



CONFEDERATED TRIBES  
of the  
*Umatilla Indian Reservation*

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November 13, 1997

Toni Davidson  
U.S. Fish and Wildlife Service  
11103 E. Montgomery Drive, Suite 2  
Spokane, Washington 99206

**RECEIVED**  
FEB 06 2008

**EDMC**

Subject: Comments on Hanford 1100 Area PAS, Draft 2

Dear Ms. Davidson:

Hanford has a host of governmental and citizen watchdogs. Dogs act on instinct and an ability to sense fear. In the Hanford context, the watchdogs jump on any project that displays muddled reasoning and unclear analysis. They do this because such projects have the greatest chances of containing simple errors or intentional deception. I know what I am talking about. I am one of those watchdogs.

The problem with the current outline for the PAS is its chronic inability to get to the point. Fully 90 % of the sites being analyzed are procedural deadwood. At least 38 of the 42 sites can be easily excluded from detailed analysis on the basis that they clearly fail to meet one of the five criteria. Rather than disposing of these procedural and analytical dead-ends expeditiously, the current outline drags these waste sites through eighty pages of analysis before reaching any conclusions. In the meantime, much information is presented that tends to give the impression that there are serious issues at stake when, in fact, there are none.

Such an outline is a waste of the reader's time. It will also generate suspicion and instinctive opposition to our recommended course of action, deriving from the instinctive public distrust of any decision that reflects muddled reasoning. By failing to present our reasoning in an clear and concise manner, this outline will end up generating opposition to our recommended course of action.

To your credit, you sought and received approval for this outline before beginning the project. Moreover, your outline is designed to be procedurally bulletproof. It includes a section for every topic that the regulations even hint should be considered in a PAS. In so doing, this outline assures that the PAS would withstand a legal challenge.

Yet, we can aspire to something better than that. After all, which is better, to have a really great moat, or to not need one? If we write a clear, concise PAS, where the language and outline is publicly accessible, and our reasoning unassailable, we will do better than blunt legal challenges. We will inspire confidence in the NRTC and educate the public about Hanford decision making.

With some effort, the NRTC could fill in the remaining gaps in the outline and publish the PAS in its current form. For the same amount of effort, however, the NRTC could produce a PAS that will be significantly better received. Much of the raw material is already present in the Draft 2 PAS, it simply has to be reorganized.

Your greatest service to the NRTC has been the hard work that has gone into drafting section II.A of the PAS. This detailed, site-by-site catalog of what was discovered and done during remediation is an invaluable tool. It also constitutes most of the analysis we need. On the basis of this text, our site visits, the photos we have taken, and EPA's answers to a few outstanding questions, we could swiftly dispose of at least 38, and possibly 41 or 42 of the 42 sites. All that would be needed would be to discuss how each site fails to qualify for one or another of the five criteria. Once that task had been completed, no further analysis would be necessary.

In order to do this, we need to vastly improve the introduction, by adding substantially more discussion of the procedural context and basis for the five questions. Judging from your response, in Draft 2, to my comments on Draft 1, I must conclude that you are uncomfortable drafting such text. Sadly, section I.A & B is the weakest portion of the Draft 2, containing serious grammatical errors, very confusing text, and giving the reader little help in understanding the document that is to follow. Ultimately, it may be most appropriate for the NRTC to draft this section itself, since the NRTC should have the best idea of what procedural and historical matters will be important for understanding the 1100 PAS they intend to produce.

I understand that the NRTC 1100 Area PAS Working Group is putting together some guidance on how they want to proceed. I am confident that, working with you, we can produce a strong PAS. We just have quite a bit of work left to do.

