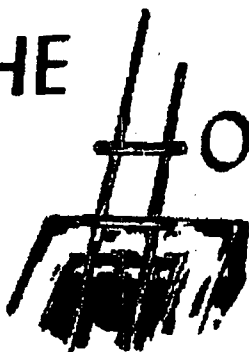


THE HOPI TRIBE



Benjamin H. Nuvamsa
CHAIRMAN

VICE-CHAIRMAN

March 27, 2008

VIA FIRST CLASS MAIL

Mr. Jerry Gidner
Director, Bureau of Indian Affairs
1849 C Street, NW
MS-4141-MIB
Washington, DC 20240

Re: Health and Environmental Impacts of Uranium Contamination in the Navajo Nation – Five Year Plan

Dear Mr. Gidner:

We appreciate this opportunity to provide comments on behalf of the Hopi Tribe to the collective Five-Year Plan submitted to the House Committee on Oversight and Government Reform on March 3, 2008 ("Five-Year Plan" or "Plan"). We understand that BIA is the agency responsible for the portions of the Five-Year Plan pertaining to the cleanup of the Tuba City Dump. Accordingly, we have limited our comments generally to those portions of the Five-Year Plan.

Although the Plan begins to address the many environmental and public health concerns that will require federal involvement, it falls far short of adequately addressing such concerns and gives no real indication of when those concerns will be completely addressed nor the cost of doing so. The Five-Year Plan discusses planned efforts for site investigation and consideration of possible interim remediation without clearly stating the regulatory mandates for site closure and remediation or recognizing the 13 year history of efforts expended by the federal government, the Hopi Tribe and the Navajo Nation to accomplish cleanup. The Hopi Tribe urges that the Five Year Plan emphasize the critical need to rapidly implement groundwater corrective action and complete final closure of the Tuba City Dump.

As you are aware, the Hopi Tribe has been working with the Navajo Nation, BIA, and EPA for over ten years to find an acceptable method for closing the Tuba City Dump and addressing its attendant risks. The Hopi Tribe, in solidarity with the Navajo Nation, strongly supports clean closure of the Tuba City Dump and believes that clean closure should be completed as quickly as possible in order to eliminate any potential threat of contaminated groundwater adversely affecting the health, economy, or cultural resources of the Hopi Tribe. Additionally, investigations at the Tuba City Dump have indicated the presence of an imminent and substantial threat to human health and the environment – the plume of contaminated groundwater is migrating towards and is closely approaching Hopi drinking water supply wells and drinking water and irrigation springs. The Hopi Tribe has installed 32 groundwater monitor wells during its investigations, the results of which clearly demonstrate the need for groundwater corrective

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action. The contaminant concentration of uranium in the closest groundwater monitor well downgradient of the Tuba City Dump is approximately 9 times greater than the federal maximum contaminant level ("MCL") for drinking water. Moreover, as discussed in more detail in these comments, groundwater corrective action is a clear and critical requirement under applicable law governing closure of municipal solid waste landfills. As such, the Hopi Tribe again urges that timely action be taken to address this threat and supports rapid implementation of an interim remedial measure to contain and remediate the contaminated groundwater plume.

Assess and Cleanup The Tuba City Dump – Page 8

This section of the Five-Year Plan states that the "federal agencies will work together with the Navajo and Hopi tribes in early 2008 to assess *whether interim actions are needed* prior to selection of a final remedy for the site. ... *If an imminent threat to water supplies is identified*, the agencies will determine the most appropriate authorities to achieve an interim remedy." (emphasis added). The Hopi Tribe is deeply disappointed by the agencies' refusal to recognize that an imminent threat to Hopi water supplies currently exists.

