



August 5, 2010

Dr. Steven Chu
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Re: Rocky Flats Site - Proposal by U.S. Department of Energy, Office of Legacy Management to Breach the Dams and Modify Site Monitoring System - Request to Bring the Proposal to a Halt

Dear Dr. Chu:

The City and County of Broomfield (Broomfield) has significant concerns regarding the proposal by the U.S. Department of Energy's Office of Legacy Management ("DOE-LM") to make changes to the monitoring requirements and operations at the Rocky Flats site (the "Proposal"). The Proposal includes the breaching of the dams of the ponds at Rocky Flats.

For the reasons enumerated in this letter, it is Broomfield's position that the DOE-LM Proposal needs to come to an immediate halt, and we are requesting that you do all within your power and authority to bring the Proposal to a halt.

As you know, Rocky Flats made "triggers" for nuclear weapons and had a storied history. On site at Rocky Flats were plutonium, tritium, beryllium, nitrates, boron, organic solvents (such as trichloroethene, tetrachloroethene, and carbon tetrachloride), metals (such as chromium) and other radioactive and non-radioactive elements (collectively the "elements"). Over the years, releases from Rocky Flats of many of these elements, including plutonium and tritium, occurred and impacted adjacent areas. The subject ponds at Rocky Flats have helped to provide downstream areas a level of protection from being impacted by possible additional releases of these elements. Broomfield has voiced its strong opposition to the DOE-LM's Proposal because of insufficient information and because of concerns that the Proposal is not necessary and is not in the best interests of the area's public health, safety, and welfare.

INCREASING LEVELS OF PLUTONIUM AND AMERICIUM

In a letter to the Colorado Department of Public Health and Environment (CDPHE), dated June 27, 2010 (see Attachment 1), we noted that monitoring results from the Rocky Flats site show increasing levels of plutonium and americium. (Please note that the letter inadvertently made reference to groundwater monitoring instead of surface water monitoring data.) The point is that these monitoring results are representative of and are further reasons for our concerns regarding the DOE -LM's Proposal.

In addition, during our review of the DOE-LM *Annual Report of Site Surveillance and Maintenance Activities at the Rocky Flats, Colorado, Site Calendar Year 2009* (2009 Annual Report), we noticed other alarming data for plutonium and americium on Walnut Creek and Woman Creek. As shown in Attachment 2 (Figure 3-134) and Attachment 3 (Figure 3-136) from the 2009 Annual Report, the plutonium load increases by 81% and americium load increases by 180% between the Walnut Creek terminal ponds and the Indiana Street monitoring sites. What is particularly troubling is that the 2009 Annual Report simply states that the gain is occurring and does not identify the source of the increase.

Similar gains are also occurring on Woman Creek, but at even greater rates. Plutonium and americium loads at the Woman Creek monitoring site at Indiana Street are over 20 times higher than just downstream of the terminal pond - see Attachment 4 (Figure 3-141) and Attachment 5 (Figure 3-143).

Further, the 2009 Annual Report shows that plutonium and americium continue to migrate away from the industrial area through surface water and are being deposited behind the terminal ponds. The data on Attachment 6 (Figure 3-153) and Attachment 7 (Figure 3-155) shows that the terminal ponds on Walnut Creek have removed 84% of the plutonium and 93% of the americium, respectively. Pond C-2 on Woman Creek is performing in the same manner. Between 83% and 84% of the plutonium and americium load is being removed from the water flowing into Pond C-2 [see Attachment 8 (Figure 3-161) and Attachment 9 (Figure 3-163)].

All of this raises questions, such as, "What is going to happen to the materials that have settled behind the dams during operations and after regulatory closure once the terminal ponds are breached?" The potential for downstream migration will be further compounded by the unexplained gains that are already occurring.

PRIOR REQUESTS FOR INFORMATION

Broomfield has made several requests of the DOE-LM both verbally and in writing to provide additional information related to the Proposal. Given that the clock is ticking on the DOE-LM Proposal and the DOE-LM has not yet been able to respond to Broomfield's requests, I thought it would be well to re-state our requests for your immediate reference.

Request #1. Provide Information Supporting DOE-LM's Plans to Excavate Greater Than 3 Feet

"Excavation, drilling and other intrusive activities below a depth of 3 feet are prohibited, except for remedy-related purposes and routine or emergency maintenance of existing utility easement, in accordance with pre-approved procedures" (the Restriction).

The Restriction is included in the following documents:

- Corrective Action Decision/Record of Decision for Rocky Flats Plant (USDOE) – Peripheral Operable Unit and Central Operable Unit, September 2006;

- Rocky Flats Legacy Management Agreement, March 14, 2007; and
- Environmental Covenant (for the Central Operating Unit of the Rocky Flats Environmental Technology Site), December 4, 2006.

The Restriction was included in the remediation documents to provide assurances that future excavations would not compromise the integrity of the measures taken to allow radioactive and other toxic waste to remain buried and left on the Rocky Flats site. Now, the DOE-LM is proposing to violate this very important Restriction that was an integral part of the aforementioned documents.

We will very much appreciate the DOE-LM providing Broomfield the information including but not limited to any recent risk assessments, health based studies, sediment migration and transport analysis, or other investigations that supports the proposed greater than 3 feet excavation.

