characterization; however, it should include sufficient sampling, site observations, maps, and other information needed to meet the purposes specified in subsection (a) of this section. To fulfill this need, a site hazard assessment should include, as appropriate, the following information:

(1) Identification of hazardous pollutants causing the contamination, including what was released and is threatened to be released and/or, if known, what products of decomposition, recombination, or chemical reaction are currently present on site, and an estimate of their quantities and concentrations. The responsible party should conduct a thorough site reconnaissance and a historical review of site operations to identify existing and potential source(s) of contamination and potential chemicals of concern on site.

Sources and chemicals of concern may be identified based on knowledge of a known or documented release; location of certain structures that typically represent a source such as underground storage tanks, pipes, process area, pumps, etc.; interviews with current and former site employees who may have knowledge of source areas; materials purchased, sold, handled, or produced; material safety data sheet records; and permits issued or applied for;

(2) Evidence confirming a release or threatened release of hazardous pollutants to the environment and an identification of the location of all areas where a hazardous pollutant is known or suspected to be, indicated on a site map;

(3) Description of facilities containing releases, if any, and their condition;

(4) Consideration of surface water run-on and run-off and the hazardous pollutant’s leaching potential;

(5) Information related to historic, current, and future land use on and adjacent to the site. A chronology of relevant site activities is often useful in understanding the site;

(6) Preliminary evaluation of receptors, including: human population, food crops, recreation areas, parks, sensitive environments, irrigated areas, and aquatic resources currently or potentially affected by groundwater, air, or surface water containing the release of hazardous pollutants at the site, including distances to these receptors;

(7) Any other factors which may be significant in estimating the potential or current exposure to sensitive biota.

(d) Contamination Source Characterization. The site hazard assessment should contain a thorough discussion of the potential sources of contamination. This discussion should be based on samples collected pursuant to subsection (c)(1) above. The exact number of samples, analytical methods to be used, and specific technology to be applied to collect data will vary among sites. Thus, the responsible party should develop a work plan and have it approved by WRD prior to implementing the work. At a minimum, the responsible party should verbally confer with WRD before collecting any data.

(1) Soil Source Characterization. The site hazard assessment should contain soil data representative of the maximum concentration on site. For inorganic chemicals, background concentrations should also be determined. At larger sites subdivided into smaller areas, the responsible party should attempt to collect maximum soil concentrations representative of each area.

The overall intent of initial site characterization is to identify maximum concentrations of chemicals of concern. However, for sites that will likely need further characterization, it may be efficient and cost-effective to collect additional data at this stage of the evaluation to identify the nature and extent of contamination and potential for exposure. For example, if contamination is suspected to exist in both surface and subsurface soil zones, samples representing maximum concentrations in both zones should be collected.

(2) Groundwater Source Characterization. The site hazard assessment should contain groundwater samples below or immediately adjacent to the source. For sites with a very localized source, it may be sufficient to collect only a few groundwater samples using a temporary well. If the responsible party proposes to only use one well, it should submit the proposal to WRD in the work plan. Sites with multiple sources will need multiple wells and samples, and may necessitate a full hydrogeologic site model, so the magnitude and direction of flow can also be established.

(e) Ecological Risks. The default cleanup standards and fate and transport parameters are designed primarily to evaluate human health risks. Some sites may need an additional evaluation of ecological risks. As part of the site assessment process, the responsible party should investigate whether the release poses threats to ecological resources that would not be considered under the default or risk-based standards.

(1) Exclusions from Ecological Risk Evaluation. Unless WRD determines that screening is required for threatened and endangered species, screening for potential ecological effects will generally not be needed if the site is obviously devoid of ecologically important species and habitat, or the responsible party can demonstrate that:

(i) Contaminated soils are only present at a depth greater than three feet below the ground surface, or if present at a shallower depth, such soils cover an area no greater than 0.125 acre;

- (ii) Surface water has not been affected, nor is it likely to be affected in the future as a result of the release;
- (iii) Contaminated groundwater does not and is not reasonably likely to discharge to surface waters or otherwise reach the surface in a manner that might result in contact with ecological receptors; and
- (iv) Contaminated groundwater does not and is not reasonably likely to come into contact with aquatic sediments.

(2) Ecological Risk Investigation. Unless excluded in (1) above, the responsible party should conduct an ecological risk investigation as part of the site assessment process. This is meant as an initial step to determine whether a full-blown ecological risk assessment should be completed. The investigation should consider the following:

- (i) **Local Habitat and Ecology.** The habitat and ecology present at the site, especially sensitive environments at, adjacent to, or in the locality of the site, including surface water or any evident signs of groundwater discharge to the surface (seeps, springs, cutbanks, etc.),
- (ii) **Effects of Substances on Biota.** The chemicals potentially released at the site, with an emphasis on the particular impacts to local and regional flora and fauna. Identification of contaminants of interest for ecological receptors may necessitate a separate identification process than that used for any human health evaluation, since a contaminant not generally considered a threat to human health may be a threat to biota. The investigation should move beyond hazardous pollutants, and instead consider any substance released at the site which may be a stressor to fish and wildlife,
- (iii) **Threatened and Endangered Species.** Known or suspected presence of threatened and/or endangered species or their habitat in the locality of the facility as evidenced by response letters from the U.S. Fish & Wildlife Service (USFWS)/NOAA Fisheries, or discussion with the Nez Perce Tribe Department of Fisheries Resource Management or Natural Resources Department staff,
- (iv) **Existence of Complete Exposure Pathways.** Whether complete exposure pathways exist between substances released to a specific environmental media and ecologically important receptors associated with that media (e.g., between hazardous substances in surface water and fish). Complete exposure pathways are those that have: a source and mechanism for hazardous pollutant release to the environment, an environmental transport medium for the hazardous pollutant, a point of receptor contact (exposure point) with the contaminated media, and an exposure route to the receptor at the exposure point.

A visit to the site to directly assess ecological features and conditions is highly recommended. Involvement of an ecologist or biologist with risk assessment experience is preferred.

(3) Ecologically Important Species. For the purpose of completing the ecological risk

investigation, any of the following may be considered “ecologically important” species:

- (i) Listed threatened and endangered species;
- (ii) Local populations of species that are recreational and/or commercial resources;
- (iii) Local populations of any species with a known or suspected susceptibility to the hazardous substance(s);
- (iv) Local populations of vertebrate species;
- (v) Local populations of invertebrate species that:

- (A) Provide a critical (i.e., not replaceable) food resource for higher organisms and whose function as such would not be replaced by more tolerant species; or
- (B) Perform a critical ecological function (such as organic matter decomposition) and whose function would not be replaced by other species; or
- (C) Can be used as a surrogate measure of adverse effects for individuals or populations of other species.

- (vi) Plants that form the habitat for an ecologically important species as defined above or are themselves listed as threatened and endangered species.
- (vii) Because they are not members of natural communities, any of the following should not be considered “ecologically important” species for the purpose of completing the ecological risk investigation:

- (A) Pest and opportunistic species that populate an area entirely because of artificial or anthropogenic conditions;
- (B) Domestic animals (e.g., pets and livestock);

(4) Ecological Risk Investigation Checklist. In order to facilitate the ecological risk investigation, the following scoping checklist should be filled out and submitted to WRD for determination whether further action is necessary. This determination will be based on information presented in the investigation checklist with respect to whether potential ecological receptors and potentially complete exposure pathways exist at or in the locality of the site. Specific criteria are as follows:

- (i) If any of the “Y” or “U” boxes in Part 5 are checked, then a recommendation to move to a full-blown ecological risk assessment should be made. In completing this investigation checklist, a lack of knowledge, presence of high uncertainty, or any “unknown” circumstances should be tabulated as a “U”. Note that a “Y” answer for any section means that all three questions within that section be answered “Y” or “U”.
- (ii) If all of the “No” boxes in Part 5 are checked, then the site is highly unlikely to present significant risks to ecological receptors and a recommendation for no

further ecological risk assessment should be made.

Ecological Scoping Checklist (cont'd)

Part 3

SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT	Finding
<i>Terrestrial – Wooded</i>	
Percentage of site that is wooded	
Dominant vegetation type (Evergreen, Deciduous, Mixed)	P *
Prominent tree size at breast height, i.e., four feet (<6", 6" to 12", >12")	
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
<i>Terrestrial - Scrub/Shrub/Grasses</i>	
Percentage of site that is scrub/shrub	
Dominant vegetation type (Scrub, Shrub, Grasses, Other)	P
Prominent height of vegetation (<2', 2' to 5', >5')	
Density of vegetation (Dense, Patchy, Sparse)	P
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
<i>Terrestrial - Ruderal</i>	
Percentage of site that is ruderal	
Dominant vegetation type (Landscaped, Agriculture, Bare ground)	P
Prominent height of vegetation (0', >0' to <2', 2' to 5', >5')	
Density of vegetation (Dense, Patchy, Sparse)	P
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
<i>Aquatic - Non-flowing (lentic)</i>	
Percentage of site that is covered by lakes or ponds	
Type of water bodies (Lakes, Ponds, Vernal pools, Impoundments, Lagoon, Reservoir, Canal)	
Size (acres), average depth (feet), trophic status of water bodies	
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	
Water discharge point (None, River, Stream, Groundwater, Wetlands impoundment)	
Nature of bottom (Muddy, Rocky, Sand, Concrete, Other)	P
Vegetation present (Submerged, Emergent, Floating)	P
Obvious wetlands present (Yes / No)	
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
<i>Aquatic - Flowing (lotic)</i>	
Percentage of site that is covered by rivers, streams (brooks, creeks), intermittent streams, dry wash, arroyo, ditches, or channel waterway	
Type of water bodies (Rivers, Streams, Intermittent Streams, Dry wash, Arroyo, Ditches, Channel waterway)	
Size (acres), average depth (feet), approximate flow rate (cfs) of water bodies	P
Bank environment (cover: Vegetated, Bare / slope: Steep, Gradual / height (in feet))	
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	
Tidal influence (Yes / No)	
Water discharge point (None, River, Stream, Groundwater, Wetlands impoundment)	
Nature of bottom (Muddy, Rocky, Sand, Concrete, Other)	
Vegetation present (Submerged, Emergent, Floating)	P

Part 5

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
<p>Are hazardous substances present or potentially present in surface waters? AND Are ecologically important species or habitats present? AND Could hazardous substances reach these receptors via surface water?</p>			
<p>When answering the above questions, consider the following:</p> <ul style="list-style-type: none"> • Known or suspected presence of hazardous substances in surface waters. • Ability of hazardous substances to migrate to surface waters. • Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters. Aquatic receptors may be exposed through osmotic exchange, respiration or ventilation of surface waters. • Contaminants may be taken-up by terrestrial plants whose roots are in contact with surface waters. • Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source. 			
<p>Are hazardous substances present or potentially present in groundwater? AND Are ecologically important species or habitats present? AND Could hazardous substances reach these receptors via groundwater?</p>			
<p>When answering the above questions, consider the following:</p> <ul style="list-style-type: none"> • Known or suspected presence of hazardous substances in groundwater. • Ability of hazardous substances to migrate to groundwater. • Potential for hazardous substances to migrate via groundwater and discharge into habitats and/or surface waters. • Contaminants may be taken-up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone (~1m depth). • Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface. 			
<p>Are hazardous substances present or potentially present in sediments? AND, Are ecologically important species or habitats present? AND, Could hazardous substances reach these receptors via contact with sediments?</p>			
<p>When answering the above questions, consider the following:</p> <ul style="list-style-type: none"> • Known or suspected presence of hazardous substances in sediment. • Ability of hazardous substances to leach or erode from surface soils and be carried into sediment via surface runoff. • Potential for contaminated groundwater to upwell through, and deposit contaminants in, sediments. • If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods. Aquatic receptors may be directly exposed to sediments or may be exposed through osmotic exchange, respiration or ventilation of sediment pore waters. • Terrestrial plants may be exposed to sediment in an area that is only periodically inundated with water. • If sediments are present in an area that is only periodically inundated with water, terrestrial species may have direct access to sediments for the purposes of incidental ingestion. Aquatic receptors may regularly or incidentally ingest sediment while foraging. 			

“Y” = yes; “N” = No, “U” = Unknown (counts as a “Y”)

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
<p>Are hazardous substances present or potentially present in sediments? AND Are ecologically important species or habitats present? AND Could hazardous substances reach these receptors via contact with sediments?</p>			
<p>When answering the above questions, consider the following:</p> <ul style="list-style-type: none"> • Known or suspected presence of hazardous substances in sediment. • Ability of hazardous substances to leach or erode from surface soils and be carried into sediment via surface runoff. • Potential for contaminated groundwater to upwell through, and deposit contaminants in, sediments. • If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods. Aquatic receptors may be directly exposed to sediments or may be exposed through osmotic exchange, respiration or ventilation of sediment pore waters. • Terrestrial plants may be exposed to sediment in an area that is only periodically inundated with water. • If sediments are present in an area that is only periodically inundated with water, terrestrial species may have direct access to sediments for the purposes of incidental ingestion. Aquatic receptors may regularly or incidentally ingest sediment while foraging. 			
<p>Are hazardous substances present or potentially present in prey or food items of ecologically important receptors? AND Are ecologically important species or habitats present? AND Could hazardous substances reach these receptors via consumption of food items?</p>			
<p>When answering the above questions, consider the following:</p> <ul style="list-style-type: none"> • Higher trophic level terrestrial and aquatic consumers and predators may be exposed through consumption of contaminated food sources. • In general, organic contaminants with $\log K_{ow} > 3.5$ may accumulate in terrestrial mammals and those with a $\log Kow > 5$ may accumulate in aquatic vertebrates. 			
<p>Are hazardous substances present or potentially present in surficial soils? AND Are ecologically important species or habitats present? AND Could hazardous substances reach these receptors via incidental ingestion of or dermal contact with surficial soils?</p>			
<p>When answering the above questions, consider the following:</p> <ul style="list-style-type: none"> • Known or suspected presence of hazardous substances in surficial (~1m depth) soils. • Ability of hazardous substances to migrate to surficial soils. • Significant exposure via dermal contact would generally be limited to organic contaminants which are lipophilic and can cross epidermal barriers. • Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash). • Contaminants in bulk soil may partition into soil solution, making them available to roots. • Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil or while grooming themselves clean of soil. 			

“Y” = yes; “N” = No, “U” = Unknown (counts as a “Y”)

Evaluation of Receptor-Pathway Interactions (cont'd)

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
Are hazardous substances present or potentially present in soils? AND Are ecologically important species or habitats present? AND Could hazardous substances reach these receptors via vapors or fugitive dust carried in surface air or confined in burrows?			
When answering the above questions, consider the following: <ul style="list-style-type: none"> • Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant $> 10^{-5}$ atm-m³/mol and molecular weight < 200 g/mol). • Exposure via inhalation is most important to organisms that burrow in contaminated soils, given the limited amounts of air present to dilute vapors and an absence of air movement to disperse gases. • Exposure via inhalation of fugitive dust is particularly applicable to ground-dwelling species that could be exposed to dust disturbed by their foraging or burrowing activities or by wind movement. • Foliar uptake of organic vapors would be limited to those contaminants with relatively high vapor pressures. • Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces. 			

“Y” = yes; “N” = No, “U” = Unknown (counts as a “Y”)

(f) WRD decision. Based on the results of the site hazard assessment and other available information about the site, WRD should either determine the site warrants no further action or recommend that remedial action is necessary (including placing the site on the hazardous site list).

(g) Notification. WRD shall make available the results of the site hazard assessment to the site's owner and operator and any person who has received a potentially liable person status letter. If WRD finds after a site hazard assessment that the site needs no further action, it should, upon request of the owner/operator, send a "no further action letter" to the site's owner/operator, and make additional copies available to other interested parties.

(h) Removal from the Hazardous Sites List.

(1) WRD may remove a site from the list only after it has determined that:

(i) For sites where the selected cleanup action does not include containment, all remedial actions except confirmational monitoring have been completed and compliance with the cleanup standards has been achieved at the site;

(ii) The listing was erroneous; or

(iii) For sites where the selected cleanup action includes containment, if all of the following conditions have been met:

(A) All construction and operation of remedial actions have been adequately completed and only passive maintenance activities such as monitoring, inspections and periodic repairs remain;

(B) Sufficient confirmational monitoring has been done to demonstrate that the remedy has effectively contained the hazardous substances of concern at the site;

(C) All necessary performance monitoring has been completed;

(D) Any necessary institutional controls are in place and have been demonstrated to be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action;

(E) Written documentation is present in WRD files that describes what hazardous substances have been left on site, where they are located, and the long-term monitoring and maintenance obligations at the site; and

(F) For sites with releases to groundwater, it has been demonstrated the site meets groundwater cleanup standards.