EPA has broadly interpreted the phrase "imminent" to mean "that the present conditions indicate that there may be a future risk to health or the environment even though the harm may not be realized for years. It is not necessary for the endangerment to be immediate or tantamount to an emergency." EPA, *Guidance on the Use of Section 7003 of RCRA*, October 1997, available at <http://www.epa.gov/compliance/resources/policies/cleanup/rcra/971020.pdf> (citations omitted) (discussing similar standard in the Resource Conservation and Recovery Act allowing EPA to bring action where conditions present imminent and substantial endangerment). To be sure, EPA has found an "imminent threat" under much less dire circumstances than those present at the Tuba City Dump. The Hopi Tribe understands that limited, additional studies may be necessary to design an interim remedial measure, but no more studies are required to determine that an imminent threat exists. The Hopi Tribe's consultant, Daniel B. Stephens & Associates, Inc. ("DBS&A") has conducted over ten years of technical investigation of the Tuba City Dump and has compiled extensive water quality documentation and geochemical information, including site characterization studies, all of which has been completed under a series of work plans authorized and funded by BIA. Based on this information, the Hopi Tribe believes unequivocally that rapid interim action is required for remedial groundwater containment and cleanup.

Estimated 5-Year Timeline – Pages 9-10

BIA's Estimated 5-Year Timeline does not clearly indicate the types of interim remedial measures that will be conducted in 2008. "Conduct interim remedial measures" could simply mean installation of a fence and removal of surface garbage, which is exactly what BIA indicates later on in the Plan. The Hopi Tribe has already indicated that interim remedial measures to

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contain and treat the groundwater contamination are necessary and asks that the Estimated 5-Year Timeline indicate when such measures will begin.

As stated above, a substantial amount of site investigation and site characterization has already been conducted at the Tuba City Dump. Accordingly, the Hopi Tribe believes two years is far too long to devote to remedial investigation, selection of a final remedy and a closure plan. The Hopi Tribe requests that these activities be performed more expeditiously. Relatedly, the Five-Year Plan does not indicate when BIA plans to achieve clean closure and remediation of the Tuba City Dump and requests an estimated completion date for those events.

Contaminated Water Sources – Page 16

The Hopi Tribe believes that the Plan should recognize the importance of groundwater as the sole source of drinking water and irrigation supplies in the Villages of Moencopi (Lower) and Upper Moenkopi. Groundwater supplies are derived from the N-aquifer, which has a shallow water table at approximately 10 to 20 feet below ground surface in the area of the Tuba City Dump. The Village of Moencopi (Lower) obtains its drinking water from two springs, one of which feeds a small community water system with four outdoor taps in the village. The Village of Upper Moenkopi obtains its water supply from three wells, ranging in depth from 135 to 280 feet. Several springs are also used for irrigation in areas downgradient of the groundwater contaminant plume. The groundwater contaminant plume has migrated 4,000 feet away from the Tuba City Dump to within 2,500 feet of both the springs and supply wells that provide the only drinking water source. The contaminated groundwater plume emanating from the Tuba City Dump threatens the villagers' source water wells and springs. Yet, there is no mention of the Hopi villages' contaminated drinking water aquifer in this section of the Five-Year Plan.

Cleanup of Tuba City Dump – Page 31

Background

The Background section states that the "Tuba City Dump (site) was used for more than 50 years as an open, uncontrolled dump receiving solid waste from local communities. For some years, the BIA maintained the dump by covering trash and burying waste." This does not accurately describe BIA's historical role at this location. BIA was the landfill operator, not only the part-time maintenance provider for an uncontrolled open dump:

- BIA set aside a 10.88 acre area for waste disposal followed by a 20 acre area when additional disposal capacity was needed;

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- BIA excavated trenches for waste disposal and periodically covered the waste with soil (although dumping outside the trenches was widespread and burning of exposed waste was common);
- BIA stated its responsibility for completing final closure of the Tuba City Dump in accordance with regulatory requirements and deadlines in a Memorandum from the Deputy Commissioner of Indian Affairs, dated August 7, 1997 (attached).

The Plan needs to reflect BIA's clear responsibility for the Tuba City Dump.

In addition to the constituents identified in the Five-Year Plan, which exceed EPA MCLs, the groundwater and geochemical investigations conducted at the Tuba City Dump have also identified exceedances of secondary drinking water standards, including those for total dissolved solids ("TDS"), sulfate, and chloride. The Plan should reflect this.