Request #2. Maps

Broomfield has repeatedly asked the DOE-LM and CDPHE for maps and related information showing:

- What chemicals were buried and where at Rocky Flats before the clean-up;
- What chemicals remain buried and where at Rocky Flats after the clean-up ; and
- Information regarding what measures the DOE-LM is taking to deal with the chemicals that remain buried at Rocky Flats.

Broomfield has not, to date, received the requested maps. We would appreciate the DOE-LM providing Broomfield copies of the maps and related information or, in the alternative, advising Broomfield that the DOE-LM does not have the maps.

If the DOE-LM does not have the maps and information requested, then it is Broomfield's follow-up request that the DOE-LM produce such maps and information for the public's review and do so in a manner that is clear, readily understandable, and lends itself to a layman's understanding. It seems to us that such maps and related information that clearly and concisely show what Broomfield requested would have been prepared by the DOE-LM before the DOE-LM initiated its Proposal. It would have been prudent and in the public interest to have these maps and information in a form and content that facilitate public review of the DOE-LM Proposal.

The public should not be expected to go through reams and reams of reports and data to try to determine what was and what remains buried at Rocky Flats. If the DOE-LM Proposal is to be effectively reviewed, all involved parties, including the CDPHE and area cities and counties, need to have a clear understanding of what elements remain both on and below the ground and where on the Rocky Flats site and what the potential is for these elements to leave the Rocky Flats site and negatively impact adjacent areas. A case in point is the increased levels of

plutonium and americium that are being detected. In the face of this, the DOE-LM is proposing to weaken the Rocky Flats monitoring requirements. This is incomprehensible.

Request #3. Disposition of Broomfield's Comments on the Draft Environmental Assessment (EA) to Breach the Dams on the Ponds

In Broomfield's June 1, 2010, letter to the DOE-LM regarding the Draft Environmental Assessment (EA) to breach the dams on the ponds, Broomfield requested certain information that Broomfield considers necessary to analyze the proposed modifications to the remediation.

Broomfield requested that prior to releasing the final EA, and before it considers a FONSI, or modified-FONSI, the DOE-LM provide the requested information. A list of the information requested is included in Attachment 10 to this letter. Broomfield requested the information to enable Broomfield to review the technical aspects of the proposed modification. Without the information, the risks of the proposed modifications cannot be adequately assessed.

REQUEST FOR AN IMMEDIATE HALT TO THE DOE-LM'S PROPOSAL

It is Broomfield's position that the DOE-LM Proposal needs to come to an immediate halt for the following reasons:

1. Dangerous elements remain at Rocky Flats.
2. The DOE-LM's reports show that there are increasing levels of plutonium and americium at monitoring locations on Rocky Flats.
3. The DOE-LM has not and apparently does not intend to respond to Broomfield's comments and requests for information regarding the proposed breach of the dams of the ponds at Rocky Flats (see Attachment 10).
4. Broomfield has unanswered questions regarding the decision making process involved with CDPHE's decision to approve the DOE -LM's Proposal to excavate greater than 3 feet for the dams of ponds A-3, A-4, B-5, C-2 and the present landfill.
5. Broomfield has requested that the CDPHE reverse its decision to approve the excavation of greater than 3 feet, but has not yet received an answer from the CDPHE.
6. The DOE-LM has not provided necessary information to demonstrate that its proposed changes in the Rocky Flats' monitoring requirements and operations will not adversely impact on the area's public health, safety, and welfare.
7. One of the DOE-LM's stated reasons for its Proposal is that it will reduce Rocky Flats' operating costs. However, the DOE's projected cost savings does not include a professional cost benefit analysis, the savings are not significant, and are not worth the resulting risk to the area's public health, safety, and welfare.

8. Considering the magnitude of potential adverse impacts of the DOE-LM Proposal, a full Environmental Impact Statement rather than an Environmental Assessment should be conducted for the breaching of the dams.
9. There is no compelling need for the DOE-LM Proposal and, accordingly, there is no need for the DOE-LM to move forward with its Proposal.
10. No further proposals by the DOE-LM to change the Rocky Flats monitoring requirements and operations should be made by the DOE-LM until and after the Rocky Flats Stewardship Council, Broomfield, and other downstream cities and counties have concurred that such proposals are worthy of consideration.

We respectfully request that the DOE-LM do all within its authority and power to bring this ill conceived Proposal to an immediate halt.

As you know, the DOE-LM is having a public meeting on August 10, 2010, regarding the proposed changes to the Rocky Flats surface water monitoring sites and enforcement standards. In addition, comments on the proposed changes to the surface water monitoring sites are due on August 27, 2010. We would very much appreciate having your response to this letter and our requests by August 20, 2010.

Please know your help is very much appreciated.