(2) A site owner, operator, or potentially liable person may request that a site be removed from the list by submitting a petition to WRD. The petition should include thorough documentation of all investigations performed, all cleanup actions taken, and adequate compliance monitoring to demonstrate to WRD's satisfaction that one of the conditions in (1) of this subsection has been met. WRD shall review such petitions; however, the timing of the review

shall be at its discretion and as resources may allow.

§ 3-4 Comparison of Site Contaminant Levels with Default Cleanup Standards.

(a) Purpose. Data collected during the initial site characterization is first evaluated using default cleanup standards. The objective of this evaluation and steps involved in the evaluation are discussed in this section. The objectives of the default cleanup standard evaluation are to determine whether the site or portions of the site pose a threat to human health or the environment, and hence necessitate further evaluation; and to identify areas of the site that do not need further evaluation. These objectives are achieved by comparing the maximum site concentrations (or maximum concentrations in portions of the site) identified in the site hazard assessment with the default cleanup standards listed in Table 3-4.

(b) Default Cleanup Standards. The default cleanup standards are risk-based cleanup standards developed using conservative input parameters, a target acceptable risk of 1×10^{-6} , and a Hazard Quotient of 1. These default cleanup standards are the lowest risk-based cleanup standards for soil and groundwater representative of residential conditions.

(1) Specifically, default cleanup standards for soil are the lowest of the following concentrations:

- (i)** Surface soil concentrations protective of exposures via groundwater ingestion at maximum contaminant levels or equivalent risk-based concentrations at the downgradient edge of the source,
- (ii)** Subsurface soil concentrations protective of exposure via groundwater ingestion at maximum contaminant levels or risk-based concentrations at the downgradient edge of the source,
- (iii)** Subsurface soil concentrations protective of exposure via indoor inhalation of vapors emanating from soil for a residential scenario (e.g., child or age-adjusted receptor), and
- (iv)** Surface soil concentrations protective of combined ingestion, dermal contact, and outdoor inhalation exposures for a residential scenario.

(2) Default cleanup standards for groundwater are the lowest of the following concentrations:

- (i)** Maximum contaminant levels for chemicals having designated levels, or calculated values for ingestion of water by either a child, adolescent, adult, or age-adjusted individual in a residential scenario, and
- (ii)** Groundwater concentrations protective of indoor inhalation for a residential scenario (e.g., child or age-adjusted receptor).

(3) Table 3-4 lists default cleanup standards, the critical pathway used to determine each

of the default cleanup standards, and the receptor (if applicable). As a result of the methods and assumptions used in the development of the default cleanup standards and the current limitations of laboratory analytical methods the calculated default cleanup standards may be lower than the practical quantification limit reported by a laboratory for selected chemicals. In these situations site-specific review by WRD may be necessary. Examples of some issues involved in a review include the total number of chemicals of concern present at the site, whether the chemical in question is responsible for a large proportion of site-risk, the cost of alternate analytical methods, and the nature and proximity of receptors. As a result of this review, WRD may recommend the use of specialized analytical techniques; monitoring to ensure that levels remain at detection limits, institutional controls, or the use of surrogate measures of contamination.

(c) Comparison of Default Cleanup Standards with Site Concentrations. Based on the site hazard assessment, the responsible party should identify the maximum soil and groundwater concentrations for the chemicals of concern found at the site. These maximum concentrations are compared with the default cleanup standards, found in Table 3-4.

(1) Background Concentration as Default Standard. For inorganic chemicals, especially metals, the site-specific background concentration may replace the default cleanup standards if the background concentration exceeds the default standards. The responsible party should work with WRD to determine if background concentrations can be used in place of the default cleanup standards.

(2) Concentrations Do Not Exceed Default Standards. If the maximum site concentration for any chemicals of concern does not exceed the default cleanup standards, and no other regulatory issues remain with respect to the release, the responsible party may request WRD approval for site closure.

(3) Concentrations Exceed Default Standards. If the maximum site concentration for any chemical of concern exceeds the default cleanup standard, in order to adequately protect human health and the environment the responsible party should select one of the following options, and convey the decision to WRD in writing:

(i) Option 1: Adopt default cleanup standards as site cleanup levels and develop a Cleanup Action Plan as discussed in Section 6.

(ii) Option 2: Perform a more detailed, site-specific risk-based evaluation as discussed in the Nez Perce Tribe Risk-Based Cleanup Guidance.

(d) Initial Default Cleanup Standards Evaluation Report. The responsible party should submit a default cleanup standards evaluation report to WRD. The report should include, at a minimum (references can be made to a previously submitted site hazard assessment if applicable):

(1) A description of site history and activities leading to the release,

- (2) A description of current land use on and adjacent to the site,
- (3) A summary of the site hazard assessment results for soil and groundwater,
- (4) An estimation of background concentrations (if applicable) and methods used to determine background concentrations,
- (5) A discussion of data quality, along with original laboratory reporting sheets, including QA/QC data,
- (6) A comparison of maximum soil and groundwater concentrations with default cleanup standards, along with site maps indicating land use, structures on site, locations and depths of samples, and locations of sources,
- (7) A list of recommendations.

Table 3-4 Default Cleanup Standards

CHEMICALS OF CONCERN	SOIL			GROUNDWATER		
	IDTL	Critical Pathway	Critical Receptor	IDTL	Critical Pathway	Critical Receptor
	[mg/kg]			[mg/L]		
1,1,1,2-Tetrachloroethane	4.09E-02	GWP ^a	GWP	2.15E-03	Ingestion	Risk-Based
1,1,1-Trichloroethane	2.00E+00	GWP	GWP	2.00E-01	Ingestion	MCL ^b
1,1,2,2-Tetrachloroethane	9.15E-04	GWP	GWP	2.79E-04	Ingestion	Risk-Based
1,1,2-Trichloroethane	1.41E-02	GWP	GWP	5.00E-03	Ingestion	MCL
1,1-Dichloroethane	3.48E+00	GWP	GWP	1.04E+00	Ingestion	Risk-Based
1,1-Dichloroethene	3.88E-02	GWP	GWP	7.00E-03	Ingestion	MCL
1,2,3-Trichloropropane	2.45E-04	GWP	GWP	2.79E-05	Ingestion	Risk-Based
1,2,4-Trichlorobenzene	6.92E-01	Subsurface Soil	Child	7.00E-02	Ingestion	MCL
1,2,4-Trimethylbenzene (pseudocumene)	1.93E-01	Subsurface Soil	Child	4.39E-01	Indoor Inhalation	Child
1,2-Dibromo-3-chloropropane	9.75E-04	GWP	GWP	2.00E-04	Ingestion	MCL
1,2-Dichlorobenzene	5.25E+00	GWP	GWP	6.00E-01	Ingestion	MCL
1,2-Dichloroethane	7.67E-03	Subsurface Soil	Child	5.00E-03	Ingestion	MCL
1,2-Dichloroethene-(cis)	1.93E-01	GWP	GWP	7.00E-02	Ingestion	MCL
1,2-Dichloroethene-(trans)	3.65E-01	GWP	GWP	1.00E-01	Ingestion	MCL
1,2-Dichloropropane	8.90E-03	Subsurface Soil	Child	5.00E-03	Ingestion	MCL
1,2-Diphenylhydrazine	9.48E-04	GWP	GWP	6.98E-05	Ingestion	Risk-Based
1,3,5-Trimethylbenzene	1.45E-01	Subsurface Soil	Child	3.04E-01	Indoor Inhalation	Child
1,3-Dichlorobenzene	2.29E-01	Subsurface Soil	Child	9.39E-03	Ingestion	Risk-Based
1,3-Dichloropropene-(cis)	2.45E-03	GWP	GWP	5.59E-04	Ingestion	Risk-Based
1,3-Dichloropropene-(trans)	2.45E-03	GWP	GWP	5.59E-04	Ingestion	Risk-Based
1,4-Dichlorobenzene	7.55E-02	Subsurface Soil	Child	7.50E-02	Ingestion	MCL
2,3,7,8-TCDD ^h	3.91E-06	SS ^j	Age-Adjusted	3.00E-08	Ingestion	MCL
2,4,5 TP (silvex) ⁱ	2.37E+00	GWP	GWP	5.00E-02	Ingestion	MCL
2,4,5-Trichlorophenol	7.38E+00	GWP	GWP	1.04E+00	Ingestion	Risk-Based
2,4,6-Trichlorophenol	4.36E-03	GWP	GWP	1.04E-03	Ingestion	Risk-Based
2,4,6-Trinitrotoluene	1.34E-02	GWP	GWP	1.86E-03	Ingestion	Risk-Based
2,4-Dichlorophenol	9.78E-02	GWP	GWP	3.13E-02	Ingestion	Risk-Based
2,4Dichloro-phenoxyacetic acid	1.84E+00	GWP	GWP	1.04E-01	Ingestion	Risk-Based
2,4-Dimethylphenol	8.19E-01	GWP	GWP	2.09E-01	Ingestion	Risk-Based
2,4Dinitro-6-sec-butylphenol (Dinoseb)	1.63E-01	GWP	GWP	7.00E-03	Ingestion	MCL
2,4-Dinitrophenol	3.84E-02	GWP	GWP	2.09E-02	Ingestion	Risk-Based

2,4-Dinitrotoluene	2.90E-04	GWP	GWP	8.22E-05	Ingestion	Risk-Based
2,6-Dinitrotoluene	2.12E-04	GWP	GWP	8.22E-05	Ingestion	Risk-Based
2-Butanone (Methyl Ethyl Ketone)	1.18E+01	GWP	GWP	6.26E+00	Ingestion	Risk-Based
2-Chloronaphthalene	1.28E+02	GWP	GWP	8.34E-01	Ingestion	Risk-Based
2-Chlorophenol	3.65E-01	GWP	GWP	5.21E-02	Ingestion	Risk-Based
2-Chlorotoluene	1.56E+00	Subsurface Soil	Child	2.09E-01	Ingestion	Risk-Based
2-Methylnaphthalene	3.31E+00	GWP	GWP	4.17E-02	Ingestion	Risk-Based
2-Methylphenol	1.80E+00	GWP	GWP	5.21E-01	Ingestion	Risk-Based
2-Nitroaniline	7.25E-02	GWP	GWP	3.13E-02	Ingestion	Risk-Based
3,3-Dichlorobenzidine	1.83E-03	GWP	GWP	1.24E-04	Ingestion	Risk-Based
3-Nitroaniline	3.18E-03	GWP	GWP	1.47E-03	Ingestion	Risk-Based
4-Bromo-phenylphenylether	5.45E-03	GWP	GWP	3.72E-06	Ingestion	Risk-Based
4-Chloroaniline	1.26E-01	GWP	GWP	4.17E-02	Ingestion	Risk-Based
4-Methyl-2-pentanone	1.76E+01	GWP	GWP	8.97E+00	Ingestion	Risk-Based
4-Methylphenol	1.41E-01	GWP	GWP	5.21E-02	Ingestion	Risk-Based
4-Nitroaniline	2.99E-03	GWP	GWP	1.47E-03	Ingestion	Risk-Based
4-Nitrophenol	2.26E-01	GWP	GWP	8.34E-02	Ingestion	Risk-Based
Acenaphthene	5.23E+01	GWP	GWP	6.26E-01	Ingestion	Risk-Based
Acenaphthylene	7.80E+01	GWP	GWP	6.26E-01	Ingestion	Risk-Based
Acetochlor	1.12E+00	GWP	GWP	2.09E-01	Ingestion	Risk-Based
Acetone	1.74E+01	GWP	GWP	9.39E+00	Ingestion	Risk-Based
Acrolein	9.65E-03	GWP	GWP	5.21E-03	Ingestion	Risk-Based
Acrylonitrile	1.94E-04	GWP	GWP	1.03E-04	Ingestion	Risk-Based
Alachlor	1.05E-02	GWP	GWP	2.00E-03	Ingestion	MCL
Aldicarb	4.14E-02	GWP	GWP	1.04E-02	Ingestion	Risk-Based
Aldrin	2.11E-02	SS	Age-Adjusted	3.29E-06	Ingestion	Risk-Based
Ammonia	4.15E+00	Subsurface Soil	Child	NA	NA	NA
Aniline	1.96E-02	GWP	GWP	9.80E-03	Ingestion	Risk-Based
Anthracene	1.04E+03	GWP	GWP	3.13E+00	Ingestion	Risk-Based
Antimony	4.77E+00	GWP	GWP	6.00E-03	Ingestion	MCL
Aroclor 1016	2.33E+00	GWP	GWP	7.30E-04	Ingestion	Risk-Based
Aroclor 1221	2.94E-03	GWP	GWP	2.79E-05	Ingestion	Risk-Based
Aroclor 1242	3.18E-03	GWP	GWP	2.79E-05	Ingestion	Risk-Based
Aroclor 1248	1.37E-01	GWP	GWP	2.79E-05	Ingestion	Risk-Based
Aroclor 1254	7.40E-01	SS	Child	2.09E-04	Ingestion	Risk-Based
Aroclor 1260	1.47E-01	SS	Age-Adjusted	2.79E-05	Ingestion	Risk-Based
Arsenic	3.91E-01	SS	Age-Adjusted	1.00E-02	Ingestion	MCL
Atrazine	1.39E-02	GWP	GWP	3.00E-03	Ingestion	MCL
Azobenzene	1.30E-02	GWP	GWP	5.08E-04	Ingestion	Risk-Based
Barium	8.96E+02	GWP	GWP	2.00E+00	Ingestion	MCL
Benzene	1.78E-02	GWP	GWP	5.00E-03	Ingestion	MCL
Benzidine	5.37E-07	GWP	GWP	2.43E-07	Ingestion	Risk-Based
Benzo(a)anthracene	4.22E-01	SS	Age-Adjusted	7.65E-05	Ingestion	Risk-Based
Benzo(a)pyrene	4.22E-02	SS	Age-	2.00E-04	Ingestion	MCL

			Adjusted			
Benzo(b)fluoranthene	4.22E-01	SS	Age-Adjusted	7.65E-05	Ingestion	Risk-Based
Benzo(g,h,i)perylene	1.18E+03	SS	Child	3.13E-01	Ingestion	Risk-Based
Benzo(k)fluoranthene	4.22E+00	SS	Age-Adjusted	7.65E-04	Ingestion	Risk-Based
Benzoic acid	7.71E+01	GWP	GWP	4.17E+01	Ingestion	Risk-Based
Benzyl Alcohol	6.43E+00	GWP	GWP	3.13E+00	Ingestion	Risk-Based
Beryllium	1.63E+00	GWP	GWP	4.00E-03	Ingestion	MCL
BHC-alpha ^c	2.10E-04	GWP	GWP	8.87E-06	Ingestion	Risk-Based
BHC-beta	7.51E-04	GWP	GWP	3.10E-05	Ingestion	Risk-Based
BHC-gamma(Lindane)	8.96E-04	GWP	GWP	4.30E-05	Ingestion	Risk-Based
Bis(2-chloroethyl)ether	1.08E-04	GWP	GWP	5.08E-05	Ingestion	Risk-Based
Bis(2-chloroisopropyl) ether	3.11E+00	GWP	GWP	4.17E-01	Ingestion	Risk-Based
Bis(2-ethylhexyl) phthalate	1.18E+01	GWP	GWP	6.00E-03	Ingestion	MCL
Bromodichloromethane	2.68E-03	GWP	GWP	9.01E-04	Ingestion	Risk-Based
Bromoform	2.92E-02	GWP	GWP	7.07E-03	Ingestion	Risk-Based
Bromomethane	5.01E-02	GWP	GWP	1.46E-02	Ingestion	Risk-Based
Butyl benzyl phthalate	5.11E+02	GWP	GWP	2.09E+00	Ingestion	Risk-Based
Cadmium	1.35E+00	GWP	GWP	5.00E-03	Ingestion	MCL
Carbofuran	9.42E-02	GWP	GWP	4.00E-02	Ingestion	MCL
Carbon disulfide	5.97E+00	GWP	GWP	1.04E+00	Ingestion	Risk-Based
Carbon Tetrachloride	1.14E-02	Subsurface Soil	Child	4.56E-03	Indoor Inhalation	Age-Adjusted
Chlordane	1.53E+00	SS	Age-Adjusted	2.00E-03	Ingestion	MCL
Chlorobenzene	6.18E-01	GWP	GWP	1.00E-01	Ingestion	MCL
Chloroethane	5.33E-02	GWP	GWP	1.93E-02	Ingestion	Risk-Based
Chloroform	5.64E-03	GWP	GWP	1.80E-03	Ingestion	Risk-Based
Chloromethane	2.31E-02	GWP	GWP	4.30E-03	Ingestion	Risk-Based
Chlorpyrifos	2.84E+00	GWP	GWP	3.13E-02	Ingestion	Risk-Based
Chromium (III) total Cr	2.13E+03	GWP	GWP	1.00E-01	Ingestion	MCL
Chromium (VI)	7.90E+00	GWP	GWP	3.13E-02	Ingestion	Risk-Based
Chrysene	3.34E+01	GWP	GWP	7.65E-03	Ingestion	Risk-Based
Copper	9.21E+02	GWP	GWP	1.30E+00	Ingestion	MCL
Cyanide (as Sodium Cyanide)	3.68E-01	GWP	GWP	2.00E-01	Ingestion	MCL
Dacthal	1.58E+01	Subsurface Soil	Child	1.04E-01	Ingestion	Risk-Based
Dalapon (2,2-dichloropropionic acid)	4.57E-01	GWP	GWP	2.00E-01	Ingestion	MCL
DDD ^d	2.44E+00	SS	Age-Adjusted	2.33E-04	Ingestion	Risk-Based
DDE ^c	1.72E+00	SS	Age-Adjusted	1.64E-04	Ingestion	Risk-Based
DDT ^f	4.03E-01	GWP	GWP	1.64E-04	Ingestion	Risk-Based
Demeton	1.29E-03	GWP	GWP	4.17E-04	Ingestion	Risk-Based
Dibenzo(a,h)anthracene	4.22E-02	SS	Age-Adjusted	7.65E-06	Ingestion	Risk-Based
Dibenzofuran	6.10E+00	GWP	GWP	4.17E-02	Ingestion	Risk-Based
Dibromochloromethane	2.02E-03	GWP	GWP	6.65E-04	Ingestion	Risk-Based