Wishing you well,



Christopher Burford

Policy Analyst

Voting Representative to the Hanford Natural Resource Trustee Council

**COMMENTS ON WORKING DRAFT 1**  
**HANFORD 1100 AREA PREASSESSMENT SCREEN**  
Christopher Burford, Esq., Policy Analyst  
Confederated Tribes of the Umatilla Indian Reservation (CTUIR)

**INTRODUCTION**

The following are my comments on the working draft 1 Hanford 1100 Area Preassessment Screen. I work through the document section by section. I apologize that I am submitting these a week late, and I realize that this creates inconvenience for you, and may limit the degree to which you can respond to my comments. Finally, I make some fairly sweeping statements in portions of my comments. Please understand that I know we are under a deadline, and the USF&WS, in particular, has very little flexibility in its time schedule. In the interest of effective communication I have followed the rule that "You can't get what you want if you don't ask for it." I understand, nevertheless, that there may be compelling reasons why we can't follow some of my suggestions. My comments are part of a dialog; not a demand letter.

As we all too well know, the documentation and history of the 1100 Area has been rich in the accumulation of facts and poor in the reasoned discussion of their importance. Our document must be clear to relatively uninformed readers, so that they will be confident that what we are doing makes sense, and that our conclusions are well-founded. Our goal must be to speak clearly about a matter that all other governmental entities have made a confusing mess.

**STRUCTURE OF THE DOCUMENT**

I find the organization to be cumbersome and non-intuitive. In addition, the public will not be able to meaningfully comment on the document because they lack enough background information to understand the document's context. It seems to me that the following outline would be an improvement:

- I. Introduction
  - A. Explanation of the CERCLA Natural Resource Restoration Process
    - a. Purpose of Process
    - b. Basic Procedural components of process
    - c. relationship to CERCLA remediation process
    - d. role of natural resource trustees
  - B. Description of the Hanford Natural Resource Trustee Council
  - C. History of 1100 Area
    - a. Operations
    - b. Remediation

D. Purpose of the 1100 Area PAS

- a. scope
- b. the five questions

II. 1100 - EM- 1 Operable Unit Waste Sites

[Discuss each site in order, give background info on each site and then ask and answer each of the five questions until you reach a conclusion about whether any site requires an NRDA]

III. 1100 - EM - 2 Operable Unit Waste Sites

[Same as above]

IV. 1100 - EM - 3 Operable Unit Waste Sites

[Same as above]

V. 1100-IU-I (ALE) Operable Unit Waste Sites

[Same as above]

VI. Consideration of Cumulative impact questions [If necessary]

VII. Conclusion -- next steps

It seems to me that this approach is much more accessible to the reader. Each geographic unit is handled in one place in the document, avoiding the need to flip back and forth and get confused. The arguments are concise and all in one place, thus placing them in the best possible light. Fear that the analysis might be piecemealed would be addressed by chapter VI, if it was felt necessary to have this chapter.

**NOTES AND CONCLUSIONS FROM CTUIR TOUR OF WASTE SITES,  
SEPTEMBER 3, 1997**

Last Wednesday, I toured the entire 1100 - EM - 1, - 2, and - 3 operable units, with the exception of the Horn Rapids Landfill portion of 1100 - EM - 1. I was accompanied by my colleague, Stuart Harris, CTUIR - SSRP Natural/Cultural Resources Coordinator. Dave Einan of EPA guided us on this tour.

Stuart and I viewed each waste site within these operable units. We photographed each of these and made notes regarding the natural resources present. We would be happy to make these photographs available for use in the 1100 PAS. Indeed, I feel each waste site discussion should include a photograph of the site. The following are our conclusions regarding the natural resource damage potential of these sites.

Do not mistake these notes for the type of text I would like to see in sections II - V of the

outline. Nevertheless, something like this, incorporating this type of analysis, preceded by the kind of information contained in the current draft's sections III.A.2 and III.B, and making reference to the five questions, is the format that I believe would work best.