Sincerely,



George DiCiero
City and County Manager

Enclosures

cc: Lori Cox, Broomfield's Representative on the Rocky Flats Stewardship Council
Broomfield Mayor and City Council
Bill Tuthill, Broomfield City and County Attorney
Charles Ozaki, Broomfield Deputy City and County Manager
Kevin Standbridge, Broomfield Assistant for Community Development
Rosann Doran, Broomfield Public Information Officer
Jennifer Hoffman, Assistant to Broomfield City and County Manager
Alan King, Broomfield Public Works Director
David Allen, Broomfield Deputy Public Works Director

John Watson, Berenbaum Weinshienk, PC
Doug Young, Senator Udalls' Office
Zane Kessler, Senator Bennet's Office
Andy Schultheiss, Representative Polis' Office
Bill Holden, Representative Perlmutter's Office
Dave Geiser, DOE-LM
Ray Plieness, DOE-LM
Scott Surovchak, DOE-LM
James Martin, USEPA
Carol Rushin, USEPA
Larry Svoboda, USEPA
Vera Moritz, USEPA
Martha Rudolph
Howard Roitman, CDPHE
Joe Schieffelin, CDPHE
Carl Spreng, CDPHE
Steve Berendzen, USFWS
Josh Nims, Women Creek Reservoir Authority
Brent McFall, Westminster City Manager
Ron Hellbusch, City of Westminster
Cathy Sugarts, City of Westminster
William Simmons, Northglenn City Manger
David Willett, City of Northglenn
Shelley, Stanley, City of Northglenn
Bud Elliot, City of Thornton
David Abelson, Rocky Flats Stewardship Council



OFFICE OF THE CITY AND COUNTY MANAGER

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July 27, 2010

Ms. Martha Rudolph
Executive Director
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Re: Elevated Levels of Plutonium and Americium at Rocky Flats

Dear Ms. Rudolph:

A significant concern has arisen regarding increased levels of Plutonium 239, 240 and Americium 241 at Rocky Flats. The City and County of Broomfield continues to receive and review groundwater monitoring results from Rocky Flats. In performing these reviews, it has come to our attention that levels of Plutonium 239, 240 and Americium 241 are increasing over time at certain groundwater monitoring wells on the Rocky Flats site.

Attached for your immediate reference are graphs of the monitoring results for these isotopes. The monitoring well locations are noted on the map included with the graphs.

These results raise significant concerns about the effectiveness of the remediation program at Rocky Flats. As a downstream community from Rocky Flats, Broomfield is relying everyday on the success of the remediation programs at the site to preserve the public health, safety and welfare of its residents.

Given the immediacy of the situation, I request that the CDPHE determine what is causing the increased levels and what corrective action needs to be taken and when.

I will very much appreciate your letting me know as soon as possible what we can expect from the CDPHE.

Sincerely,

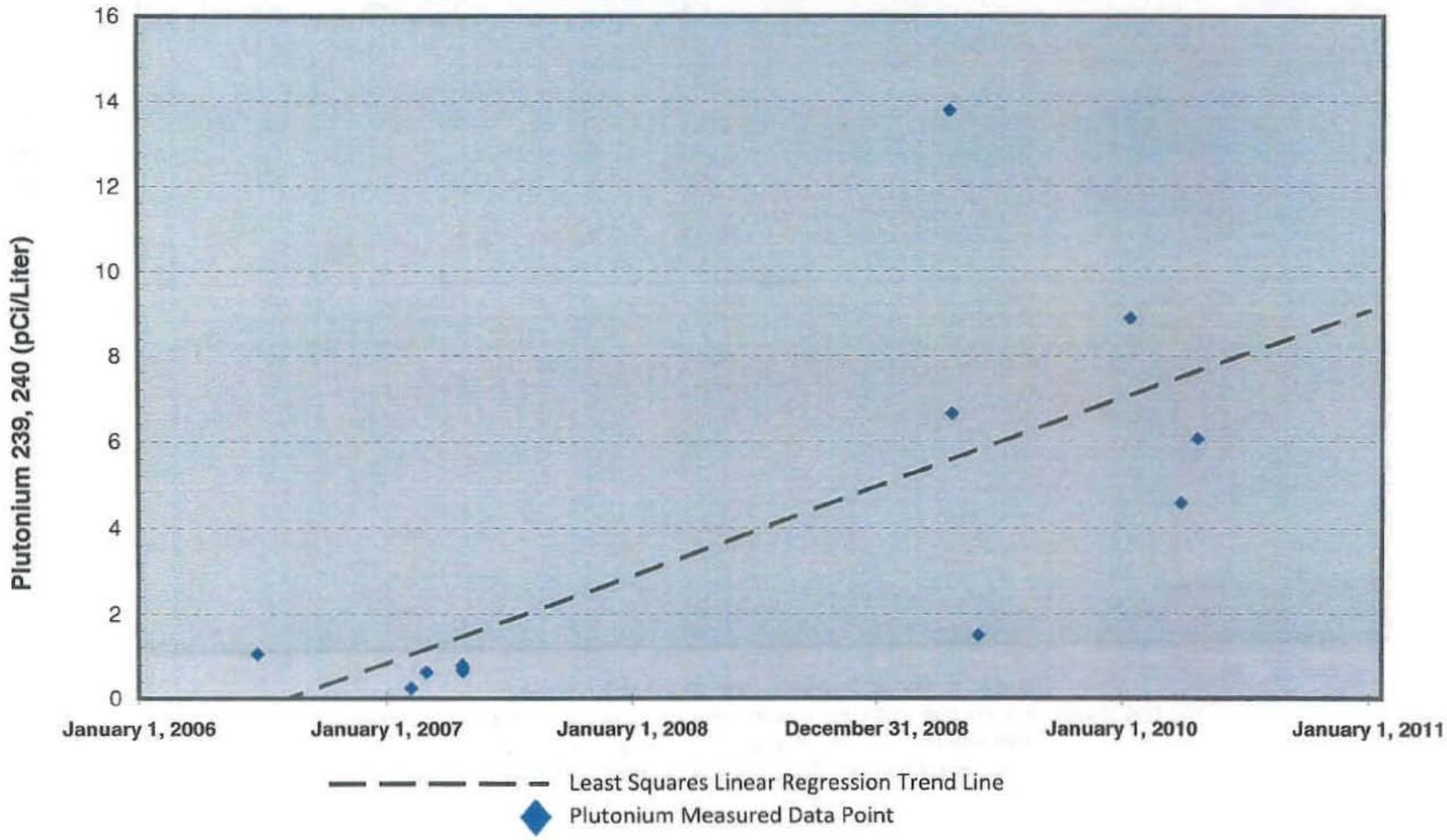
A handwritten signature in black ink, appearing to read "George DiCiero".