Dichloro-difluoromethane	2.96E+00	Subsurface Soil	Child	1.95E-01	Indoor Inhalation	Child
Dieldrin	1.33E-03	GWP	GWP	3.49E-06	Ingestion	Risk-Based
Diethylphthalate	2.75E+01	GWP	GWP	8.34E+00	Ingestion	Risk-Based
Dimethylphthalate	2.71E+02	GWP	GWP	1.04E+02	Ingestion	Risk-Based
Di-n-butyl phthalate	3.10E+01	GWP	GWP	1.04E+00	Ingestion	Risk-Based
Di-n-octyl phthalate	1.83E+03	SS	Child	4.17E-01	Ingestion	Risk-Based
Diquat	1.09E-01	GWP	GWP	2.00E-02	Ingestion	MCL
Disulfoton	6.68E-02	GWP	GWP	4.17E-04	Ingestion	Risk-Based
Diuron	2.16E-01	GWP	GWP	2.09E-02	Ingestion	Risk-Based
Endosulfan	2.49E+00	GWP	GWP	6.26E-02	Ingestion	Risk-Based
Endothall	3.35E-01	GWP	GWP	1.00E-01	Ingestion	MCL
Endrin	3.35E-01	GWP	GWP	2.00E-03	Ingestion	MCL
Eptam	1.39E+00	GWP	GWP	2.61E-01	Ingestion	Risk-Based
Ethylbenzene	1.02E+01	GWP	GWP	7.00E-01	Ingestion	MCL
Ethylene dibromide(EDB)	1.43E-04	GWP	GWP	5.00E-05	Ingestion	MCL
Fluoranthene	3.64E+02	GWP	GWP	4.17E-01	Ingestion	Risk-Based
Fluorene	5.48E+01	GWP	GWP	4.17E-01	Ingestion	Risk-Based
Fluoride (as Sodium Fluoride)	7.36E+00	GWP	GWP	4.00E+00	Ingestion	MCL
Glyphosate	4.48E+01	GWP	GWP	7.00E-01	Ingestion	MCL
Heptachlor	1.06E-03	Subsurface Soil	Age-Adjusted	4.00E-04	Ingestion	MCL
Heptachlor epoxide	2.61E-02	GWP	GWP	2.00E-04	Ingestion	MCL
Hexachlorobenzene	4.27E-02	Subsurface Soil	Age-Adjusted	1.00E-03	Ingestion	MCL
Hexachlorobutadiene	3.78E-02	Subsurface Soil	Age-Adjusted	7.16E-04	Ingestion	Risk-Based
Hexachloro-cyclopentadiene	1.16E-02	Subsurface Soil	Child	7.01E-03	Indoor Inhalation	Child
Hexachloroethane	1.38E-01	GWP	GWP	3.99E-03	Ingestion	Risk-Based
Hexazinone	8.84E-01	GWP	GWP	3.44E-01	Ingestion	Risk-Based
Hydrogen Sulfide	2.96E-02	Subsurface Soil	Child	1.75E-02	Indoor Inhalation	Child
Indeno(1,2,3-cd)pyrene	4.22E-01	SS	Age-Adjusted	7.65E-05	Ingestion	Risk-Based
Iron (as Iron Oxide)	5.76E+00	GWP	GWP	3.13E+00	Ingestion	Risk-Based
Isophorone	1.40E-01	GWP	GWP	5.88E-02	Ingestion	Risk-Based
Isopropylbenzene (Cumene)	3.46E+00	GWP	GWP	1.04E+00	Ingestion	Risk-Based
Lead	4.96E+01	GWP	GWP	1.50E-02	Ingestion	MCL
Manganese	2.23E+02	GWP	GWP	2.50E-01	Ingestion	Risk-Based
Mercury	5.09E-03	GWP	GWP	2.00E-03	Ingestion	MCL
Methoxychlor	5.52E+01	GWP	GWP	4.00E-02	Ingestion	MCL
Methylene Chloride	1.69E-02	GWP	GWP	7.45E-03	Ingestion	Risk-Based
Metolachlor	8.43E+00	GWP	GWP	1.56E+00	Ingestion	Risk-Based
Metribuzin	7.21E-01	GWP	GWP	2.61E-01	Ingestion	Risk-Based
MTBE ^g	3.64E-02	GWP	GWP	1.69E-02	Ingestion	Risk-Based
Naphthalene	1.14E+00	Subsurface Soil	Child	2.09E-01	Ingestion	Risk-Based
Nickel	5.91E+01	GWP	GWP	2.09E-01	Ingestion	Risk-Based
Nitrate (as Sodium	1.84E+01	GWP	GWP	1.00E+01	Ingestion	MCL

Nitrate)						
Nitrite (as Sodium Nitrite)	1.84E+00	GWP	GWP	1.00E+00	Ingestion	MCL
Nitrobenzene	2.18E-02	GWP	GWP	5.21E-03	Ingestion	Risk-Based
N-Nitrosodimethylamine	2.09E-06	GWP	GWP	1.10E-06	Ingestion	Risk-Based
N-Nitrosodi-n-propylamine	1.81E-05	GWP	GWP	7.98E-06	Ingestion	Risk-Based
N-Nitrosodiphenylamine	8.80E-02	GWP	GWP	1.14E-02	Ingestion	Risk-Based
Oxamyl (Vydate)	3.86E-01	GWP	GWP	2.00E-01	Ingestion	MCL
Pentachlorophenol	9.07E-03	GWP	GWP	1.00E-03	Ingestion	MCL
Phenanthrene	7.90E+01	GWP	GWP	3.13E-01	Ingestion	Risk-Based
Phenol	7.36E+00	GWP	GWP	3.13E+00	Ingestion	Risk-Based
Picloram	2.95E+00	GWP	GWP	5.00E-01	Ingestion	MCL
Prometon	7.04E-01	GWP	GWP	1.56E-01	Ingestion	Risk-Based
Pyrene	3.59E+02	GWP	GWP	3.13E-01	Ingestion	Risk-Based
sec-Butylbenzene	1.17E+00	Subsurface Soil	Child	1.04E-01	Ingestion	Risk-Based
Selenium	2.03E+00	GWP	GWP	5.00E-02	Ingestion	MCL
Silver	1.89E-01	GWP	GWP	5.21E-02	Ingestion	Risk-Based
Simazine	1.08E-02	GWP	GWP	4.00E-03	Ingestion	MCL
Styrene	1.83E+00	GWP	GWP	1.00E-01	Ingestion	MCL
Terbutryn	3.21E-01	GWP	GWP	1.04E-02	Ingestion	Risk-Based
tert-Butylbenzene	8.52E-01	Subsurface Soil	Child	1.04E-01	Ingestion	Risk-Based
Tetrachloroethene	2.88E-02	Subsurface Soil	Child	5.00E-03	Ingestion	MCL
Thallium	1.55E+00	GWP	GWP	2.00E-03	Ingestion	MCL
Toluene	4.89E+00	GWP	GWP	1.00E+00	Ingestion	MCL
Total Xylenes	1.67E+00	Subsurface Soil	Child	4.34E+00	Indoor Inhalation	Child
Toxaphene	3.26E-01	SS	Age-Adjusted	3.00E-03	Ingestion	MCL
Trichloroethene	2.88E-03	Subsurface Soil	Child	3.32E-03	Indoor Inhalation	Age-Adjusted
Trichlorofluoromethane	1.04E+01	Subsurface Soil	Child	2.05E+00	Indoor Inhalation	Child
Vinyl Chloride	9.63E-03	GWP	GWP	2.00E-03	Ingestion	MCL
Zinc	8.86E+02	GWP	GWP	3.13E+00	Ingestion	Risk-Based

^aGroundwater Protection Via Soils Leaching to

Groundwater

^bMaximum contaminant level

^c Benzene hexachloride

^d Dichloro diphenyl dichloroethylene

^e 1,1-Dichloro-2,2-bis(p-chlorophenyl) ethane

^f Dichloro diphenyl trichloroethane

^g Methyl tert-butyl ether

^h Tetrachloro di benzo-p-dioxin

ⁱ 4,5,-Trichlorophenoxy propionic acid

^j Surface Soil Pathway

Section 4 – Site-Specific Cleanup Levels

§ 4-1 Site-Specific Cleanup Levels. If the site owner/operator does not feel that the default cleanup standards should be applied to his/her site due to site-specific conditions, they may seek to develop site-specific cleanup levels. This process is governed by the Nez Perce Tribe's Risk-Based Cleanup Guidance.

Section 5 – Site Conceptual Model

§ 5-1 Site Conceptual Model. The site-specific cleanup level development process requires the development of a Site Conceptual Model as part of the risk calculation process. The guidelines for an adequate Site Conceptual Model are found in Section 2 of the Nez Perce Tribe's Risk-Based Cleanup Guidance.

Section 6 – Site Cleanup and Monitoring

§ 6-1 Introduction. Development and implementation of a Cleanup Action Plan (CAP) is the last step in the remediation process. If after the comparison of site contaminant levels with default cleanup standards or risk-based cleanup standards, an unacceptable risk to a receptor is identified, the responsible party is to develop and implement a CAP. Cleanup levels may be developed as part of the risk-based cleanup standard determination, or alternative strategies to manage the unacceptable risk may be proposed.

The overall objective of the CAP is to ensure that residual soil and groundwater concentrations are protective of human health and the environment. The remedial strategies used in the CAP depend on the results of the risk evaluation (which pathways, chemicals, and media are responsible for the unacceptable risk) and other circumstances unique to the site.

Any cleanup action that does not fully meet cleanup standards (i.e. through the use of institutional controls) must necessarily involve monitoring. The development of the monitoring plan is described in this Section.

§ 6-2 Development of a Cleanup Action Plan that Includes Remediation Levels. A CAP selected for a site will often involve a combination of cleanup action components, such as treatment of soil and groundwater contamination, or in some situations containment of contamination. Remediation levels are used to identify the concentrations (or other methods of identification) of hazardous substances at which different cleanup action components will be used. Remediation levels may be used at sites where a combination of cleanup actions components are used to achieve cleanup levels at the point of compliance (see the examples in subsection (c)(1) and (3) of this section). Remediation levels may also be used at sites where the cleanup action involves the containment of soils as provided under § 6-4.

(a) Relationship of Remediation Levels to Cleanup Levels and Cleanup Standards.

Remediation levels are not the same as cleanup levels. A cleanup level defines the concentration of hazardous substances above which a contaminated medium (e.g., soil) must be remediated in some manner (e.g., treatment, containment, institutional controls). A remediation level, on the other hand, defines the concentration (or other method of identification) of a hazardous substance in a particular medium above or below which a particular cleanup action component will be used (e.g., soil treatment or containment).

Remediation levels, by definition, exceed cleanup levels. Cleanup levels should be established for every site. Remediation levels, on the other hand, may not be necessary at a site. Whether remediation levels are necessary depends on the cleanup action selected. For example, remediation levels would not be necessary if the selected cleanup action removes (for off-site disposal) all soil that exceeds the cleanup level at the applicable points of compliance.

A cleanup action that uses remediation levels should meet each of the minimum requirements specified in Section 6-3, including the provision that all cleanup actions comply with cleanup standards. Compliance with cleanup standards mandates, in part, that cleanup levels are met at the applicable points of compliance. If the remedial action does not comply with cleanup standards it will not be considered a final cleanup action that can result in a No further Action Letter.

(b) Examples. The following examples of cleanup actions that use remediation levels are for illustrative purposes only. All proposed cleanup actions, including those with remediation levels, should be evaluated to determine whether they meet each of the minimum requirements specified in Section 6-3.

(1) Example: Site Meeting Soil Cleanup Levels at the Point of Compliance.

Assume that the soil cleanup level at a site is 20 ppm. Further assume that the cleanup action determined to comply with the minimum requirements in Section 6-3 and selected for the site consists of soil treatment and removal and a remediation level of 100 ppm to define when those two components are used. Under the cleanup standard, any soil that exceeds the 20 ppm cleanup level at the applicable point of compliance would need to be remediated in some manner. Under the selected cleanup action, any soil that exceeds the 100 ppm remediation level should be removed and treated. Any soil that does not exceed the 100 ppm remediation level, but exceeds the 20 ppm cleanup level, should be removed and landfilled. The cleanup action may be determined to comply with the cleanup standard because the cleanup level is met at the applicable point of compliance.

(2) Example: Site Not Meeting Soil Cleanup Levels at the Point of Compliance.

Assume that the soil cleanup level at a site is 20 ppm. Further assume that the cleanup action determined to comply with the minimum requirements in Section 6-3 and selected for the site consists of soil treatment and containment, and a remediation level of 100 ppm to define when those two components are used. Under the cleanup standard, any soil that exceeds the 20 ppm cleanup level at the applicable point of compliance would need to be remediated in some manner.

Under the selected cleanup action, any soil that exceeds the 100 ppm remediation level should be treated. Any soil that does not exceed the 100 ppm remediation level, but exceeds the 20 ppm cleanup level, should be contained. Residual contamination above the cleanup level will remain at the site. However, assuming the cleanup action meets the terms specified in Section 6-4 for soil containment actions, the cleanup action may be determined to comply with cleanup standards.

(3) Example: Site Meeting Groundwater Cleanup Levels at the Point of Compliance. Assume that the groundwater cleanup level at a site is 500 ug/l and that WRD approved a conditional point of compliance at the property boundary. Further assume that the cleanup action determined to comply with the minimum requirements in Section 6-3 and selected for the site consists of: removing the source of the groundwater contamination (e.g., removal of a leaking tank and associated soil contamination above the water table); extracting free product and any groundwater exceeding a concentration of 2,000 ug/l; and utilizing natural attenuation to restore the groundwater to 500 ug/l before it arrives at the property boundary. The groundwater concentration of 2,000 ug/l constitutes a remediation level because it defines the concentration of a hazardous substance at which different cleanup action components are used. As long as the groundwater meets the 500 ug/l cleanup level at the conditional point of compliance (the property boundary), the cleanup action may be determined to comply with cleanup standards.