## **1100 - EM - 1 Operable Unit Waste Sites**

### **1100-1 Battery Acid Pit**

This very small (1.8 m X 1.8 m) pit was located between a railroad track and a parking lot. It is now almost entirely covered by parking lot. Baseline condition for this site -- the condition the natural resources would have been in had the release not occurred -- is a parking lot, devoid of natural resources. According to the existing record, the only natural resources injured by these releases were geologic. The sand lining of the pit was periodically removed. This sand, however was replaced, so this site is just as capable of supporting a parking lot as it was before the releases. As far as this particular waste site is concerned, there have been no natural resource injuries, or they have been fully mitigated by the remedial action.

A remaining question is what happened to the contaminated sand. No one knows. It could be anywhere (Horn rapids landfill?). There may be a mystery dump site somewhere contaminated with this material. We do not know its location, however. Moreover, I imagine we will be unlikely to find that location at a regulatorily-defined reasonable cost. Conclusion: we cannot pursue a damage assessment for this site.

### **1100-2 Paint and Solvent Pit**

The conclusion of the EPA and DOE was that no hazardous substance release ever occurred at this site. Releases were rumored in site oral histories. No documentation supported these allegations. Investigations at the sites apparently discovered no hazardous substances above regulatory limits (Correct me if I'm wrong on this -- I couldn't be sure because Table Two did not indicate the regulatory limits.). It was concluded that no release had occurred. Therefore no remedial action was taken. We have a right to question this if there appears to be a problem with EPA's decision making, but otherwise we have a right to rely upon their conclusions.

Moreover, baseline for this site is a former borrow pit filled with construction debris and capped. That is also the current condition of this site. This site currently sustains almost no biological resources. A small amount of russian thistle and cheatgrass was present. The ground was at least 40% bare.

By contrast, a remnant old-growth sage stand was about 100 yards to the west, across the tracks, toward 1100-3, the Antifreeze and Degreaser Pit. This area contained no young sage, and the understory was mostly cheatgrass, although yarrow was present. Moreover, the area

had been highly disturbed by a variety of heavy vehicles. Nevertheless, cryptogam was well established. The big sage plants ranged from five to six feet high and occurred about every ten feet or so. Rabbit runways and scat were ubiquitous. Small rodent holes and beetle holes were common, as were large anthills. We also found the a bed of a large to medium sized mammal, perhaps a coyote. Unfortunately, the disturbance that has damaged this place and has obliterated what must have been similar habitat nearby was not caused by documented hazardous substance releases. Conclusions: There is nothing we can do as a council to restore 1100-2 or to restore and protect these resources.

#### 1100-3 Antifreeze and Degreaser Pit

The story here is the same as at the neighboring 1100-2 Paint and Solvent Pit. Releases were rumored but not documented. A thorough investigation revealed nothing above regulatory limits. Baseline is a borrow pit shallowly filled with construction debris and capped. That is exactly what it is today. Slightly more vegetation was present here than at 1100-2. Many very large anthills were present, as was a variety of scat, some coyote-sized. Conclusion: no release occurred. We cannot answer question one with a "yes," so we cannot do an NRDA.

#### 1100-4 Antifreeze Tank

There is very little evidence that a release ever occurred from this tank. No remediation was ever taken. In addition, the tank was located inside a building (the 1171 building) that was surrounded by a huge parking lot. No biological resources could have been injured by an possible release. The only resources that could have been injured would have been geologic (soil). This resource continues to do an admirable job of providing the only service it has provided for decades -- holding up the 1171 building. Conclusion: If a release occurred, natural resources were not adversely affected by the release.

#### UN-1100-6 Discolored Soil Site

A release was found and remediated. The actual site is quite small, although 70 cubic meters of soil was removed from here. The removed material was replaced with a clean sandy-looking material. The site is currently partially covered with vegetation, but only by disturbed-site colonizing plants, mostly exotic. The plants are predominantly cheatgrass and Russian thistle, although a small amount of young rabbitbrush is also present. The adjacent rail line is apparently expanding. Earth moving has been taking place, and a new dirt road is established on top of the southeastern part of the site.