George DiCiero
City and County Manager

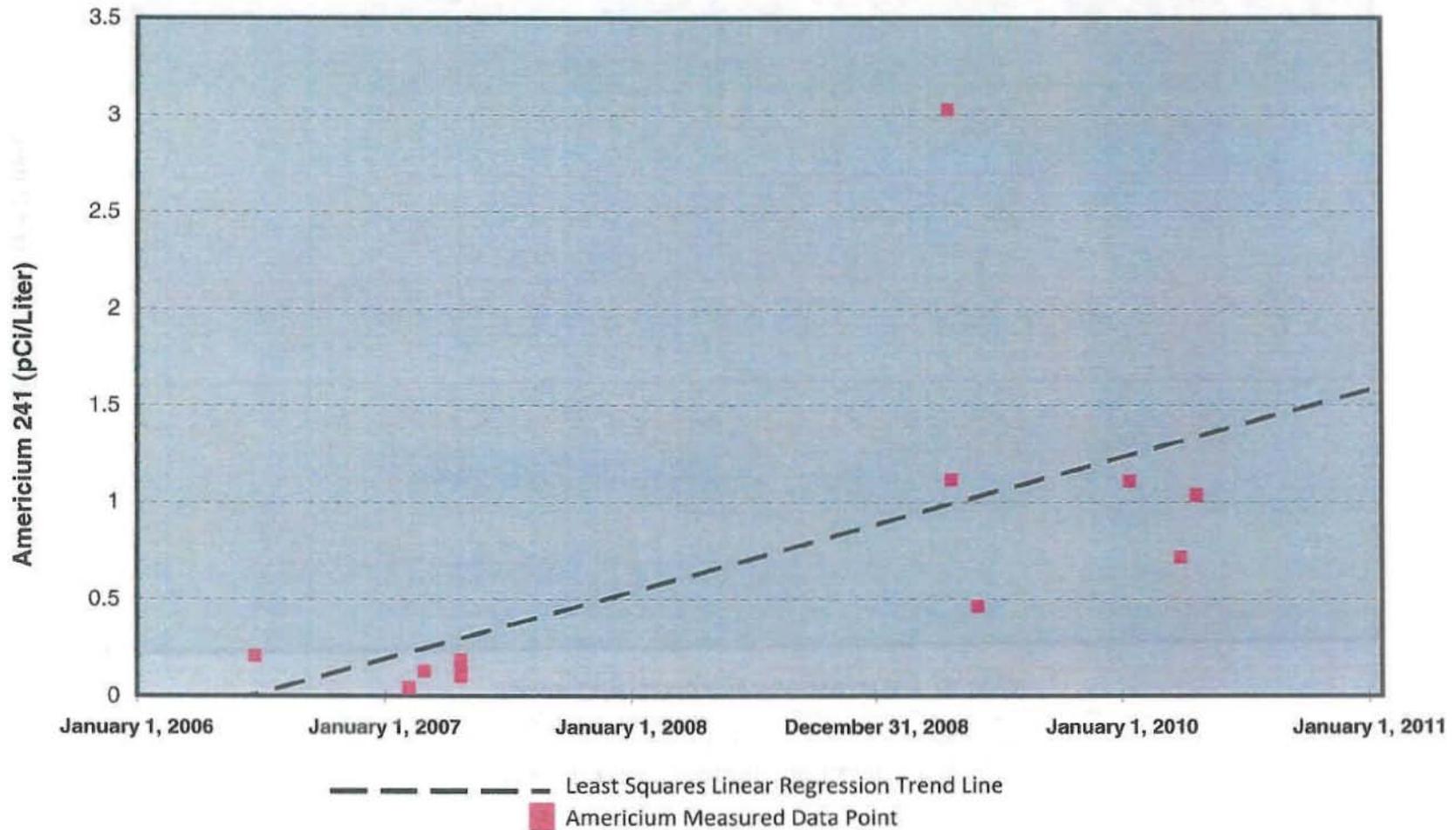
Enclosures

Cc: Lori Cox, Broomfield City Council
Alan King, Broomfield Public Works Director
Bill Tuthill, Broomfield City and County Attorney
Kevin Standbridge, Broomfield Assistant City and County Manager
Rosann Doran, Broomfield Public Information Officer
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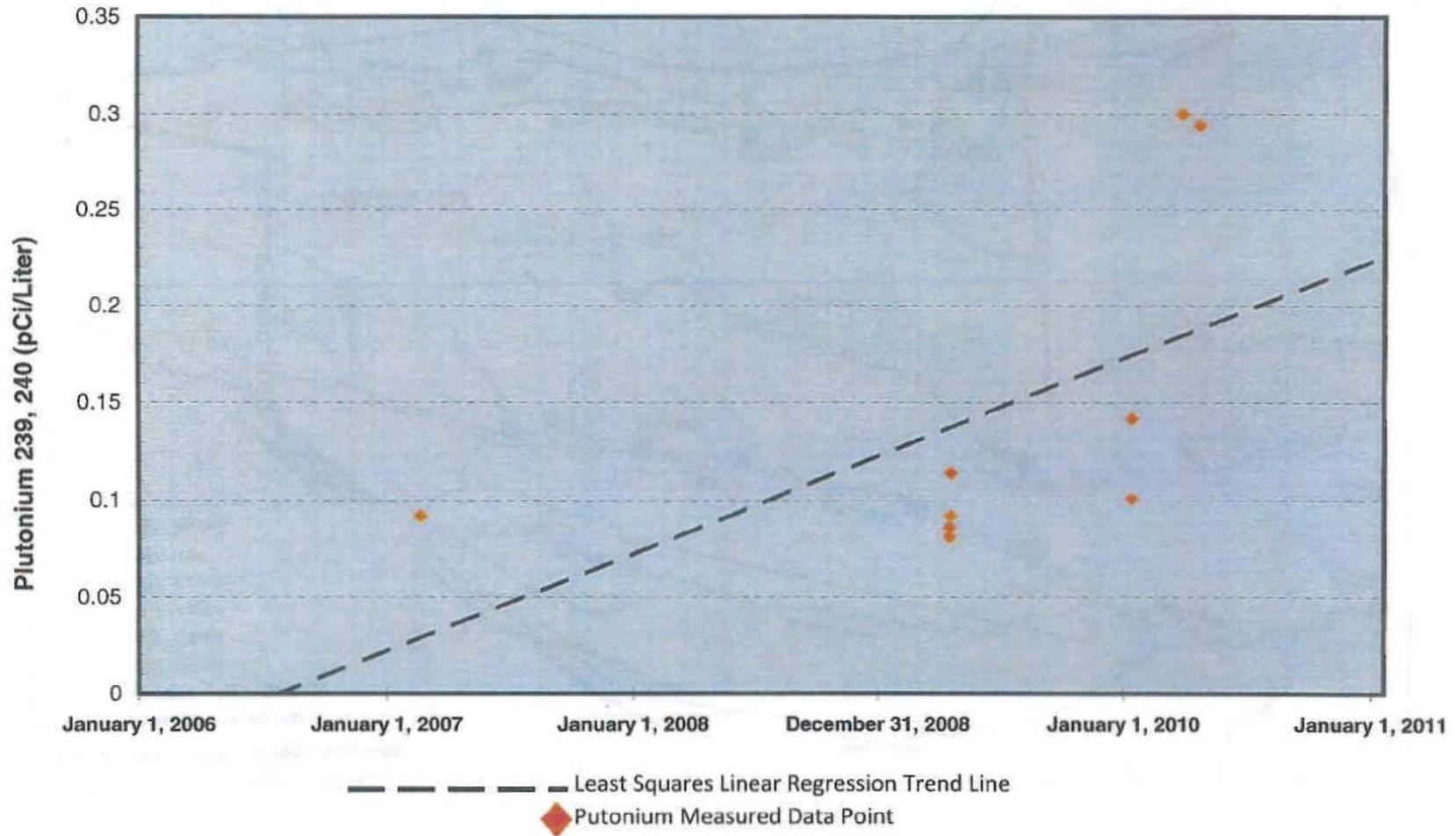
Investigative Monitoring Location GS51
Upstream of Pond C-2 in Woman Creek Drainage Basin
(Drainage area tributary to the South Interceptor Ditch (SID) and south of former 903 Pad)
Source: DOE GEMS data extracted on July 12, 2010



Investigative Monitoring Location GS51
Upstream of Pond C-2 in Woman Creek Drainage Basin
(Drainage area tributary to the South Interceptor Ditch (SID) and south of former 903 Pad)
Source: DOE GEMS data extracted on July 12, 2010



Point of Evaluation Monitoring SW27
South Interceptor Ditch (SID) at Pond C-2
Woman Creek Drainage Basin
Source: DOE GEMS data extracted on July 12, 2010