(4) Example: Site Not Meeting Groundwater Cleanup Levels at the Point of Compliance. Assume that the groundwater cleanup level at a site is 5 ug/l and that WRD approves a conditional point of compliance at the property boundary. Further assume that the remedial action selected for the site consists of: vapor extraction of the soil to nondetectable concentrations (to prevent further groundwater contamination); extraction and treatment of groundwater with concentrations in excess of 100 ug/l; and installation of an air stripping system to treat groundwater at a water supply well beyond the property boundary to less than 5 ug/l. Further assume that the groundwater cleanup level will not be met at the conditional point of compliance (the property boundary). The groundwater concentration of 100 ug/l constitutes a remediation level because it defines the concentration of a hazardous substance at which different cleanup action components are used. However, in this example, the remedial action does not constitute a cleanup action because it does not comply with cleanup standards, one of the minimum requirements for cleanup actions in Section 6-3. Consequently, the remedial action is considered an interim action (meaning that WRD may not issue a No Further Action letter for the site) until the cleanup level is attained at the conditional point of compliance (the property boundary).

(c) General Requirements. Potential remediation levels may be developed as part of the cleanup action planning process. These potential remediation levels may be defined as either a concentration or other method of identification of a hazardous substance. Other methods of identification include physical appearance or location (e.g., all of the green sludge will be removed from the northern area of the site). Quantitative or qualitative methods may be used to develop these potential remediation levels. These methods may include a human health risk assessment or an ecological risk assessment. These methods may also consider fate and transport issues.

These methods may be simple or complex, as appropriate to the site. All proposed cleanup actions, including those with proposed remediation levels, should still be evaluated to determine whether they meet each of the minimum requirements specified in Section 6-3.

§ 6-3 Selection of Cleanup Actions

(a) Purpose. This Section describes the procedures and requirements for minimally acceptable cleanup actions. This Section is intended to be used in conjunction with the administrative principles and procedures discussed elsewhere in this Guidance.

(b) Minimum Requirements for Acceptable Cleanup Actions. All cleanup actions should meet the following requirements. Because cleanup actions will often involve the use of several cleanup action components at a single site, the overall cleanup action should meet the requirements of this Section. WRD recognizes that some of the requirements contain flexibility and will allow the use of professional judgment in determining how to apply them at particular sites.

(1) Threshold Requirements. Acceptable cleanup actions should:

- (i)** Protect human health and the environment;
- (ii)** Comply with cleanup standards;
- (iii)** Comply with applicable tribal and federal laws; and
- (iv)** Provide for compliance monitoring as discussed in Section 6-8.

(2) Other Requirements. When selecting from proposed cleanup actions that fulfill the threshold requirements, the selected action should:

- (i)** Use permanent solutions to the maximum extent practicable (see subsection (c) of this Section); and
- (ii)** Provide for a reasonable restoration time frame (see subsection (d) of this Section).

(3) Groundwater Cleanup Actions.

(i) Permanent Groundwater Cleanup Actions. A permanent cleanup action should be used to achieve the cleanup levels for groundwater at the standard point(s) of compliance where a permanent cleanup action is practicable or determined by WRD to be in the public interest.

(ii) Nonpermanent Groundwater Cleanup Actions. Where a nonpermanent cleanup action is allowed, the following measures should be taken:

- (A)** Treatment or removal of the source of the release should be conducted for liquid wastes, areas contaminated with high concentrations of

hazardous substances, highly mobile hazardous substances, or hazardous substances that cannot be reliably contained. This includes removal free product consisting of petroleum and other light nonaqueous phase liquid (LNAPL) from the groundwater using normally accepted engineering practices. Source containment may be appropriate when the free product consists of a dense nonaqueous phase liquid (DNAPL) that cannot be recovered after reasonable efforts have been made.

(B) Groundwater containment, including barriers or hydraulic control through groundwater pumping, or both, should be implemented to the maximum extent practicable to avoid lateral and vertical expansion of the groundwater volume affected by the hazardous substance.

(4) Cleanup Actions for Soils at Current or Potential Future Residential Areas and for Soils at Schools and Child Care Centers. For current or potential future residential areas and for schools and child care centers, soils with hazardous substance concentrations that exceed soil cleanup levels need to be treated, removed, or contained in order to adequately protect human health. Property qualifies as a current or potential residential area if:

- (i) The property is currently used for residential use; or
- (ii) The property has a potential to serve as a future residential area based on the consideration of zoning, statutory and regulatory restrictions, comprehensive plans, historical use, adjacent land uses, and other relevant factors.

(5) Institutional Controls. Use of Institutional Controls is discussed in Section 7.

- (i) Cleanup actions may use institutional controls, including financial assurances where appropriate, when provided for under Section 7.
- (ii) Cleanup actions that use institutional controls should meet each of the minimum requirements specified in this Section, just as any other cleanup action. Institutional controls should demonstrably reduce risks to ensure a protective remedy. This demonstration should be based on a quantitative scientific analysis where appropriate.
- (iii) In addition to meeting each of the minimum requirements specified in this Section, cleanup actions should not rely primarily on institutional controls and monitoring where it is technically possible to implement a more permanent cleanup action for all or a portion of the site.

(6) Releases and Migration. Cleanup actions should prevent or minimize present and future releases and migration of hazardous substances in the environment.

(7) Dilution and Dispersion. Cleanup actions should not rely primarily or substantially on dilution and dispersion unless the incremental costs of any active remedial measures over the costs of dilution and dispersion grossly exceed the incremental degree of benefits of active

remedial measures over the benefits of dilution and dispersion.

(8) Remediation Levels. Cleanup actions that use remediation levels should meet each of the minimum requirements specified in this Section, just as any other cleanup action.

(i) Selection of a cleanup action alternative that uses remediation levels necessitates, in part, a determination that a more permanent cleanup action is not practicable, based on the disproportionate cost analysis (see subsections (c) of this section).

(ii) Selection of a cleanup action alternative that uses remediation levels also necessitates a determination that the alternative meets each of the other minimum requirements specified in this Section, including a determination by WRD that the alternative is protective of human health and the environment.

(c) Use of Permanent Solutions to the Maximum Extent Practicable. This subsection describes the procedures for determining whether a cleanup action uses permanent solutions to the maximum extent practicable, as specified under subsection (b)(2)(i) of this section. A determination that a cleanup action meets this one element does not mean that the other minimum requirements specified in subsection (b) of this section have been met. To select a cleanup action for a site, a cleanup action needs to meet each of the minimum requirements specified in subsection (b) of this section.

(1) General Requirements. When selecting a cleanup action, preference should be given to permanent solutions to the maximum extent practicable. To determine whether a cleanup action uses permanent solutions to the maximum extent practicable, the disproportionate cost analysis specified in (4) of this subsection may be used. The analysis should informally compare the costs and benefits of the cleanup action proposals. The costs and benefits to be compared are the evaluation criteria identified in paragraph (3) of this subsection.

(2) Permanent Cleanup Action Defined. A permanent cleanup action or permanent solution is a cleanup action in which cleanup standards can be met without further action being need at the site being cleaned up, or any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

(3) Disproportionate Cost Analysis. A disproportionate cost analysis should only be used where WRD and the potentially liable party(s) cannot agree on a particular cleanup action because the potentially liable party(s) believes the cost of the cleanup action at issue is disproportionate to the benefits that will occur because of the cleanup, and a less costly cleanup action alternative exists that will achieve similar benefits.

(i) Test. Costs are disproportionate to benefits if the incremental costs of the more expensive alternative over that of a lower cost alternative exceed the incremental degree of benefits achieved by the more expensive alternative over that

of the other lower cost alternative. The comparison of benefits and costs may be quantitative, but will often be qualitative and require the use of best professional judgment. In particular, WRD has the discretion to favor or disfavor qualitative benefits and use that information in selecting a cleanup action. Where two or more alternatives are equal in benefits, WRD should select the less costly alternative provided the requirements of subsection (b) of this section are met.

(ii) Evaluation Criteria. The following criteria should be used to evaluate and compare each cleanup action when conducting a disproportionate cost analysis under (3) of this subsection to determine whether a cleanup action is permanent to the maximum extent practicable. It should be noted that high cost of a cleanup action, alone, is not sufficient justification for a finding of disproportionate cost as the responsible party bears the responsibility for remediating the contaminated site, regardless of cost. Disproportionate cost analysis is used where an alternative cleanup action exists that is less costly, but reduces overall risk at the site by an acceptable amount, as determined by WRD.

(A) Protectiveness. Overall protectiveness of human health and the environment, including the degree to which existing risks are reduced, time required to reduce risk at the facility and attain cleanup standards, on-site and off-site risks resulting from implementing the cleanup action, and improvement of the overall environmental quality.

(B) Permanence. The degree to which the alternative permanently reduces the toxicity, mobility or volume of hazardous substances, including the adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and sources of releases, the degree of irreversibility of waste treatment process, and the characteristics and quantity of treatment residuals generated.

(C) Cost. The cost to implement the cleanup action, including the cost of construction, the net present value of any long-term costs, and agency oversight costs that are cost recoverable. Long-term costs include operation and maintenance costs, monitoring costs, equipment replacement costs, and the cost of maintaining institutional controls. Cost estimates for treatment technologies should describe pretreatment, analytical, labor, and waste management costs. The design life of the cleanup action should be estimated and the cost of replacement or repair of major elements should be included in the cost estimate.

(D) Effectiveness Over the Long-Term. Long-term effectiveness includes the degree of certainty that the cleanup action will be successful, the reliability of the cleanup action during the period of time hazardous substances are expected to remain onsite at concentrations that exceed cleanup levels, the magnitude of residual risk with the cleanup action in

place, and the effectiveness of controls necessary to manage treatment residues or remaining wastes. The following types of cleanup action components may be used as a guide, in descending order, when assessing the relative degree of long-term effectiveness: reuse or recycling; destruction or detoxification; immobilization or solidification; on-site or off-site disposal in an engineered, lined and monitored facility; on-site isolation or containment with attendant engineering controls; and institutional controls and monitoring.

(E) Management of Short-Term Risks. The risk to human health and the environment associated with the cleanup action during construction and implementation, and the effectiveness of measures that will be taken to manage such risks.

(F) Technical and Administrative Implementability. Ability to be implemented including consideration of whether the cleanup action is technically possible, availability of necessary off-site facilities, services and materials, administrative and regulatory requirements, scheduling, size, complexity, monitoring requirements, access for construction operations and monitoring, and integration with existing facility operations and other current or potential remedial actions.

(d) Reasonable Restoration Time Frame. This subsection describes the process and procedures for determining whether a cleanup action provides for a reasonable restoration time frame, as necessary under subsection (b)(2)(ii) of this section. A determination that a cleanup action meets these provisions does not mean that the other minimum requirements specified in subsection (b) of this section have been met. To select a cleanup action for a site, a cleanup action must meet each of the minimum requirements specified in subsection (b) of this section.

(1) Factors. To determine whether a cleanup action provides for a reasonable restoration time frame, the factors to be considered include the following:

- (i)** Potential risks posed by the site to human health and the environment;
- (ii)** Practicability of achieving a shorter restoration time frame;
- (iii)** Current use of the site, surrounding areas, and associated resources that are, or may be, affected by releases from the site;
- (iv)** Potential future use of the site, surrounding areas, and associated resources that are, or may be, affected by releases from the site;
- (v)** Availability of alternative water supplies;
- (vi)** Likely effectiveness and reliability of institutional controls;
- (vii)** Ability to control and monitor migration of hazardous substances from the site;
- (viii)** Toxicity of the hazardous substances at the site; and
- (ix)** Natural processes that reduce concentrations of hazardous substances and have been documented to occur at the site or under similar site conditions.

(2) A longer period of time may be used for the restoration time frame for a site to achieve cleanup levels at the point of compliance if the cleanup action selected has a greater degree of long-term effectiveness than on-site or off-site disposal, isolation, or containment options.

(3) When area background concentrations would result in recontamination of the site to levels that exceed cleanup levels, that portion of the cleanup action which addresses cleanup below area background concentrations may be delayed until the off-site sources of hazardous substances are controlled. In these cases the remedial action should be considered an interim action until cleanup levels are attained.

(4) Where cleanup levels are below technically possible concentrations, concentrations that are technically possible to achieve should be met within a reasonable time frame considering the factors in subsection (2) of this section. In these cases the remedial action should not be considered a final action resulting in a No Further Action letter until cleanup levels are attained.

(f) Extending the restoration time frame should not be used as a substitute for active remedial measures, when such actions are practicable.

§ 6-4 Cleanup Actions Involving Containment of Contaminants. Where a cleanup action involves containment of soils or groundwater with hazardous substance concentrations exceeding cleanup levels at the point of compliance, the cleanup may be deemed acceptably protective where:

(a) The selected remedy is permanent to the maximum extent practicable using the procedures in Section 6-3(c);

(b) The cleanup action is protective of human health. This may require a site-specific human health risk assessment conforming to the provisions of this Section to demonstrate that the cleanup action is protective of human health;

(c) The cleanup action is demonstrated to be protective of ecological receptors;

(d) Institutional controls are put in place under Section 7 that prohibit or limit activities that could interfere with the long-term integrity of the containment system;

(e) Compliance monitoring under Section 6-8 and periodic reviews under Section 6-9 are designed to ensure the long-term integrity of the containment system; and

(f) The types, levels and amount of hazardous pollutants remaining on-site and the measures that will be used to prevent migration and contact with those substances are specified in the Cleanup Action Plan.

§ 6-5 Expectations for Cleanup Action Alternatives. WRD has the following expectations for the development of cleanup actions under the Cleanup Action Plan process. WRD recognizes that there may be some sites where cleanup actions conforming to these expectations are not appropriate. Also, selecting a cleanup action that meets these expectations should not be used as a substitute for selecting a cleanup action under the selection process described in Section 6-3.

(a) WRD expects that treatment technologies will be emphasized at sites containing liquid wastes, areas contaminated with high concentrations of hazardous substances, highly mobile materials, and/or discrete areas of hazardous substances that lend themselves to treatment.

(b) To minimize the need for long-term management of contaminated materials, WRD expects that all hazardous substances will be destroyed, detoxified, and/or removed to concentrations below cleanup levels throughout sites containing small volumes of hazardous substances.

(c) WRD recognizes the need to use engineering controls, such as containment, for sites or portions of sites that contain large volumes of materials with relatively low levels of hazardous substances where treatment is impracticable.

(d) In order to minimize the potential for migration of hazardous substances, WRD expects that active measures will be taken to prevent precipitation and subsequent runoff from coming into contact with contaminated soils and waste materials. When such measures are impracticable, such as during active cleanup, WRD expects that site runoff will be contained and treated prior to release from the site.

(e) WRD expects that when hazardous substances remain on-site at concentrations which exceed cleanup levels, those hazardous substances will be consolidated to the maximum extent practicable where needed to minimize the potential for direct contact and migration of hazardous substances;

(f) WRD expects that, for facilities adjacent to a surface water body, active measures will be taken to prevent/minimize releases to surface water via surface runoff and groundwater discharges in excess of cleanup levels. WRD expects that dilution will not be available for demonstrating compliance with cleanup standards in these instances.

(g) WRD expects that natural attenuation of hazardous substances may be appropriate at sites where:

(1) Source control (including removal and/or treatment of hazardous substances) has been conducted to the maximum extent practicable;

(2) Leaving contaminants on-site during the restoration time frame does not pose an unacceptable threat to human health or the environment;

(3) There is evidence that natural biodegradation or chemical degradation is occurring and will continue to occur at a reasonable rate at the site; and

(4) Appropriate monitoring actions are conducted to ensure that the natural attenuation process is taking place and that human health and the environment are protected.

(h) WRD expects that cleanup actions conducted under this Guidance will not result in a significantly greater overall threat to human health and the environment than other alternatives.

§ 6-6 Development of the Cleanup Action Plan

(a) Draft Cleanup Action Plan. The responsible party should submit a draft cleanup action plan to WRD. The level of detail in the draft cleanup action plan should be commensurate with the complexity of the site and proposed cleanup action. The draft cleanup action plan should include the following:

- (1) A general description of the proposed cleanup action;
- (2) A summary of the rationale for selecting the proposed alternative;
- (3) A brief summary of alternative cleanup actions that were evaluated by the responsible party;
- (4) Cleanup standards and, where applicable, remediation levels, for each hazardous substance and for each medium of concern at the site;
- (5) The schedule for implementation of the CAP including, if known, restoration time frame;
- (6) Institutional controls, if any, required as action; and part of the proposed cleanup action;
- (7) Applicable tribal and federal laws, if any, for the proposed cleanup action, when these are known at this step in the cleanup process (this does not preclude subsequent identification of applicable tribal and federal laws); and
- (8) Where the cleanup action involves on-site containment, specification of the types, levels, and amounts of hazardous substances remaining on site and the measures that will be used to prevent migration and contact with those substances.