The surrounding land is highly disturbed. Cheatgrass dominates the understory. The land contains denser and larger stands of rabbitbrush, and a small amount of small *artemisia tridentata* plants. This surrounding land indicates this site's baseline -- the condition it would

have been in had the release not occurred. That condition is simply that of a disturbed site that has been experiencing recolonization for a longer period of time -- essentially a more mature disturbed site. Also the rail expansion, being unrelated to the release, is apparently part of the baseline.

While geologic material (soil) was injured by the release, apparently any associated damages have been mitigated by the remedial action, which apparently acquired equivalent geologic resources and placed them on the site. Conclusion: The only injury has been that the site now is covered by less mature disturbed-site vegetation than it would have covered it otherwise. This is hardly a significant enough injury to sustain a regulatorily-defined reasonable damage assessment.

### Ephemeral Pool

The Ephemeral Pool was a man-made structure. It was a primitive stormwater discharge collection structure, located along the west side of the 1171 building parking lot between the parking lot and the rail road tracks. As designed, we can assume it supported virtually no biological resources, except, perhaps, for some Russian thistle. As a result, baseline is a non-vegetated man made structure. No plant or terrestrial animal resources would have been injured by the releases, although subsurface soil resource was contaminated. Nevertheless, the remediation of this site required the removal of 185 cubic meters of subsoil, which was replaced with clean fill. Conclusion: as with the Discolored Soil Site we might consider that remediation had mitigated whatever natural resource damage we might have been able to claim.

### 1100 - EM - 2 Operable Unit Waste Sites

#### Tar Flow Site and the Stained Soil Site

The 1100 EM - 2 Operable Unit is located on top of an old stabilized dune that has been significantly altered by earth moving activity, including the dumping of small cobbles on top of the dune sands. The dune apparently has a very different shape today than it had originally. Perhaps half of the material is foreign. It is apparently the largest landform for several miles in any direction.

Ironically, this highly modified dune contains better natural resources than any of the waste sites we visited. Remarkably, some native grass is still present (Indian ricegrass appears in several spots). Rabbitbrush of all sizes is very common, some of it quite large and relatively dense. Small rodent and beetle holes are common, as were tracks of medium-sized mammals. A well-used wildlife pathway crosses the site. A variety of scat was present, around the site, including large amounts of rabbit scat. No *artemisia tridentata* appear anywhere on this site.

Two waste sites were detected in the 1100 EM - 2 Operable Unit, the Stained Sands area and the Tar Flow. The only apparent natural resource losses were associated with remediation. Both sites were remediated by the removal of the contaminated soils which were not replaced. As a result, 1,224 cubic meters was removed from the Tar Flow site and 41 cubic meters was removed from the Stained Sands Area, making a total loss of 1,265 cubic meters of soil. In addition, we might assume that these releases destroyed whatever vegetation was in place at the locations where the releases occurred. It would be difficult to estimate what that vegetation was, other than to assume it was the same sort of disturbed site vegetation otherwise present here.

It may also be that the 70 cubic meters of soil used to restore the 1100-6 Discolored Soil Site was taken from this dune. Likewise sand and soil used to remediate the Battery Acid Pit and the Ephemeral Pool may have come from here. If so, this is an additional natural resource loss. On the other hand, the remediation of the Ephemeral Pool required the creation of a new storm water discharge collection area, which consists of an area excavated out of the 1171 building parking lot. This excavation must have removed hundreds or thousands of cubic meters of material, much of which may have been deposited on the 1100 - EM - 2 dune. Is this a geologic natural resource loss, gain, or zero sum equation?

Conclusion: before we know what to do about these sites, we will need to figure out if the geologic resource loss is a significant issue. I suspect that even though the volumes are large, this does not represent a significant natural resource damage to any particular trustee, and that, therefore, a regulatorily-defined reasonable NRDA for these resources could not be sustained. My estimate is also that the habitat loss is negligible. Nevertheless, we should find some way to support these hunches and document them.