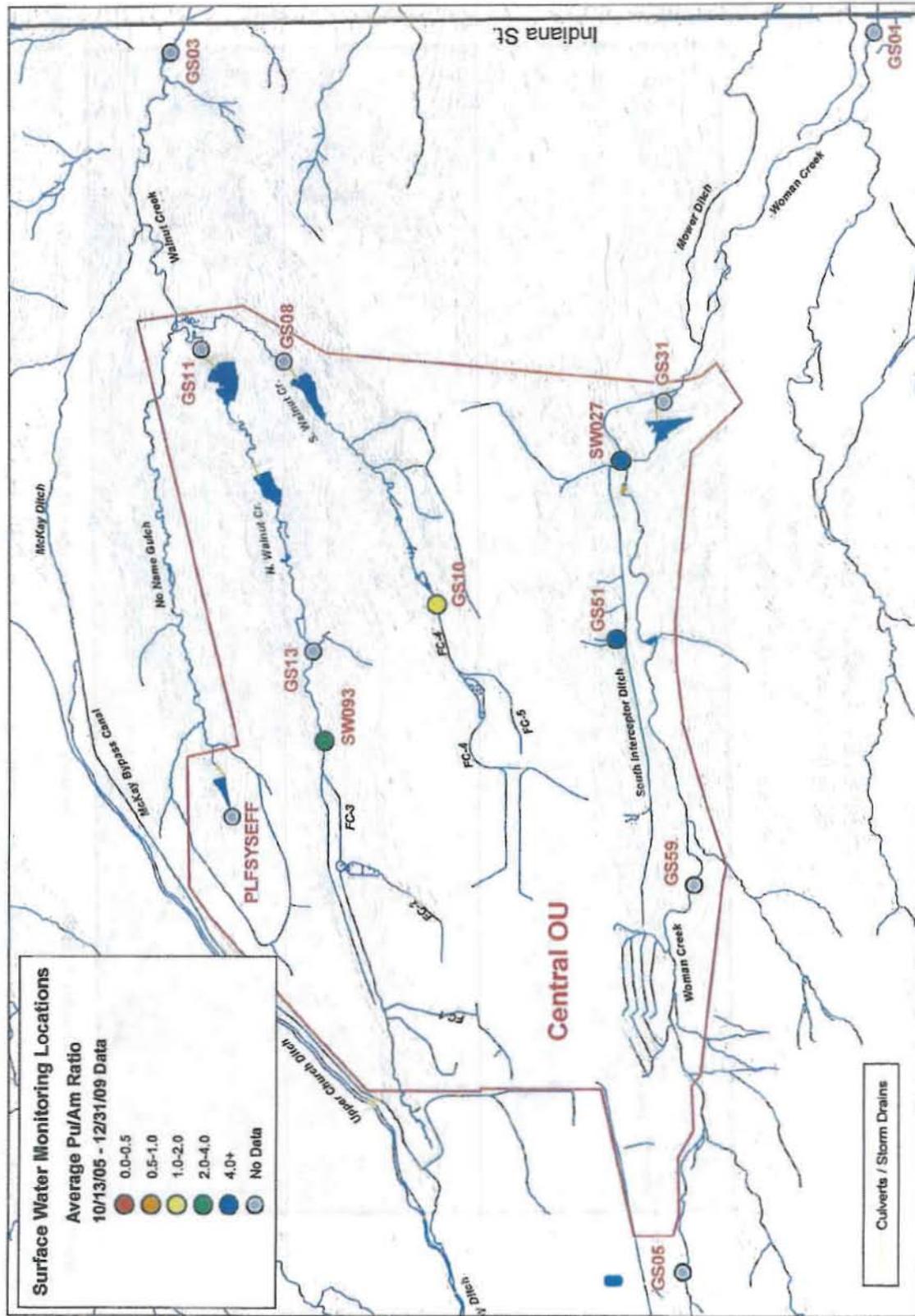


Figure 3-118. Post-Closure Average Pu/Am Ratios

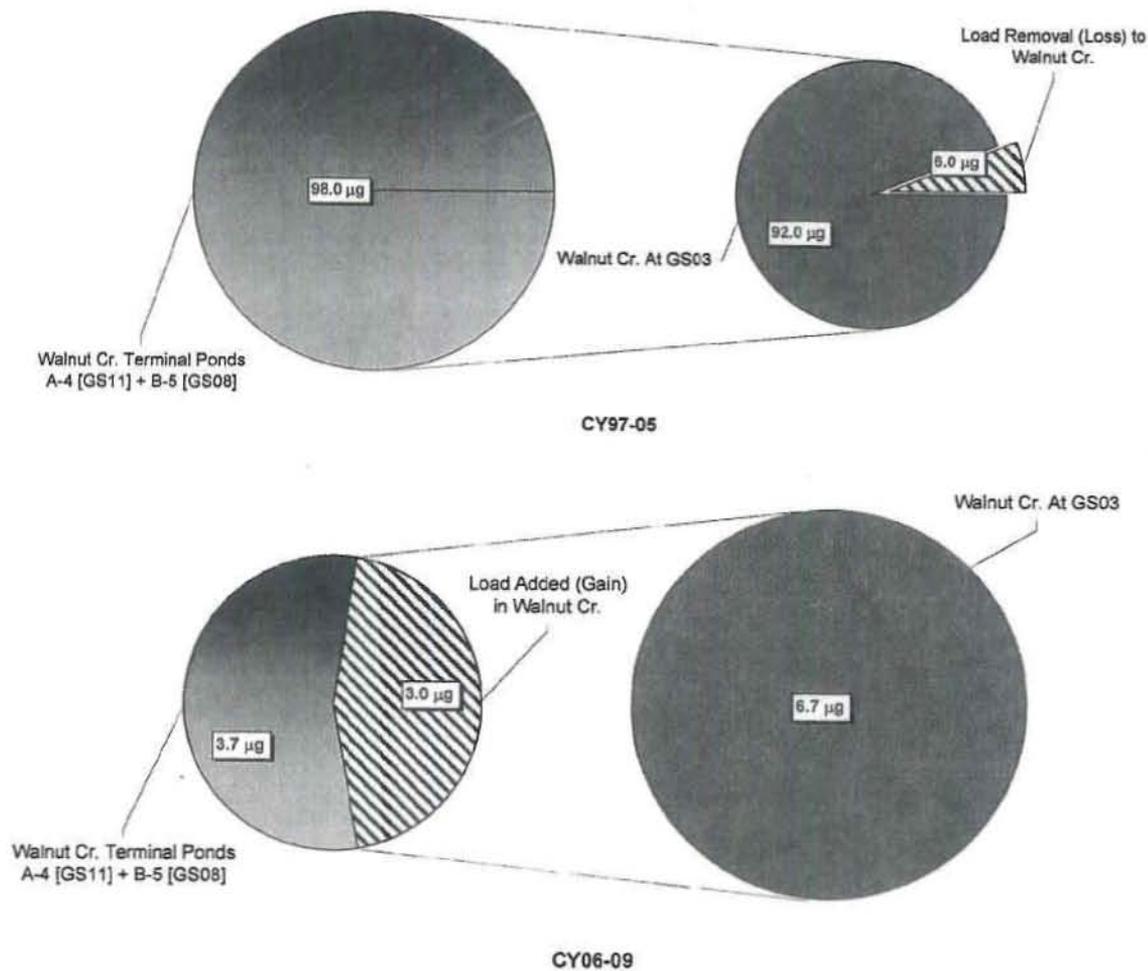