(b) Final Cleanup Action Plan. After review and consideration of the draft CAP, WRD should make a determination whether plan is adequately protective of human health and the environment. If WRD makes a finding that the plan is not adequately protective, the reasons for

such a determination should be forwarded to the responsible party so that the appropriate changes or revisions can occur, and the plan can be resubmitted for consideration.

If WRD determines, following the implementation of the CAP, that the cleanup standards or, where applicable, remediation levels established in the CAP cannot be achieved, WRD may discuss further options with the responsible party.

(c) Federal Cleanup Sites. For federal cleanup sites, a record of decision or order or consent decree prepared under the federal cleanup law may be used by WRD to meet the requirements of this section provided:

- (1) The cleanup action meets the requirements under Section 6-3; and
- (2) The Tribe has concurred with the cleanup.

§ 6-7 Implementation of the Cleanup Action Plan

(a) Purpose. Cleanup actions should comply with this Section except in the case of emergencies or abatement of imminent threat responses. The purpose of this Section is to ensure that the cleanup action is designed, constructed, and operated in a manner that is consistent with: the cleanup action plan; accepted engineering practices; and the requirements specified in Section 6-3.

(b) Administrative Options. A cleanup action may be conducted under any of the procedures described in Section 8.

(c) Plans Describing the Cleanup Action. Design, construction, and operation of the cleanup action should be consistent with the purposes of this Section and should consider relevant information provided by the site assessment. For most cleanups, to ensure this is done it will be necessary to prepare the engineering documents described in this section. The scope and level of detail in these documents may vary from site to site depending on the site-specific conditions and nature and complexity of the proposed cleanup action. In many cases, such as routine cleanups and cleanups at leaking storage tanks, it is appropriate to combine the information in these various documents into one report to avoid unnecessary duplication. Where the information is contained in other documents it may be appropriate to incorporate those documents by reference to avoid duplication. Any document prepared in order to implement a cleanup may be used to satisfy these provisions provided they contain the necessary information.

(1) Engineering Design Report. The engineering design report should include sufficient information for the development and review of construction plans and specifications. It should document engineering concepts and design criteria used for design of the cleanup action. The following information should be included in the engineering design report, as appropriate:

- (i) Goals of the cleanup action including specific cleanup or performance terms;

- (ii)** General information on the facility including a summary of information in the site assessment updated as necessary to reflect the current conditions;
- (iii)** Identification of who will own, operate, and maintain the cleanup action during and following construction;
- (iv)** Facility maps showing existing site conditions and proposed location of the cleanup action;
- (v)** Characteristics, quantity, and location of materials to be treated or otherwise managed, including groundwater containing hazardous substances;
- (vi)** A schedule for final design and construction;
- (vii)** A description and conceptual plan of the actions, treatment units, facilities, and processes necessary to implement the cleanup action including flow diagrams;
- (viii)** Engineering justification for design and operation parameters, including:

- (A)** Design criteria, assumptions and calculations for all components of the cleanup action;
- (B)** Expected treatment, destruction, immobilization, or containment efficiencies and documentation on how that degree of effectiveness is determined; and
- (C)** Demonstration that the cleanup action will achieve compliance with cleanup terms by citing pilot or treatability test data, results from similar operations, or scientific evidence from the literature;

- (ix)** Design features for control of hazardous materials spills and accidental discharges (for example, containment structures, leak detection devices, run-on and run-off controls);
- (x)** Design features to assure long-term safety of workers and local residences (for example, hazardous substances monitoring devices, pressure valves, bypass systems, safety cutoffs);
- (xi)** A discussion of methods for management or disposal of any treatment residual and other waste materials containing hazardous substances generated as a result of the cleanup action;
- (xii)** Facility specific characteristics that may affect design, construction, or operation of the selected cleanup action, including:

- (A)** Relationship of the proposed cleanup action to existing facility operations;
- (B)** Probability of flooding, probability of seismic activity, temperature extremes, local planning and development issues; and
- (C)** Soil characteristics and groundwater system characteristics;

- (xiii)** A general description of construction testing that will be used to demonstrate adequate quality control;
- (xiv)** A general description of compliance monitoring that will be performed during

and after construction to meet the provisions of Section 6-8;

(xv) A general description of construction procedures proposed to assure that worker safety and health is assured;

(xvi) Any additional information needed to address any applicable legal requirements including the substantive standards for any exempted permits; and property access issues which need to be resolved to implement the cleanup action;

(xvii) For sites needing financial assurance and where not already incorporated into the order or decree or other previously submitted document, preliminary cost calculations and financial information describing the basis for the amount and form of financial assurance and, a draft financial assurance document;

(xviii) For sites using institutional controls as part of the cleanup action and where not already incorporated into the order or decree or other previously submitted documents, copies of draft restrictive covenants and/or other draft documents establishing these institutional controls; and

(xix) Other information as requested by WRD.

(2) Construction Plans and Specifications. Construction plans and specifications should detail the cleanup actions to be performed. The plans and specifications should be prepared in conformance with currently accepted engineering practices and techniques and should include the following information as applicable:

(i) A general description of the work to be performed and a summary of the engineering design criteria from the engineering design report;

(ii) General location map and existing facility conditions map;

(iii) A copy of any permits and approvals;

(iv) Detailed plans, procedures and material specifications necessary for construction of the cleanup action;

(v) Specific quality control tests to be performed to document the construction, including specifications for the testing or reference to specific testing methods, frequency of testing, acceptable results, and other documentation methods;

(vi) Startup procedures and criteria to demonstrate the cleanup action is prepared for routine operation;

(vii) Additional information to address applicable legal requirements including the substantive standards for any exempted permits;

(viii) Other information as requested by WRD.

(3) Operation and Maintenance Plan. An operation and maintenance plan that presents technical guidance to assure effective operations under both normal and emergency conditions. The operation and maintenance plan should include the following elements, as appropriate:

(i) Name and phone number of the responsible individuals;

(ii) Process description and operating principles;

- (iii) Design criteria and operating parameters and limits;
- (iv) General operating procedures, including startup, normal operations, operation at less than design loading, shutdown, and emergency or contingency procedures;
- (v) A discussion of the detailed operation of individual treatment units, including a description of various controls, recommended operating parameters, safety features, and any other relevant information;
- (vi) Procedures and sample forms for collection and management of operating and maintenance records;
- (vii) Spare part inventory, addresses of suppliers of spare parts, equipment warranties, and appropriate equipment catalogues;
- (viii) Equipment maintenance schedules incorporating manufacturers recommendations;
- (ix) Contingency procedures for spills, releases, and personnel accidents;
- (x) A compliance monitoring plan prepared under Section 6-8 describing monitoring to be performed during operation and maintenance;
- (xi) Procedures for the maintenance of the facility after completion of the cleanup action, including provisions for removal of unneeded appurtenances, and the maintenance of covers, caps, containment structures, and monitoring devices; and
- (xii) Other information as requested by WRD.

(d) Construction. Construction of the cleanup action should be conducted in accordance with the construction plans and specifications, and other plans prepared under this section.

(1) Inspections.

- (i) WRD may perform site inspections and construction oversight. WRD may recommend that construction activities be halted at a site if construction or any supporting activities are not consistent with approved plans; are not in compliance with environmental regulations or accepted construction procedures; or endanger human health or the environment.
- (ii) WRD may conduct a formal inspection of the site following construction and an initial operational shake down period to ensure satisfactory completion of the construction. If such an inspection is performed, the construction documentation report and engineer's opinion specified in (2)(ii) of this subsection should be available before the inspection.

(2) Construction Documentation.

- (i) **Professional Engineer or Geologist Supervision.** Except as provided for in (2)(iii) of this subsection, all aspects of construction should be performed under the oversight of a professional engineer or geologist or a qualified technician under the direct supervision of a professional engineer or geologist. During construction, detailed records should be kept of all aspects of the work performed including

construction techniques and materials used, items installed, and tests and measurements performed.

(ii) As Built Reports. At the completion of construction the engineer/geologist responsible for the oversight of construction should prepare as built drawings and a report documenting all aspects of facility construction. The report should also contain an opinion from the engineer/geologist, based on testing results and inspections, as to whether the cleanup action has been constructed in substantial compliance with the plans and specifications and related documents.

(iii) Professional Oversight Exceptions. For leaking underground storage tanks, the construction oversight and documentation report may be conducted by an underground storage tank provider. Removal of above ground abandoned drums, tanks and similar above ground containers and associated minor soil contamination may be overseen and documented by an experienced environmental professional.

(3) Financial Assurance and Institutional Control Documentation. As part of the as-built documentation for the site cleanup, the following information should be included in the as-built report:

(i) For sites needing financial assurance, a copy of the financial assurance document and any procedures for periodic adjustment to the value of the financial assurance mechanism;

(ii) For sites using institutional controls as part of the cleanup action, copies of recorded deed restrictions (with proof of recording) and other documents establishing these institutional controls.

(e) Plans and Reports. Plans or reports, or modifications to plans and reports, prepared under this section should be submitted to WRD for review and approval.

(f) Requirements for Managing Waste Generated by Site Cleanup. Any waste contaminated by a hazardous pollutants generated during cleanup activities and requiring off-site treatment, storage or disposal, shall be transported to a facility permitted or approved to handle these wastes.

§ 6-8 Compliance Monitoring

(a) Purpose. There are three types of compliance monitoring: Protection, performance, and confirmational monitoring. The purposes of these three types of compliance monitoring and evaluation of the data are to:

(1) Protection Monitoring. Confirm that human health and the environment are adequately protected during construction and the operation and maintenance period of a cleanup action as described in the safety and health plan;

(2) Performance Monitoring. Confirm that the cleanup action has attained cleanup standards and, if appropriate, remediation levels or other performance standards such as construction quality control measurements or monitoring necessary to demonstrate compliance with a permit or, where a permit exemption applies, the substantive requirements of other laws;

(3) Confirmational Monitoring. Confirm the long-term effectiveness of the cleanup action once cleanup standards and, if appropriate, remediation levels or other performance standards have been attained.

(b) General Provisions. Compliance monitoring should be used for all cleanup actions, and may be necessary for emergency actions and imminent threat abatement actions conducted under this Section. A compliance monitoring plan should be prepared. Plans prepared under this Section and under an order or decree may be submitted to WRD for review and approval. Protection monitoring may be addressed in the safety and health plan. Performance and confirmational monitoring may be addressed in separate plans or may be combined with other plans or submittals.

(c) Contents of a Monitoring Plan. Compliance monitoring plans may include monitoring for chemical constituents, biological testing, and physical parameters as appropriate for the site. Where the cleanup action includes engineered controls or institutional controls, the monitoring may need to include not only measurements but also documentation of observations on the performance of these controls. Long-term monitoring may be necessary if on-site disposal, isolation, or containment is the selected cleanup action for a site or a portion of a site. Such measures may be necessary until residual hazardous substance concentrations no longer exceed site cleanup levels established. Compliance monitoring plans should be specific for the media being tested and should contain the following elements:

(1) A sampling and analysis plan which explains in the statement of objectives how the purposes of subsection (a) of this section are met;

(2) Data analysis and evaluation procedures used, to demonstrate and confirm compliance and justification for these procedures, including:

- (i)** A description of any statistical method to be employed; or
- (ii)** If sufficient data is not available before writing the plan to propose a reliable statistical method to demonstrate and confirm compliance, a contingency plan proposing one or more reliable statistical methods to demonstrate and confirm compliance, and the conditions under which the methods would be used at the facility; and

(3) Other information as requested by WRD.

§ 6-9 Periodic Review. A periodic review consists of a review by WRD of post-cleanup site

conditions and monitoring data to assure that human health and the environment are being protected.

(a) Applicability. WRD may conduct periodic reviews of a site; and is more likely to conduct a review when one of the following conditions exists at the site:

(1) Where an institutional control and/or financial assurance is necessary as part of the cleanup action; and

(2) Where, in WRD's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

(b) General Provisions. If a periodic review is made under subsection (a) of this Section, a review should be conducted by WRD at least every five years after the initiation of a cleanup action. WRD may request potentially liable persons to submit information to WRD in order to conduct a periodic review.

(c) Review Criteria. When evaluating whether human health and the environment are being protected, the factors WRD shall consider include:

(1) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous pollutants remaining at the site;

(2) New scientific information for individual hazardous pollutants or mixtures present at the site;

(3) New applicable tribal and federal laws for hazardous pollutants present at the site;

(4) Current and projected site and resource uses;

(5) The availability and practicability of more permanent remedies; and

(6) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

(d) Determination of Whether Amendment of the Cleanup Action Plan is Necessary. When WRD determines that substantial changes in the cleanup action are necessary to protect human health and the environment at the site, a revised cleanup action plan should be prepared.

(e) Determination of Whether Future Periodic Reviews are Necessary. In conducting a periodic review under this section, WRD should determine whether additional reviews are necessary, taking into consideration the factors in subsection (c) of this section. Sites with institutional controls should remain subject to periodic reviews as long as the institutional controls are in place under this Section.

§ 6-10 Soil Landfarming. It is the policy of the Nez Perce Tribe to approve the use of soil landfarming in appropriate situations. By this Section, NPTEC directs WRD to develop a soil landfarming guidance which shall govern the implementation of soil landfarming of contaminated soils within the Reservation boundaries.

Section 7 – Use of Institutional Controls

§ 7 Institutional Controls

(a) Purpose. Institutional controls are measures undertaken to limit or prohibit activities that may interfere with the integrity of a cleanup action or that may result in exposure to hazardous substances at a site. The term institutional controls refers to nonengineered measures and differs from engineered controls, which are containment and/or treatment systems that are designed and constructed to prevent or limit the movement of, or the exposure to, hazardous substances. Institutional controls may include:

- (1) Physical measures such as fences;
- (2) Use restrictions, such as: limitations on the use of property or resources; or requirements that cleanup action occur if existing structures or pavement are disturbed or removed;
- (3) Maintenance requirements for engineered controls such as the inspection and repair of monitoring wells, treatment systems, caps or groundwater barrier systems;
- (4) Public awareness programs such as signs, postings, public notices, health advisories, mailings, and similar measures that educate the public and/or employees about site contamination and ways to limit exposure; and
- (5) Financial assurances.

(b) Applicability. This section applies to cleanup action actions being conducted at sites under Section 6. The availability and use of institutional controls at a cleanup site is dependent on approval of WRD during the development of the Cleanup Action Plan. WRD disfavors the use of institutional controls, preferring active remediation, but will consider proposals based on generally accepted practices.

(c) Circumstances Required. Institutional controls may be necessary to assure both the continued protection of human health and the environment and the integrity of a cleanup action

in the following circumstances:

(1) The cleanup level is established and hazardous substances remain at the site at concentrations that exceed the applicable cleanup level, with no practicable means available to further reduce contamination within the meaning established in Section 6-3(c).

(2) A conditional point of compliance is established as the basis for measuring compliance at the site;

(3) Where WRD determines such controls are necessary to assure the continued protection of human health and the environment or the integrity of the cleanup action.

(d) Minimum Requirements. Cleanup actions that use institutional controls should meet each of the minimum requirements specified in Section 6-3, just as any other cleanup action. Institutional controls should demonstrably reduce risks to ensure the remedy is protective of human health and the environment. This demonstration should be based on a quantitative, scientific analysis where appropriate.

(e) Requirement for Primary Reliance. In addition to meeting each of the minimum requirements specified in Section 6-3, cleanup actions should not rely primarily on institutional controls and monitoring where it is technically possible to implement a more permanent cleanup action for all or a portion of the site.

(f) Periodic Review. WRD should review compliance with institutional controls as part of periodic reviews under Section 6-9.

(g) Format for Use of Permanent Institutional Controls

(1) Properties Owned By Potentially Liable Parties. For properties owned by a person who has been named as a potentially liable person, or who has not been named a potentially liable person by WRD, but may be named one based on the criteria announced in Section 8-1, appropriate institutional controls should be described in a legal use restriction on the property where the institutional control is meant to be permanent. The legal use restriction needs to be executed by the property owner and recorded with the register of deeds (if applicable) for the county in which the site is located. This legal use restriction needs to run with the land, and be binding on the owner's successors and assigns.