This section of the Five-Year Plan also mentions a "U.S. Geological Survey ("USGS") study dated October 2006, [which] suggest that the radionuclides in the shallow groundwater may be from a different formation from the native rock at the site." To be clear, the Navajo Sandstone and Kayenta Formation underlying the Tuba City Dump and comprising the N-aquifer are not host rocks for naturally occurring uranium. No uranium mining occurred in the immediate area. The nearby Tuba City uranium mill processed ore that was trucked from mines in other geologic formations. Studies completed for BIA by USGS and Walker & Associates, Inc. and by DBS&A have all reached the same conclusion: the elevated contaminants found in the groundwater at the Tuba City Dump are not naturally occurring and are associated with waste materials related to uranium mining and milling and other waste material in the Dump. The Plan needs to reflect the results of these studies.

Action Plan - Overview

The Plan states that the "five federal agencies will work together with the Navajo and Hopi tribes in early 2008 to assess whether interim actions are needed prior to selection of a final remedy for the site." The Hopi Tribe has actively sought sound implementation of Executive Order No. 13175, 65 Fed. Reg. 67,249 (Nov. 6, 2000), governing the government's responsibility to engage in proper and adequate tribal consultation in connection with its trust responsibilities. Despite views expressed repeatedly by both the Hopi Tribe and Navajo Nation to the contrary, BIA is proceeding with studies to determine "whether interim actions are needed." Additionally, even if BIA recognizes, as we hope it will, the need to perform expeditious interim actions, the suggested interim actions being discussed would involve measures such as groundwater pumping to control contaminant migration near the supply wells and springs that are used for water supplies in the villages. However, such interim measures would not fully address groundwater corrective action and are insufficient to provide complete groundwater cleanup to meet regulatory standards and

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restore the Hopi water resources. The Hopi Tribe reiterates the federal government's responsibility to adequately consult with the tribes in developing closure and cleanup plans for the Tuba City Dump and notes that this responsibility should extend as well to the government's contractors performing such work.

Task 1: RI/FS Work Plan

This portion of the Plan indicates that the "development of the RI/FS study may identify other parties responsible for site closure." The Hopi Tribe is aware that BIA has conducted a potentially responsible party ("PRP") investigation, but has not yet shared the results of this investigation with the tribes. The Hopi Tribe requests that BIA do so.

Task 2: Limited Additional Studies

As the Hopi Tribe has stated repeatedly, it does not agree that limited additional studies are necessary to "assess and evaluate the potential imminent threat or risk to public health or the environment posed by the dump."

The Five-Year Plan notes that "wells are proposed to assess water quality migrating from potential up-gradient sources northeast of the dump and in Pasture Canyon." The primary potential additional sources being considered are located on the Navajo Nation along the Highway 160 corridor where waste dumping activity may have occurred. However, these possible additional contaminant sources should not obscure the clear evidence of groundwater contamination at and downgradient of the Tuba City Dump. The suspected sources are located generally north and cross-gradient of the Dump, not upgradient of the Dump's disposal cells. Monitor wells that test water quality immediately upgradient, beneath disposal cells, and downgradient of the disposal cells indicate high levels of numerous contaminants downgradient of the Dump, including concentrations above EPA MCLs for uranium, arsenic, lead, chromium, nitrate, selenium, radium-226/228, and gross alpha activity. In particular, uranium is present in groundwater downgradient of the Tuba City Dump at concentrations significantly greater than those detected upgradient. These contaminant impacts at the Dump are cross-gradient and unrelated to the suspected areas of additional waste sources. The groundwater contaminants at the Dump clearly result from leaching of wastes from the Dump into the shallow N-aquifer groundwater at the base of the waste cells.

Task 3 - Interim Remedial Measures

This section makes no mention of the necessary groundwater containment and remediation system. This omission is contrary to what the agencies and tribes have been discussing for the past several months. The Hopi Tribe requests that the Plan adequately address this much-needed interim remedial measure.