Figure 3-134. Relative Average Annual Pu Load Totals at GS03, GS08, and GS11

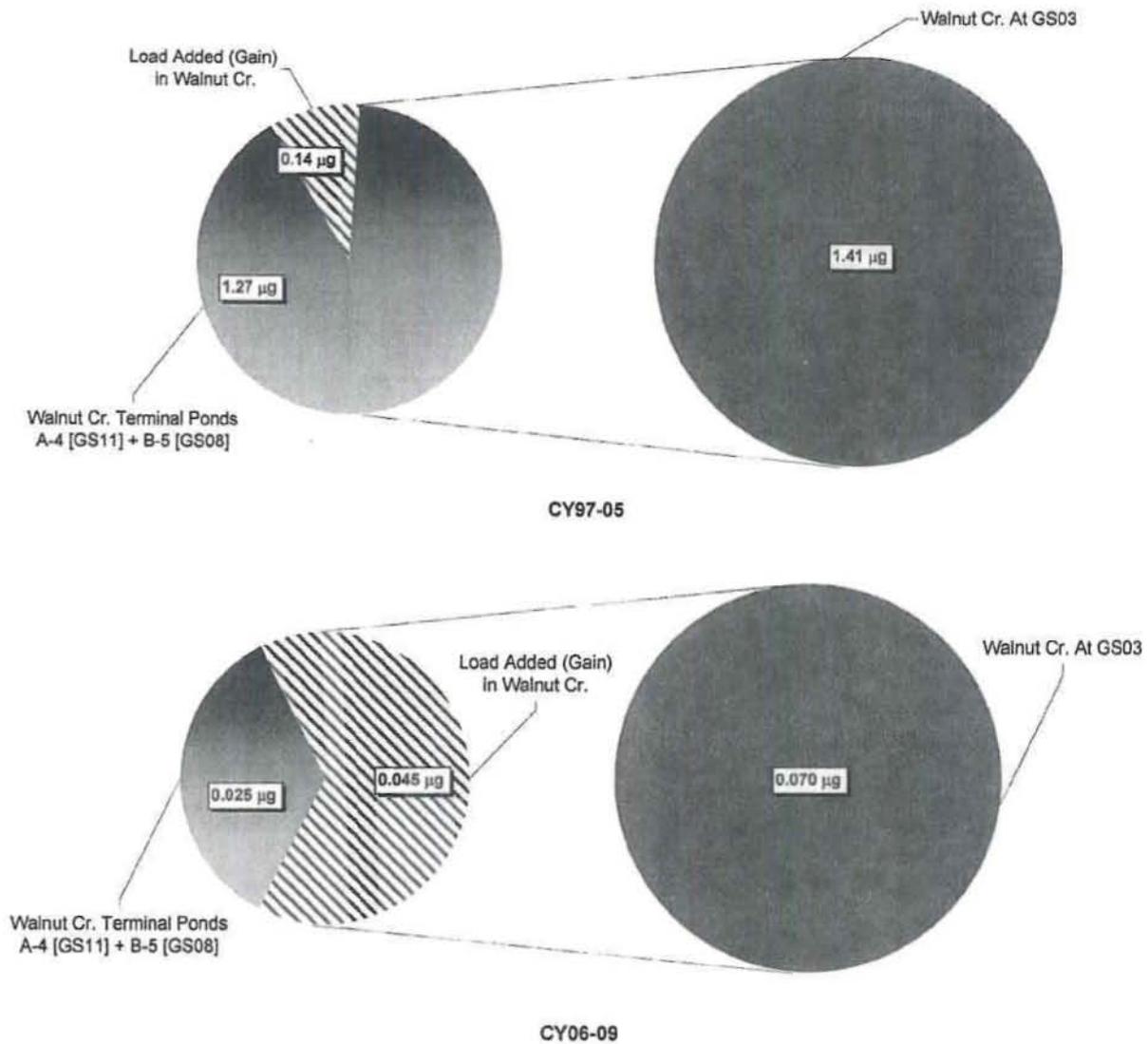


Figure 3-136. Relative Average Annual Am