(2) Properties Owned by Non-Potentially Liable Parties. For properties containing hazardous substances where the owner does not meet the criteria for being a potentially liable person announced in Section 8-1, WRD may approve cleanup actions that include legal use restriction or other legal and/or administrative mechanisms. The use of legal or administrative mechanisms that do not include legal use restriction is intended to apply to situations where the release has affected properties near the source of the release not owned by a person potentially liable under the act. A potentially liable person should make a good faith effort to obtain a legal use restriction before using other legal or administrative mechanisms. Examples of such mechanisms include zoning overlays, placing notices in local zoning or building department

records or state lands records, public notices and educational mailings.

(h) Legal Use Restrictions. Institutional controls (i.e. no residential development, no excavation, etc...) may be described in an equitable servitude, restrictive covenant, or similar legal mechanism executed by the property owner and recorded in the county in which the site is located. The use of such legal use restrictions may be addressed in the Cleanup Action Plan, the voluntary cleanup agreement, the certificate of completion, or a covenant not to sue. Where appropriate, the legal use restriction should:

(1) Prohibit activities on the site that may interfere with a cleanup action, operation and maintenance, monitoring, or other measures necessary to assure the integrity of the cleanup action and continued protection of human health and the environment;

(2) Prohibit activities that may result in the release of a hazardous substance or petroleum which was contained as a part of the cleanup;

(3) Require notice to WRD of the owner's intent to convey any interest in the site. Conveyance of title, easement, lease, or other interest in the property may be conditioned upon easement, lease, or other interest in the property for the continued operation, maintenance and monitoring of the cleanup action, and for continued compliance with this subsection;

(4) Require notice and approval by WRD of any proposal to use the site in a manner which is inconsistent with the legal use restriction.

(5) Grant WRD and its designated representatives the right to enter the property at reasonable times for the purpose of evaluating compliance with the voluntary cleanup action plan and other plans, including the right to take samples, inspect any remedial actions taken at the site, and to inspect records.

(6) Contain other restrictions appropriate under the circumstances.

(i) Format for Non-Permanent Institutional Controls. No specific format is required, WRD will consider all proposals which are based on generally accepted practices.

(j) Financial Assurances. WRD may, as appropriate, require financial assurance mechanisms at sites where the cleanup action selected includes engineered and/or institutional controls. It is presumed that financial assurance mechanisms will be necessary unless the potentially liable party can demonstrate that sufficient financial resources are available and in place to provide for the long-term effectiveness of engineered and institutional controls adopted. Financial assurances should be of sufficient amount to cover all costs associated with the operation and maintenance of the cleanup action, including institutional controls, compliance monitoring, and corrective measures.

(1) Mechanisms. Financial assurance mechanisms may include one or more of the following: a trust fund, a surety bond, a letter of credit, financial test, guarantee, standby trust fund, government bond rating test, government financial test, government guarantee, government

fund, or financial assurance mechanisms required under another law (for example, requirements for solid waste landfills or treatment, storage, and disposal facilities) that meets the requirements of this section.

(2) Exemptions. WRD should not require financial assurances if persons conducting the cleanup can demonstrate that requiring financial assurances will result in the potentially liable parties for the site having insufficient funds to conduct the cleanup or being forced into bankruptcy or similar financial hardship.

(k) Removal of Restrictions. If the conditions at the site requiring an institutional control under subsection (c) of this section no longer exist, then the owner may submit a request to WRD that the restrictive covenant or other restrictions be eliminated. The restrictive covenant or other restrictions should be removed, if WRD concurs.

Section 8 – Administrative Procedures

§ 8-1 Determination of Status as a Potentially Liable Person

(a) Potentially Liable Person Defined. Except as provided in subsection (c) of this section, the following persons are liable with respect to a facility containing hazardous substances as defined by Section 1-3(c):

(1) The owner or operator of the facility;

(2) Any person who owned or operated the facility at the time of disposal or release of the hazardous substances;

(3) Any person who owned or possessed a hazardous substance and who by contract, agreement, or otherwise arranged for disposal or treatment of the hazardous substance at the facility, or arranged with a transporter for transport for disposal or treatment of the hazardous substances at the facility, or otherwise generated hazardous wastes disposed of or treated at the facility;

(4) Any person who accepts or accepted any hazardous substance for transport to a disposal, treatment, or other facility selected by such person from which there is a release or a threatened release for which remedial action is necessary, unless such facility, at the time of disposal or treatment, could legally receive such substance; or

(5) Any person who both sells a hazardous substance and is responsible for written instructions for its use if

(i) The substance is used according to the instructions and

(ii) The use constitutes a release for which remedial action is necessary at the facility.

(b) Strict Liability. Each person who is liable under this section is strictly liable, jointly and

severally, for all remedial action costs and for all natural resource damages resulting from the releases or threatened releases of hazardous substances. The Nez Perce Tribe is empowered to recover all costs and damages from persons liable under this section.

(c) Exceptions to Liability. The following persons are not liable under this section:

(1) Any person who can establish that the release or threatened release of a hazardous substance for which the person would be otherwise responsible was caused solely by:

- (i)** An act of God;
- (ii)** An act of war; or
- (iii)** An act or omission of a third party (including but not limited to a trespasser) other than:

- (A)** An employee or agent of the person asserting the defense, or
- (B)** Any person whose act or omission occurs in connection with a contractual relationship existing, directly or indirectly, with the person asserting this defense to liability. This defense only applies where the person asserting the defense has exercised the utmost care with respect to the hazardous substance, the foreseeable acts or omissions of the third party, and the foreseeable consequences of those acts or omissions;

(2) Any person who is an owner, past owner, or purchaser of a facility and who can establish by a preponderance of the evidence that at the time the facility was acquired by the person, the person had no knowledge or reason to know that any hazardous substance, the release or threatened release of which has resulted in or contributed to the need for the remedial action, was released or disposed of on, in, or at the facility. This subsection is limited as follows:

- (i)** To establish that a person had no reason to know, the person must have undertaken, at the time of acquisition, All Appropriate Inquiry (as defined in subsection (iv) below), into the previous ownership and uses of the property, consistent with good commercial or customary practice in an effort to minimize liability. Any court interpreting this subsection shall take into account any specialized knowledge or experience on the part of the person, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection;
- (ii)** The defense contained in this subsection is not available to any person who had actual knowledge of the release or threatened release of a hazardous substance when the person owned the real property and who subsequently transferred ownership of the property without first disclosing such knowledge to the transferee;
- (iii)** The defense contained in this subsection is not available to any person who, by any act or omission, caused or contributed to the release or threatened release of a hazardous substance at the facility;

(iv) All Appropriate Inquire Requirements. In order to limit duplicative or conflicting regulations, the NPT formally adopts the provisions of 40 CFR Part 312, governing the requirements for conducting adequate All Appropriate Inquiry.

(3) Any natural person who uses a hazardous substance lawfully and without negligence for any personal or domestic purpose in or near a dwelling or accessory structure when that person is:

- (i)** A resident of the dwelling;
- (ii)** a person who, without compensation, assists the resident in the use of the substance; or
- (iii)** a person who is employed by the resident, but who is not an independent contractor;

(4) Any person who, for the purpose of growing food crops, applies pesticides or fertilizers without negligence and in accordance with all applicable laws and regulations is not subject to this section insofar as it applies to the application of the pesticide or fertilizer. The person may be liable for a release, or threatened release, if it occurs in the course of the storage or transport of the pesticide or fertilizer.

(d) Determination of Status. If after reviewing any material submitted, WRD concludes that credible evidence supports a finding of potential liability, then WRD may issue a determination of potentially liable person status.

(e) Additional Potentially Liable Persons. WRD reserves the right to notify additional potentially liable persons at any time, and as resources permit, will facilitate potentially liable persons' efforts to identify additional potentially liable persons. WRD should notify in writing, all persons who previously received a status letter for the facility whenever additional status letters have been sent.

§ 8-2 Status Letter. WRD may issue a potentially liable person status letter to any person it believes to be potentially liable as provided for in Section 8-1, unless an emergency requires otherwise. Persons will be notified when WRD has credible evidence of their potential liability and when WRD is ready to proceed with remedial action except for emergencies and initial investigations. The status letter should be sent by certified mail, return receipt requested, or by personal service. The status letter should provide:

- (a)** The name of the person WRD believes to be potentially liable;
- (b)** A general description of the location of the facility;
- (c)** The basis for WRD's belief that the person has a relationship to the facility;
- (d)** The basis for WRD's belief that a release or threatened release of a hazardous substance has

occurred at the facility and that the release or threatened release poses a threat to human health or the environment;

(e) An indication of WRD's intentions regarding enforcement or other actions at the facility; and

(f) The names of other persons to whom WRD has sent a status letter.

§ 8-3 Administrative Options for Remedial Actions.

(a) Policy. It is the responsibility of each and every liable person to conduct cleanup actions so that sites are cleaned up well and expeditiously where a release or threatened release of a hazardous substance necessitates a cleanup action. Potentially liable persons are encouraged to initiate discussions and negotiations with WRD and the Nez Perce Tribe Office of Legal Counsel that may lead to an agreement on the conduct of the cleanup action. WRD may provide informal advice and assistance on the development of proposals for remedial action if resources allow. Any approval by WRD, or the Nez Perce Tribe, of a cleanup action should occur by one of the means described in subsections (b) and (c) of this section.

(b) Actions Initiated by the Potentially Liable Person. Potentially liable persons may initiate a remedial action, as follows:

(1) A person may initiate negotiations for a consent decree by submitting a letter under Section 8-4(a).

(2) A person may request an agreed order by submitting a letter under Section 8-5(b).

(c) Action initiated by WRD. WRD may initiate remedial action by:

(1) Issuing a letter inviting negotiations on a consent decree under Section 8-4(b); or

(2) Requesting an agreed order under Section 8-5(d); or

(3) Issuing an enforcement order under Section 8-6.

(d) WRD-Initiated Cleanup Action. Nothing in this Section shall preclude WRD from taking appropriate cleanup action on its own at any time. Except for emergency actions and initial investigations, reasonable effort will be made to notify potentially liable persons before WRD takes action that may result in an action that would allow for the recovery of expenses incurred by the Nez Perce Tribe.

§ 8-4 Consent Decrees

(a) Procedures for Consent Decrees Initiated by Potentially Liable Persons. To request a

consent decree a person should submit a letter to WRD via certified mail, return receipt requested, or by personal delivery.

(1) Request. The letter should describe, based on available information:

- (i)** The proposed cleanup action(s), including the schedule for the work;
- (ii)** Information which demonstrates that the settlement will lead to a more expeditious cleanup, be consistent with cleanup standards, if applicable, and be consistent with any previous orders;
- (iii)** The facility, including location and boundaries;
- (iv)** The environmental problems to be addressed including a description of the releases at the facility and the potential impact of those releases to human health and the environment;
- (v)** A summary of the relevant historical use or conditions at the facility;
- (vi)** The date on which the potentially liable person will be ready to submit a detailed proposal;
- (vii)** Any special scheduling considerations for implementing the cleanup actions;
- (viii)** Names of other persons who the person has reason to believe may be potentially liable persons at the facility; and

(2) The letter may include:

- (i)** A waiver of the procedural provisions of Section 8-1 and acceptance, for purposes of settlement, of potentially liable person status.
- (ii)** The contents of detailed proposal under (8) of this subsection.

(3) A prospective purchaser consent decree is a particular type of consent decree entered into with a person not currently liable for remedial action at the site who proposes to purchase, redevelop, or reuse the site. Subsection (6) contains specific provisions for this type of decree. In addition to the information in (1) and (2) of this subsection, a request for a prospective purchaser consent decree should include:

- (i)** Identification of all persons proposing to enter into the consent decree and information which demonstrates that those persons are not currently liable for cleanup action at the site;
- (ii)** Information which demonstrates that the settlement will yield substantial new resources to facilitate cleanup;
- (iii)** A general description of the proposed continued use or redevelopment or reuse of the site, including the proposed schedule for purchase, redevelopment, or reuse; and
- (iv)** Information describing whether and how the proposed settlement will provide a substantial benefit to the Nez Perce Tribe.

(4) Recognizing that the steps of the cleanup process may be combined and may vary by site, the information in the request should be at the level of detail appropriate to the steps in the process for which the consent decree is requested.

(5) Prospective Purchaser Consent Decree. The Nez Perce Tribe may agree to a settlement with a person not currently liable for remedial action at a facility who proposes to purchase, redevelop, or reuse the facility, provided that:

- (i) The settlement will yield substantial new resources to facilitate cleanup;
- (ii) The settlement will expedite remedial action consistent with the rules adopted under this Section; and
- (iii) Based on available information, WRD determines that the redevelopment or reuse of the facility is not likely to contribute to the existing release or threatened release, interfere with cleanup actions that may be needed at the site, or increase health risks to persons at or in the vicinity of the site.

(6) Response to Request. WRD shall respond to the request within sixty days, unless WRD needs additional time to determine potentially liable person status under Section 8-1. This determination will be based in part on a preliminary finding by WRD that any resulting consent decree would lead to a more expeditious cleanup of hazardous substances in compliance with cleanup standards. Whenever practicable, WRD may expedite settlement with persons whose contribution is insignificant in amount and toxicity. Additionally, WRD may:

- (i) Request additional information;
- (ii) Accept the request and request the person to submit a detailed written proposal by a specified date; or
- (iii) Provide written reasons for denying the request.

(7) Contents of Detailed Proposal. The proposal should contain:

- (i) A proposed technical scope of work describing the cleanup action to be conducted;
- (ii) The data, studies, or any other information upon which the settlement proposal is based;
- (iii) A statement describing the potentially liable person's ability to conduct or finance the cleanup action as described in the proposed scope of work;
- (iv) A schedule for proposed negotiations and implementation of the proposed cleanup actions; and
- (v) Any additional information requested by WRD or the Nez Perce Tribe.

(8) Additional Provisions for Prospective Purchaser Consent Decree Proposals. In addition to the information in (8) of this subsection, the detailed proposal for a prospective purchaser consent decree should include the following:

- (i) Information showing a legal commitment to purchase, redevelop or reuse the site;
- (ii) A detailed description including a plan of the proposed continued use, redevelopment, or reuse of the site, including, if necessary, an updated schedule for purchase, redevelopment or reuse;
- (iii) Information which demonstrates that the redevelopment or reuse of the site is not likely to contribute to the existing or threatened releases at the site, interfere with cleanup actions that may be needed at the site, or increase health risks to persons at or in the vicinity of the site; and
- (iv) If the requestor does not propose to conduct the entire cleanup of the site, available information about potentially liable persons who are expected to conduct the remainder of the cleanup.

(9) Response to Proposal. WRD and the Office of Legal Counsel shall determine whether the proposal provides a sufficient basis for negotiations, and shall deliver to the potentially liable person within sixty days following receipt of their proposal a written notice indicating whether or not the proposal is sufficient to proceed with negotiations.

(10) Time Limits for Negotiations. WRD shall set the time period and starting date for negotiations. WRD and the Office of Legal Counsel shall then negotiate with those potentially liable persons who have received a notice under (10) of this subsection that their proposal was sufficient to proceed with negotiations. Negotiations may address one or more phases of the cleanup action. The length of the negotiation period specified by WRD shall be no less than that proposed by the potentially liable person provided it does not conflict with any applicable deadlines.

§ 8-5 Agreed Orders

(a) Purpose. Agreed orders may be used for all cleanup actions. An agreed order means that the potentially liable person agrees to perform cleanup actions at the site in accordance with the provisions of the agreed order and that WRD will not take additional action against the potentially liable person related to cleanup actions specified in the agreed order so long as the potentially liable person complies with the provisions of the order.

(b) Procedures for Agreed Orders Initiated by a Potentially Liable Person.

(1) To request an agreed order, a person should submit a letter to WRD based on available information, describing:

- (i) The proposed cleanup action including a schedule for the work;
- (ii) The facility, including location and boundaries;
- (iii) The environmental problems to be addressed, including the releases at the facility and the potential impact of those releases to human health and the

environment;

- (iv) A summary of the relevant historical use or conditions at the facility;
- (v) Names of other persons whom the person has reason to believe may be potentially liable persons at the facility; and

(2) The letter may include a waiver of the procedural provisions of § 8-1, and acceptance, for purposes of the agreed order, of potentially liable person status.

(3) Recognizing that the basic steps of the cleanup process may be combined and may vary by site, the information in the request should be at the level of detail appropriate to the step in the process for which the order is requested.