### **1100 - EM - 3 Operable Unit Waste Sites**

#### **1240 French Drain, 1240 Suspect Spill**

Both of these sites suffered releases that were remediated by the removal of contaminated subsoil and its replacement with clean subsoil. 62 cubic meters was removed and replaced at the 1240 French Drain, and 54 cubic meters was removed and replaced from the 1240 Suspect Spill site. Both sites are located in a gravel parking area around an industrial building. No biological resources were present at the time of release. Therefore, baseline is a clean parking lot with no plants or animals using the site. That is what is present today.

The only natural resources that were injured by the release were geologic (subsoil). These were removed and replaced. Conclusion: remediation fully restored the injured natural resources.

#### **1262 Solvent Tanks**

The suspect tanks were removed from the 1262 Solvent Tank site, but no contaminants were found in the tanks or at the site. EPA concluded that no release occurred. Conclusion: we are justified in relying upon EPA's conclusion without further discussion.

## **COMMENTS ON THE TEXT OF WORKING DRAFT 1**

### **My comments on Section I. INTRODUCTION**

The listing of the five questions is good. You should go ahead and tell the reader what your answer is to each of these questions, and indicate which pages of the text address each question.

It seems to me that this section is desperately lacking in information. I would recommend adding at least some of the sections I outlined above. I also think that the material in the current sections II and IV should appear in the introduction.

### **My comments on Section II. SCOPE OF 1100 AREA PREASSESSMENT SCREEN**

This section is really just part of the introduction. I recommend that it not receive a separate heading, except perhaps as a subunit of the Introduction discussion.

### **My comments on Section III. SITE HISTORY AND RELEVANT OPERATION**

At least by the beginning of this section, and possibly within the introduction, the PAS should contain several maps. I recommend a Hanford Site map, the satellite photo, and a map showing 1100-EM 1, 2, and 3 and their waste sites.

Part A.1 belongs in the introduction section.

I am not sure why the material in Part A.2 is separate from the information provided in Part B. When touring OUs this week, I found I had to keep flipping back and forth between these parts, and the information in Part B was more directly useful. Perhaps a boiled down version of the Part A.2 information should appear in the introduction, and the rest of the Part A.2 discussion should be integrated with the Part B discussion. This makes sense, since both parts address the questions of what releases occurred and what was done about them.

Part B. of this section (pages 18-52) is very valuable. Simply to have a concise but thorough review of what was and was not done at each operable unit is a great benefit. When I toured the 1100-EM-1, 2, and 3 OUs this week, I found the information provided on pages 19 - 31 to be extremely valuable. Good job.

One weakness is that you state that certain contaminants were found in some places, but don't say whether the contaminants are actually significant. True, the question of significance really goes to answer the questions two and three (regarding whether the releases actually did any harm). If you tell people about contaminants, though, their assumption is that they did harm unless they are told otherwise. In most of these cases, the contaminants apparently did no harm. Some mechanism should be in place to let readers know this, if only a reminder to refer to the next major section to view a discussion of the significance of these releases.

Part C. Why isn't this an appendix? Moreover, you can't simply list the contaminants found without immediately indicating which ones were actually above regulatory limits, and what was done about them. Anything less just creates confusion. This is a comment that applies to Table Two, as well. You can't just list the level of contaminant found. That is useless information to 99.999 % of the readers, including me. You have to also indicate whether the detected amount exceeds the reportable quantity, ARAR, or whatever relevant regulatory limit is applicable.

#### **My comments on Section IV. DAMAGES EXCLUDED . . .**

This section should be a minor sub-part of the introduction. Also, at item two on page 57, you misstated the test. Liability is excluded when the release and all resulting damages occurred wholly before December 11, 1980. The way you have stated it, damages occurring post-1980 would be excluded if the release occurred before 1980. That is not an accurate statement of the law (see In RE: Acushnet Harbor, and the last sentence of CERCLA Sec. 9607(f)(1)).