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Task 5 - RI/FS

The Plan indicates that a "baseline risk assessment would be performed as part of the RI/FS, if necessary." The Hopi Tribe and the Navajo Nation have asked for a risk assessment and/or a health effects study from several government agencies. The Hopi Tribe formally requests that a risk assessment and/or a health effects study be performed. While the risk assessment should proceed, this should in no way impede or delay expeditious progress on the RI/FS and interim corrective actions. The need and regulatory requirement for landfill closure and corrective action is clear apart from the health effects risk assessment.

Task 6 - Stakeholder and Other Government Agency Participation

The Hopi Tribe reiterates the importance of assuring adequate tribal consultation, including consulting with the most important stakeholders -- the Villages of Upper Moenkopi and Moenkopi (Lower).

Task 7 - Remedy Selection and Closure Plan Design

This section of the Plan states that the selected remedy that is the outcome of the CERCLA alternatives analysis "may include groundwater remediation and site closure." The Hopi Tribe believes strongly that groundwater remediation and site closure are essential elements of the remedy that must be implemented at the Tuba City Dump. The CERCLA RI/FS process must address all applicable or relevant and appropriate requirements ("ARARs"). Although the ARARs are yet to be formalized under the RI/FS process, two ARARs that will clearly apply to the Tuba City Dump are:

1. Resource Conservation and Recovery Act ("RCRA") Subtitle D provisions governing closure and corrective action at municipal solid waste landfills; and
2. Safe Drinking Water Act ("SDWA") provisions governing compliance with the MCLs in aquifers used as a drinking water source.

RCRA Subtitle D requires that groundwater corrective action be implemented within a reasonable period of time. See 40 C.F.R. §§ 258.56 and 258.57. The groundwater remedy is considered to be complete when all points in the contaminant plume downgradient of the waste management unit boundary meet the groundwater protection standards. See 40 C.F.R. §§ 258.58(e) and 258.51(a). The groundwater protection standards under RCRA Subtitle D are established by the SDWA MCLs. See 40 C.F.R. § 258.55(h). Therefore, groundwater corrective action is a requirement that should proceed as an urgent priority regardless of whether BIA agrees that the groundwater contamination poses an "imminent threat."

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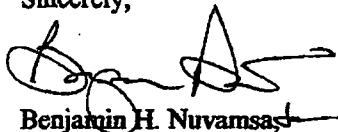
Task 8 - Site Closure

As this Part of the Plan recognizes, next to no cost information has been included regarding closure and cleanup of the Tuba City Dump. Planning for funding to complete closure and groundwater corrective action is noticeably absent. BIA's inability to establish sufficient closure funding to meet its regulatory responsibility as the Dump's operator has hampered progress for many years. Through BIA funding, DBS&A first developed closure cost estimates in 1999. At BIA's request, DBS&A updated the closure cost estimate in the *Preliminary Assessment and Closure Cost Estimate, Tuba City Landfill*, dated August 18, 2006. This cost was updated at the end of 2007 and the current expected cost for final closure of the Dump is estimated at approximately \$33.5 million. This cost estimate includes a clean closure waste removal action and groundwater corrective action, but does not include the required 30-year post-closure care and monitoring period. The closure cost estimates have progressively increased over the years of delay in implementing action. Prompt funding at a level of \$33.5 million or higher is essential to finally implement closure and corrective action. The Five-Year Plan should establish the funding necessary for the federal government to meet its regulatory and trust obligations.

* * *

We appreciate the opportunity to comment on the Five-Year Plan and look forward to working with all of the agencies to expeditiously close and remediate the Tuba City Dump, and thereby protect public health and the environment.

Sincerely,



Benjamin H. Nuvamsa
CEO/Chairman
Hopi Tribe

Enclosure

cc: Scott Canty, General Counsel, The Hopi Tribe
Jeff Baran, House Committee on Oversight and Government Reform
Andy Schneider, House Committee on Oversight and Government Reform
David Taylor, Navajo Nation Department of Justice
John Krause, BIA
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