(4) WRD may waive part of the letter provision of (1) of this subsection if the terms have already been met.

(c) WRD Response to Potentially Liable Party Initiated Request. WRD shall respond to the request within sixty days, unless WRD needs additional time to determine potentially liable person status under § 8-1. WRD may:

- (1) Request additional information;
- (2) Proceed with discussions, if WRD believes it would be beneficial to do so; or
- (3) Provide written reasons for denying the request.

(d) Procedures for Agreed Orders Initiated by WRD. When WRD believes that an agreed order is an appropriate method to achieve cleanup of a contaminated facility, it may initiate the request for an agreed order.

(e) Duration of Discussions. Discussions on the agreed order should not exceed sixty days unless WRD decides continued discussions are necessary.

(f) Focus of Discussions. The focus of discussions for the agreed order should ordinarily be the technical scope of work and work schedule. This subsection is not intended to preclude discussion on any item. It is intended to convey the expectation that the scope of work and work schedule will be the primary topics of discussion in developing agreed orders.

Section 9 – Voluntary Cleanup Program

§ 9-1 Purpose and Intent.

It is the policy of the Nez Perce Tribe to provide for the protection of the public health, welfare, safety, and environment; and to foster the cleanup, transfer, reuse, or redevelopment of sites or

groups of sites based on the risk to human health and the environment where releases or threatened release of hazardous substances, including petroleum, exists. The minimization of risk to public health and the environment at a contaminated site offers significant potential economic benefit to local communities and is vital to protect the health and welfare of the Nez Perce Tribe, and the resources on which Tribal members rely for sustenance, as well as cultural and spiritual fulfillment.

The Nez Perce Tribe Voluntary Cleanup Program rules have been adopted with the purpose of fostering the cleanup, transfer, reuse, or redevelopment of sites or groups of sites based on risk to human health and the environment where releases or threatened release of hazardous substances, including petroleum, exists. It is also the intent of these rules to establish a voluntary program for the cleanup of contaminated sites that will encourage innovation and cooperation between landowners and the Nez Perce Tribe that will promote the economic revitalization of property, and the protection of human health and the environment. It is intended that this program will provide for an expedited cleanup process by eliminating the need for many adversarial enforcement actions and delays in Cleanup Action Plan approvals.

§ 9-2 Application to Participate

(a) Application. In order to participate in the voluntary cleanup program as established by The Nez Perce Tribe Voluntary Cleanup Program rules, a person should submit an application to the Nez Perce Tribe Water Resources Division (WRD).

(b) Contents of Application. The application should include, or be accompanied by, the following information:

- (1)** Identification of the applicant and the applicant's relationship to the site;
- (2)** Identification of the owner or operator of the site;
- (3)** General information pertaining to the site, including the assessors' parcel number(s), site name, location, and GPS coordinates if possible;
- (4)** An environmental assessment that conforms to ASTM Standard Practice E 1527, Environmental Site Assessments: Phase I Environmental Site Assessment Process, as amended, or equivalent; however, WRD may waive this provision on its own motion upon a showing of good cause;
- (5)** Other background information as requested on the application form provided by WRD as necessary to determine eligibility to participate in the voluntary cleanup program.

(c) Application Processing Procedure

(1) Not more than thirty (30) days after receiving an application WRD should determine if the applicant is eligible to participate in the voluntary cleanup program and notify the applicant of WRD's decision.

(2) An application may be rejected for the following reasons:

- (i) The condition of the hazardous substance or petroleum described in the application constitutes an imminent and substantial threat to human health or the environment; or
- (ii) The application does not contain enough information for WRD to make an informed decision.

(3) If the application is rejected under (2)(ii) of this subsection, WRD should provide the person with a list of all information needed to make the application complete.

(4) If WRD rejects an application for any other reason, WRD should do the following:

- (i) Notify the person that WRD rejected the application;
- (ii) Explain the reason WRD rejected the application.

§ 9-3 Voluntary Cleanup Agreements

(a) Negotiation of Voluntary Cleanup Agreement. If WRD accepts an application pursuant to this Section, the applicant may enter into a voluntary cleanup agreement with WRD. WRD should not evaluate a voluntary cleanup action plan until the voluntary cleanup agreement is signed by the applicant and the appropriate Tribal representative (either the Director of WRD, or the NPTEC Chairman).

(b) Contents of Agreement. The voluntary cleanup agreement should include the following:

(1) A provision for WRD's oversight including access to site and pertinent site records;

(2) A timetable for WRD to do the following:

- (i) Reasonably review and evaluate the adequacy of the work plan;
- (ii) Make a determination concerning the approval or rejection of the work plan;
- (iii) Identify, to the extent possible, permits or approvals needed to initiate and complete a voluntary Cleanup Action Plan.

(3) A provision to modify the voluntary cleanup agreement and voluntary Cleanup Action Plan based upon unanticipated site conditions;

(4) A mechanism and schedule for the payment of all actual reasonable costs incurred by WRD in the review and oversight of the work plan, unless WRD determines, in writing, that only a minimal cost will be incurred by WRD to oversee the cleanup agreement;

(5) Any other conditions considered necessary by WRD or the applicant concerning the effective and efficient implementation of these rules and policies.

(c) Reimbursement of Costs Included in Agreement. The voluntary cleanup agreement may include a provision for the payment and accounting of reasonable oversight costs incurred by WRD in connection with the person's application and participation in the voluntary cleanup program, unless WRD determines, in writing, that only a minimal cost will be incurred by WRD to oversee the cleanup agreement.

(d) Oversight Costs. Oversight costs may include the following:

- (1) The review, processing and negotiation of the voluntary cleanup agreement;
- (2) The review, processing and negotiation of the voluntary Cleanup Action Plan;
- (3) Oversight of work performed in accordance with the voluntary cleanup action plan;
- (4) Issuance of the certificate of completion;
- (5) Issuance of a covenant not to sue;
- (6) Administrative expenses associated with cost recovery activities.

(e) Enforceability of Agreement. Upon signing of the voluntary cleanup agreement by WRD and the applicant, the voluntary cleanup agreement shall constitute a contract between WRD and the applicant enforceable in accordance with its terms, subject to:

- (1) WRD's right to rescind the voluntary cleanup agreement as provided in § 9-3(g); and
- (2) The applicant's right to terminate the voluntary cleanup agreement under § 9-3(f).

(f) Reasons for Which a Person May Terminate a Voluntary Cleanup Agreement. An applicant may terminate the voluntary cleanup agreement for any of the following reasons:

- (1) The applicant decides to terminate the voluntary cleanup agreement rather than submit additional or corrected information as requested by WRD; or
- (2) The voluntary cleanup action plan is modified or rejected.

(g) Reasons for Which WRD May Terminate a Voluntary Cleanup Agreement. This Section does not prohibit or limit WRD's ability to rescind the voluntary cleanup agreement or the covenant not to sue at any time if:

- (i) The person implementing the work plan fails substantially to comply with the terms and conditions of:
 - (A) A voluntary remediation agreement, or
 - (B) A covenant not to sue;
- (ii) A hazardous substance or petroleum release becomes an imminent and substantial threat to human health or the environment.

(h) Effect of Termination of Agreement. The termination of a voluntary cleanup agreement may not relieve the applicant from the obligation to comply with any applicable authorities regarding the contamination at the site.

§ 9-4 Voluntary Cleanup Action Plan

(a) Submittal of Proposed Voluntary Cleanup Action Plan. An applicant whose application has been accepted by WRD may submit a proposed voluntary Cleanup Action Plan to WRD. WRD will evaluate the work plan according to the terms and conditions of a voluntary cleanup agreement signed by WRD and the applicant.

(b) Contents of Voluntary Cleanup Action Plan. The voluntary cleanup action plan should include the following:

- (1) The current and reasonably anticipated future use of on-site ground and surface water;
- (2) The current and reasonably anticipated future uses of the site and immediately adjacent properties;
- (3) The default cleanup standards used in the Cleanup Action Plan;
- (4) If a risk-based concentration is proposed as a cleanup standard, the voluntary Cleanup Action Plan should include an estimate of the human and environmental risk from releases or threatened releases of hazardous substances or petroleum at the site based upon the current use of the site and adjacent properties and reasonably anticipated future uses of the site pursuant to Section 5;
- (5) A proposed statement of work;
- (6) A schedule to accomplish the proposed statement of work.

(c) Information Supporting the Voluntary Cleanup Action Plan. Sufficient information to support the voluntary Cleanup Action Plan should be submitted and may include the following:

- (1) A site hazard assessment drafted pursuant to Section 3.
- (2) A discussion of site contaminant levels compared to default cleanup levels found in Table 3-4, or a discussion of site-specific cleanup levels determined pursuant to Section 4.

(d) Review and Evaluation of Cleanup Action Plan. WRD should review and evaluate the voluntary Cleanup Action Plan, and may approve, modify or reject a voluntary Cleanup Action Plan.

(2) WRD may reject or approve with modification any voluntary cleanup action plan that does not achieve the cleanup standards developed and approved by WRD pursuant Section 3 or

Section 4.

(3) If WRD rejects a voluntary cleanup action plan, WRD shall:

- i. Notify the applicant and specify the reasons for rejection; or
- ii. Provide the applicant an opportunity according to the schedule in the voluntary cleanup agreement to amend the work plan.

(4) If an applicant determines not to amend a rejected work plan to the satisfaction of WRD, the voluntary cleanup agreement may be terminated.

§ 9-5 Cleanup Standards. The voluntary Cleanup Action Plan must achieve health-based and environmental cleanup standards. All hazardous substance or petroleum concentrations in media which exceed the health-based and environmental cleanup standards shall be addressed through appropriate cleanup and in accordance with the appropriate technical standards based upon the following:

- (a) Use of the default cleanup standards found in Table 3-4, or
- (b) Site-specific cleanup standards developed using the process established in Section 4.

§ 9-6 Implementation of Voluntary Cleanup Action Plan

(a) Implementation. An approved voluntary Cleanup Action Plan should be fully implemented by the applicant according to the terms and conditions of the voluntary cleanup agreement, and these rules.

(b) Permits or Approvals Necessary for Implementation. WRD should assist in the timely issuance of necessary permits or approvals necessary to initiate and complete a voluntary Cleanup Action Plan.

(c) Progress Reports. An applicant implementing a voluntary Cleanup Action Plan should submit periodic progress reports to WRD according to the terms and conditions of the voluntary cleanup agreement.

(d) Voluntary Cleanup Action Plan Completion Report. When the applicant believes the objectives of the voluntary Cleanup Action Plan have been achieved and successfully implemented, the applicant should submit to WRD a voluntary Cleanup Action Plan completion report together with a request that WRD issue a certificate of completion.

(1) The voluntary Cleanup Action Plan completion report should contain information sufficient for WRD to determine whether the voluntary Cleanup Action Plan objectives were achieved and the voluntary Cleanup Action Plan was successfully implemented.

(2) WRD shall, within thirty (30) days of the receipt of a voluntary Cleanup Action Plan completion report and a request for a certificate of completion, notify the applicant whether the voluntary cleanup action plan has been successfully implemented.

(3) If WRD notifies the applicant that the voluntary Cleanup Action Plan has not been successfully implemented, the applicant should do the following:

- (i) Implement the voluntary Cleanup Action Plan to the satisfaction of WRD; and
- (ii) Resubmit the voluntary Cleanup Action Plan completion report.

(4) If a voluntary Cleanup Action Plan completion report demonstrates that the voluntary Cleanup Action Plan has been successfully implemented, WRD should certify such facts by issuing the applicant a certificate of completion.

(5) WRD may provide a certificate of completion conditioned upon continued monitoring, recordation or maintenance of institutional or engineering controls, or other continuing actions by the applicant.

§ 9-7 Covenant Not to Sue

(a) Negotiation and Provision of Covenant. Within thirty (30) days of receipt of WRD's certificate of completion, the applicant may request WRD negotiate and provide a covenant not to sue. Any such covenant not to sue may be conditioned upon continuing monitoring, recordation or maintenance of institutional or engineering controls, or other continuing actions required of the applicant pursuant to an approved voluntary Cleanup Action Plan.

(b) Rescission of Covenant. This Section does not prohibit or limit WRD's rescission of the voluntary cleanup agreement or the covenant not to sue at any time if:

(1) The person implementing the work plan fails substantially to comply with the terms and conditions of:

- (i) A voluntary cleanup agreement, or
- (ii) Covenant not to sue;

(2) A hazardous substance (including petroleum) release becomes an imminent and substantial threat to human health or the environment.

(c) Continuing Compliance. During the implementation of an approved voluntary cleanup action plan, WRD shall not bring an action, including an administrative or judicial action for any liability for cleanup relating to the release or threatened release of a hazardous substance or petroleum that is the subject of the voluntary cleanup action plan, against a person who entered into a voluntary cleanup agreement and who is implementing the voluntary Cleanup Action Plan in accordance with such agreement implementing the voluntary Cleanup Action Plan.

§ 9-8 Lender Liability

(a) General Statement. A person who maintains indicia of ownership primarily to protect a security interest in a site, and who does not participate in the management of the site, shall not be considered an owner or operator of that site, nor liable under any pollution control or other environmental protection law, rule or regulation, or otherwise responsible for any environmental contamination or response activity costs.

(b) Definitions and Operative Provisions

(1) “Indicia of Ownership” means evidence of a security interest, evidence of an interest in a security interest, or evidence of an interest in real or personal property securing a loan or other obligation, including any legal or equitable title or deed to real or personal property acquired through or incident to foreclosure or its equivalents. Evidence of such interests include, but are not limited to, mortgages, deeds of trust, liens, surety bonds and guaranties of obligations, title held pursuant to a lease financing transaction in which the lessor does not select initially the leased property (hereinafter “lease financing transaction”), legal or equitable title obtained pursuant to foreclosure, and their equivalents. Evidence of such interests also includes assignments, pledges or other rights to or other forms of encumbrance against property that are held primarily to protect a security interest. A person is not required to hold title or a security interest in order to maintain indicia of ownership.

(i) A “holder” is a person who maintains indicia of ownership primarily to protect a security interest in a site. A holder includes the initial holder (such as a loan originator); any subsequent holder (such as a successor-in-interest or subsequent purchaser of the security interest on the secondary market); a guarantor of an obligation, surety, or any person who holds ownership indicia primarily to protect a security interest; or a receiver or other person who acts on behalf or for the benefit of a holder.

(ii) A “borrower,” “debtor,” or “obligor” is a person who owns, leases, occupies or operates a site encumbered by a security interest.

(2) “Primarily to Protect a Security Interest” means that the holder’s indicia of ownership are held primarily for the purpose of securing payment or performance of an obligation.

(i) “Security Interest” means an interest in a site, created or established for the purpose of securing a loan or other obligation. Security interests include, but are not limited to, mortgages, deeds of trust, liens, security interests under Article 9 of the Uniform Commercial Code, and title pursuant to lease financing transactions.

(ii) “Primarily to Protect a Security Interest” does not include indicia of ownership held primarily for investment purposes, nor ownership indicia held primarily for purposes other than as protection for a security interest. A holder may have other, secondary reasons for maintaining indicia of ownership, but the primary reason why any ownership indicia are held must be as protection for a security interest.

(3) Participation in Management Defined. The term “participating in the management of a site” means that the holder is engaging in acts of site management, as defined herein.

(i) Actions that are Participation in Management. Participating in the management of a site means actual participation by the holder in the management or operational affairs of the site by the holder, and does not include the mere capacity or ability to influence, or the unexercised right to control, site operations. A holder is participating in management, while the borrower is still in possession of the site encumbered by the security interest, only if the holder either:

(A) Exercises decision making control over the borrower’s environmental compliance, such that the holder has undertaken responsibility for the borrower’s hazardous substance or petroleum handling or disposal practices; or

(B) Exercises control at a level comparable to that of a manager of the borrower’s enterprise, such that the holder has assumed or manifested responsibility for the overall management of the enterprise encompassing the day-to-day decision making of the enterprise with respect to (1) environmental compliance or (2) all, or substantially all, of the operational (as opposed to financial or administrative) aspects of the enterprise other than environmental compliance.

(ii) Actions that are Not Participation in Management.

(A) Actions at the Inception of the Loan or Other Transaction. No act or omission prior to the time that indicia of ownership are held primarily to protect a security interest constitutes evidence of participation in management. A prospective holder who undertakes or requires an environmental inspection of the site or to comply or come into compliance (whether prior or subsequent to the time that indicia of ownership are held primarily to protect a security interest) with any applicable law or regulation, is not by such action considered to be participating in the site’s management. These rules do not require a holder to conduct or require an inspection to qualify for the exemption, and the liability of a holder cannot be based on or affected by the holder not conducting or not requiring an inspection.

(B) Loan Policing and Workout. Actions that are consistent with holding ownership indicia primarily to protect a security interest do not constitute participation in management. The authority for the holder to take such actions may, but need not, be contained in contractual or other documents specifying requirements for financial, environmental and other warranties, covenants, conditions, representations or promises from the borrower. Loan policing and workout activities cover and include all activities up to foreclosure and its equivalents.

(I) Policing the security interest or loan. A holder who engages in

policing activities prior to foreclosure will remain within the exemption provided that the holder does not by such actions participate in the management of the site. Such actions include, but are not limited to, requiring the borrower to clean up the site during the term of the security interest; requiring the borrower to comply or come into compliance with applicable federal, state and local environmental and other laws, rules and regulations during the term of the security interest; securing or exercising authority to monitor or inspect the site (including on-site inspections) in which indicia of ownership are maintained, or the borrower's business or financial condition during the term of the security interest; or taking other actions to adequately police the loan or security interest (such as requiring a borrower to comply with any warranties, covenants, conditions, representations or promises from the borrower).

(II) Policing activities also include any activities taken by the holder to require a borrower to comply with a voluntary cleanup action plan, or by agreement with WRD, to complete a voluntary cleanup action plan, provided that the holder does not otherwise participate in the management of the site.

(III) Loan workout. A holder who engages in workout activities prior to foreclosure and its equivalents will remain within the exemption provided that the holder does not by such action participate in the management of the site. For purposes of this rule, "workout" refers to those actions by which a holder, at any time prior to foreclosure and its equivalents, seeks to prevent, cure or mitigate a default by the borrower or obligor, or to preserve, or prevent the diminution of, the value of the security.

(4) Foreclosure on a Site and Post-Foreclosure Activities.

(i) Foreclosure. Indicia of ownership that are held primarily to protect a security interest include legal or equitable title or deed to real or personal property acquired through or incident to foreclosure and its equivalents. "Foreclosure and its equivalents" includes purchase at foreclosure sale; acquisition or assignment of title in lieu of foreclosure; termination of a lease or other repossession; acquisition to a right to title or possession; an agreement in satisfaction of the obligation; or any other formal or informal manner (whether pursuant to law or under warranties, covenants, conditions, representations or promises from the borrower) by which the holder acquires title to or possession of the secured property. The indicia of ownership held after foreclosure continue to be maintained primarily as protection for a security interest, provided that the holder undertakes to sell, release or otherwise divest itself of the site, in a reasonably expeditious manner, using whatever commercially-reasonable means are relevant or appropriate with respect to the site, taking all facts and circumstances into consideration, and provided that the holder did not participate in management prior to foreclosure.

(ii) Holding Foreclosed Property for Disposition and Liquidation. A holder, who did not participate in management prior to foreclosure and its equivalents, may sell, re-lease, liquidate, maintain business activities, wind up operations, undertake any response action under federal, state or local environmental laws, rules or regulations, undertake completion of an approved voluntary cleanup action plan by agreement with WRD, and take measures to preserve, protect or prepare the secured asset prior to sale or other disposition, without voiding these rules.

§ 9-9 Institutional Controls

(a) Purpose. Institutional controls may be proposed by the applicant or WRD as an element of the voluntary Cleanup Action Plan. Institutional controls are measures undertaken to limit or prohibit activities that may interfere with the integrity of a cleanup action or result in exposure to hazardous substances or petroleum at a site. Such measures may be used to assure both the continued protection of human health and the environment and the integrity of a cleanup action in at least the following circumstances:

(1) Where a cleanup action results in residual concentrations of hazardous substances or petroleum which exceed risk-based health standards; or

(2) When WRD determines such controls are necessary to assure the continued protection of human health and the environment or the integrity of the cleanup action.

(b) Prohibition of Use. Institutional controls should not be used as a substitute for cleanup actions that would otherwise be technically possible.

(c) Implementation of Institutional Controls. Any use of institutional controls in a voluntary cleanup agreement, or as part of a voluntary Cleanup Action Plan, must comply with the provisions of Section 7.

§ 9-10 Draft Voluntary Cleanup Agreement. The draft agreement below should be filled out by the applicant and submitted to WRD with the application to participate in the Voluntary Cleanup Program.

Voluntary Cleanup Action Agreement
Between
The Nez Perce Tribe and [Site Owner/Operator]
For [Site]

This Voluntary Cleanup Action Agreement (“Agreement”) is established between the Nez Perce Tribe and the [Site Owner/Operator], collectively referred to as “the Parties.” The Nez Perce Tribe Water Resources Division (“WRD”) enters into this Agreement in furtherance of its statutory and regulatory responsibilities pursuant to Chapter 1 to protect the health and welfare of the residents of the Nez Perce Reservation. It is intended that this Agreement will foster effective and efficient cleanup of contaminated sites through a non-adversarial process.

I. STATEMENT OF PURPOSE

1.1 In entering into this Agreement, the mutual objectives of the Parties are:

a. For [Site Owner/Operator] to work independently, voluntarily, and expeditiously to investigate and, as necessary, stabilize and remediate releases of hazardous waste, hazardous constituents, and hazardous substances at or from the [Site Name] (“the Site”) that may present an unacceptable risk to human health or the environment. The Site is located at [STREET ADDRESS], [NAME] Township, [TOWN], Idaho. [Site Owner/Operator] owns and/or operates the Site.

b. For [Site Owner/Operator] to perform cleanup action in accordance with Chapter 1 *et seq.*, and to provide all information necessary for WRD to make a determination that the site meets cleanup standards by adequately controlling human exposures to contaminants, protecting the environment from significant adverse impacts, and eliminating the migration of contaminated groundwater.

c. For [Site Owner/Operator] to use the protection standards and relevant processes of Chapter 1 *et seq.* as part of satisfying their cleanup action obligations for releases of hazardous substances and/or hazardous constituents.

d. To facilitate [Site Owner/Operator]’s efforts to restore the Site to beneficial uses.

II. DEFINITIONS

2.1 Unless otherwise expressly provided herein, the terms used in this Agreement which are defined Chapter 14-3, will have the definitions given to them in Chapter 14-3.

III. BACKGROUND

3.1 According to [Site Owner/Operator], the Site has been used for [include a description of the processes and products manufactured]. [Site Owner/Operator] is in the process of [include a description of stage of demolition, site investigation, and/or cleanup action(s)].

3.2 [USE IF APPROPRIATE] On (DATE), the U.S. EPA was notified of the release, or threatened release, at the Site.

IV. PROJECT MANAGER

4.1 The Nez Perce Tribe and [Site Owner/Operator] will each designate a Project Manager and notify each other in writing of the Project Manager selected within 14 days of the effective date of this Agreement. Each Project Manager will be responsible for overseeing the implementation of this Agreement. To the maximum extent practicable, all communications between [Site Owner/Operator] and the Nez Perce Tribe, and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to this Agreement, shall be directed through the Project Managers. The Parties will provide, within 14 days, written notice whenever there is a change of Project Manager.

V. WORK TO BE PERFORMED

5.1 [Site Owner/Operator] agrees to perform the actions specified in this section in the manner and by the dates specified herein. [Site Owner/Operator] will perform cleanup action activities, pursuant to this Agreement, in compliance with Chapter 1 *et seq.* and other applicable Federal laws and implementing regulations. To help assure compliance with Chapter 1 *et seq.*, [Site Owner/Operator] will prepare the documents listed in: § 3-3; section 4 or 5, as applicable; and 6, as part of its cleanup action activities.

5.2 **Site Hazard Assessment.** [Site Owner/Operator] will complete activities necessary to identify and define the nature and extent of releases of hazardous waste, hazardous constituents, and hazardous substances at or from the Site pursuant to § 3-3.

5.3 Cleanup Action Plan

5.3.1 [Site Owner/Operator] agrees to submit to WRD for review and approval a Cleanup Action Plan (CAP), as set forth in Chapter 6, to protect human health and the environment from all current and future unacceptable risks due to past releases of hazardous waste, hazardous constituents, and hazardous substances at or from the Site. The Cleanup Action Plan shall contain information sufficient for WRD to determine that:

a. By [DATE], all current human exposures to contamination at or from the Site are under control. That is, for all media known or reasonably suspected to be contaminated with hazardous wastes or hazardous constituents or hazardous substances, for which there are complete pathways between the contamination and human or ecological receptors, significant or unacceptable exposures do not exist.

b. By [DATE], migration of contaminated groundwater at or from the Site is controlled. That is, the migration of all groundwater known or reasonably suspected to be contaminated with hazardous wastes or hazardous constituents or hazardous substances above acceptable levels is controlled to remain within any existing areas of contamination as defined by monitoring

locations designated at the time of the demonstration. In addition, any discharge of groundwater to surface water is either insignificant or shown to be currently meeting acceptable cleanup levels according to an appropriate assessment. Monitoring and measurement data must be collected in the future, as necessary, to verify that migration of any contaminated groundwater is controlled.

5.3.2 If it is determined that cleanup activities are necessary at the Site, [Site Owner/Operator] agrees to identify, screen, and evaluate potential cleanup activity(s) to address for releases, or threatened releases, of hazardous waste, hazardous constituents, and hazardous substances at or from the Site. The CAP must include a discussion of the selected cleanup activities, with a justification for their selection and a brief summary of other alternatives not selected. The CAP shall also include a detailed schedule to construct and implement the final cleanup actions.

5.3.3 WRD may request supplemental information from [Site Owner/Operator] if it determines that the CAP and supporting information do not provide an adequate basis to support the final cleanup actions proposed to meet the requirements of Section 6. The [Site Owner/Operator] will provide such supplemental information in a timely manner as directed in writing by WRD.

5.3.4 If ongoing monitoring and/or operation and maintenance are required after construction of the final cleanup activities, [Site Owner/Operator] will include a Monitoring and/or Operations and Maintenance (“O&M”) Plan in the CAP for approval by WRD.

5.3.5 Any risk assessments conducted by [Site Owner/Operator] must estimate human health and ecological risk under reasonable maximum exposure for both current and reasonably expected future land use scenarios and be performed in accordance with the Nez Perce Tribe’s Risk-Based Cleanup Guidance Section 2-5.

5.3.6 All sampling and analysis conducted under this Agreement will be performed in accordance with a Quality Assurance Project Plan (“QAPP”) prepared in accordance with Chapter 14-4-2, and be sufficient to identify, characterize, and delineate the nature and extent of all releases, and determine the need for and design of any cleanup actions for the Site. [Site Owner/Operator] will notify WRD in writing at least 14 days before beginning each separate phase of fieldwork performed under this Agreement. At the request of WRD, [Site Owner/Operator] will provide or allow WRD staff, or its authorized representative, to take split or duplicate samples of all samples collected by [Site Owner/ Operator] under this Agreement.

5.3.7 Upon WRD approval of the CAP, [Site Owner/Operator] agrees to implement the CAP.

5.3.8 Completion Report [Site Owner/Operator] agrees to submit a final Completion Report, documenting that all work performed was completed in accordance with the approved CAP. The Completion Report should include: (a) documentation of compliance with the cleanup objectives in the approved CAP; and (b) verification of the recording of any restrictive covenant with the (COUNTY NAME) County Register of Deeds.

VI. SITE ACCESS

6.1 The Nez Perce Tribe, and its agents, employees, and representatives are authorized to enter and freely move about all property at the Site for the purposes of, but not limited to, interviewing [Site Owner/Operator] personnel and contractors; inspection of all records, operating logs, files, photographs, documents, contracts, and other writings, including all sampling and monitoring data, that pertain to work undertaken pursuant to this Agreement, and provide copies thereof, if requested by WRD; conducting such tests, sampling, or monitoring as WRD deems necessary; using a camera, sound recording, or other documentary-type equipment; and verifying the reports and data submitted to WRD by [Site Owner/Operator].

VII. REPORTING

7.1 [Site Owner/Operator] agrees to provide quarterly progress reports to WRD Project Manager by the 15th day of the month following each quarter. The report will list the work performed to date, data collected, problems encountered, project schedule, and the percent of the project completed and will attach copies of all data collected during the previous month.

7.2 The Parties will communicate frequently and in good faith to assure successful completion of the requirements of this Agreement and will meet on at least a semi-annual basis to discuss the work proposed and performed under this Agreement.

VIII. RECORD PRESERVATION

8.1 [Site Owner/Operator] will retain, during the pendency of this Agreement and for at least six (6) years after termination of the entire Agreement, all data and all final documents now in its possession or control or which come into its possession or control which relate to this Agreement or to waste disposal activities at the Site. [Site Owner/Operator] will notify WRD in writing 90 days before destroying any such records, and provide WRD the opportunity to take possession or obtain copies of any such non-privileged documents. [Site Owner/Operator]'s notice will refer to the effective date and name of this Agreement and will be addressed to:

Water Resources
Nez Perce Tribe
PO Box 305
Lapwai, ID 83540

[Site Owner/Operator] will promptly provide WRD's Project Manager a copy of any such notice.

8.2 [Site Owner/Operator] further agrees that within 30 days after retaining or employing any agent, consultant, or contractor ("Agents") to carry out the terms of this Agreement, [Site Owner/Operator] will enter into an agreement with the Agents to provide [Site Owner/Operator] a copy of all data and final non-privileged documents produced under this Agreement.

8.3 [Site Owner/Operator] agrees that it will not assert any claim of privilege for any data developed to prepare any reports or conduct any investigations or other actions taken under the Agreement.

IX. MODIFICATION, TERMINATION, AND SATISFACTION

9.1 This Agreement may be modified by written, mutual agreement of the Parties. The Project Managers may agree in writing to extend any deadline in this Agreement by mutual written agreement.

9.2 Either Party may unilaterally terminate this Agreement upon written notice to the other Party.

9.3 After completion of and based on the results of the final Completion Report and other relevant information, [Site Owner/Operator] may submit a written request to WRD if [Site Owner/Operator] wishes to terminate cleanup action for the Site or a portion of the Site. [Site Owner/Operator] must demonstrate that there have been no releases or threatened releases of hazardous waste, hazardous constituents, or hazardous substances at or from the Site or portion of the Site or that the Site or portion of the Site has been cleaned up to applicable default cleanup standards (or site-specific standards created pursuant to Chapter 4) and, therefore, poses no threat to public health, safety, welfare, or the environment.

9.4 The provisions of this Agreement will be satisfied when the [Site Owner/Operator] has achieved the cleanup action cleanup objectives and this Agreement will terminate upon [Site Owner/Operator]'s and WRD's execution of an "Acknowledgment of Termination and Agreement on Record Preservation and Reservation of Rights" ("Acknowledgment"). [Site Owner/Operator]'s execution of the Acknowledgment will affirm its continuing obligation to preserve all records as required by Section VIII, to maintain any necessary land or resource use restrictions, perform operation and maintenance and long-term monitoring activities, establish and maintain financial assurance and permanent markers or other long-term measures, and to recognize the Parties' reservation of rights as required in Section X.

9.5 A determination to terminate cleanup action shall not preclude WRD from requiring further cleanup action at a later date if new information or subsequent analysis indicates that a release or threat of a release of a hazardous waste, hazardous constituents, or hazardous substance at or from the Site exists which may pose a threat to the public health, safety, welfare, or the environment, or if there is a change in the use of any portion of the Site such that the cleanup criteria upon which the cleanup action is based are no longer applicable.

X. RESERVATION OF RIGHTS

10.1 The Parties reserve any and all rights, remedies, authorities, or defenses that they respectively have under law. Nothing in this Agreement limits or affects the authority or ability of either Party to take any action authorized by law. Nothing in this Agreement creates any legal rights, claims, or defenses in either Party or by or for any Third Party.

Nothing in this Agreement relieves [Site Owner/Operator] from complying with applicable laws of any other jurisdiction. However, the Nez Perce Tribe agrees to work in good faith with the federal government in order to minimize duplicative regulation of cleanup sites to the best of its ability.

10.2 This Agreement does not limit or affect the rights of the Parties against any Third Party, nor does it limit the rights of Third Parties.

XI. EFFECTIVE DATE

This Agreement is effective on the date the last Party signs.

DATE: _____ BY: _____

*, President [Site Owner/Operator]

DATE: _____ BY: _____

Nez Perce Tribe