Load Totals at GS03, GS08, and GS11

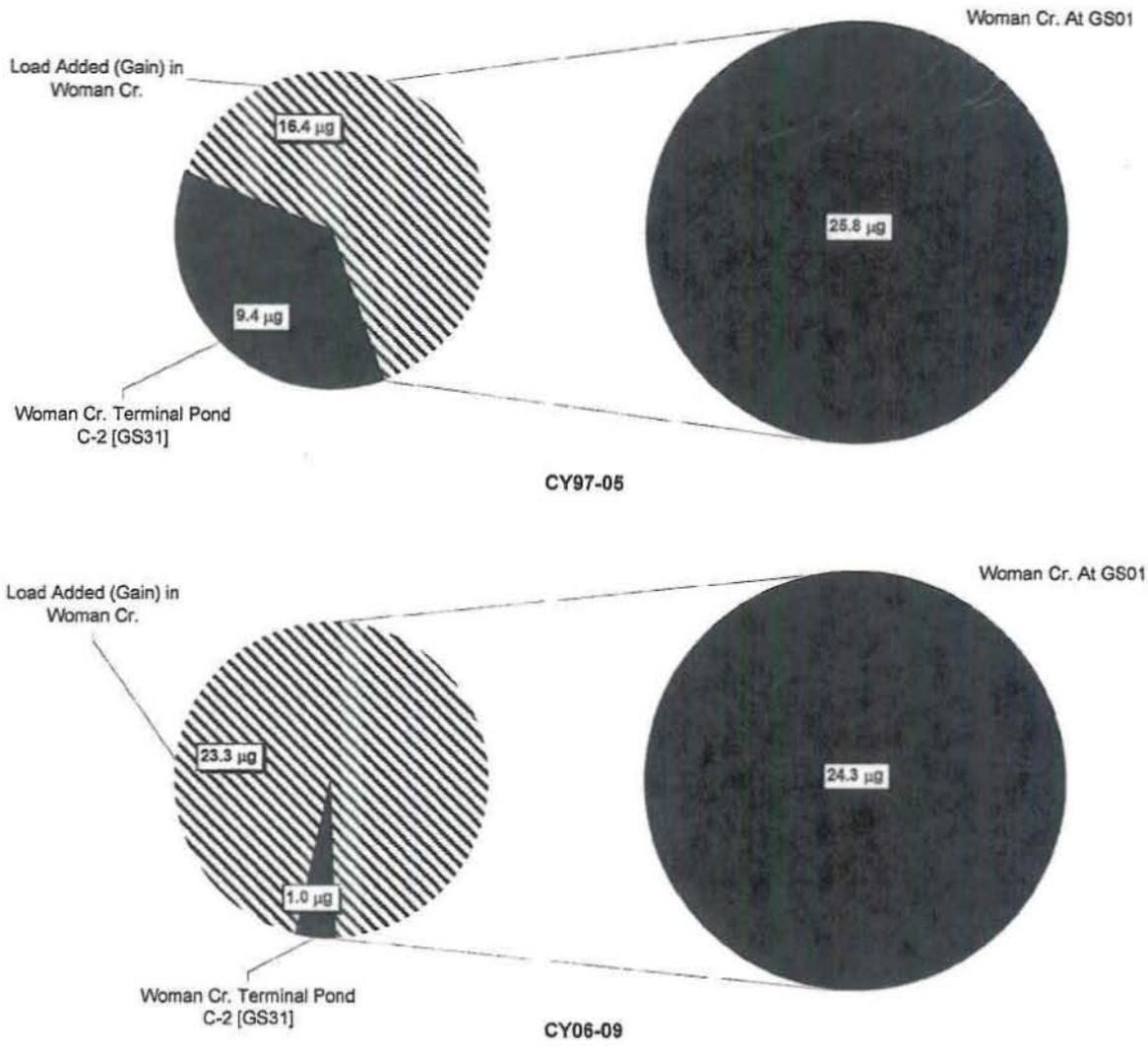


Figure 3-141. Relative Average Annual Pu Load Totals at GS01 and GS31

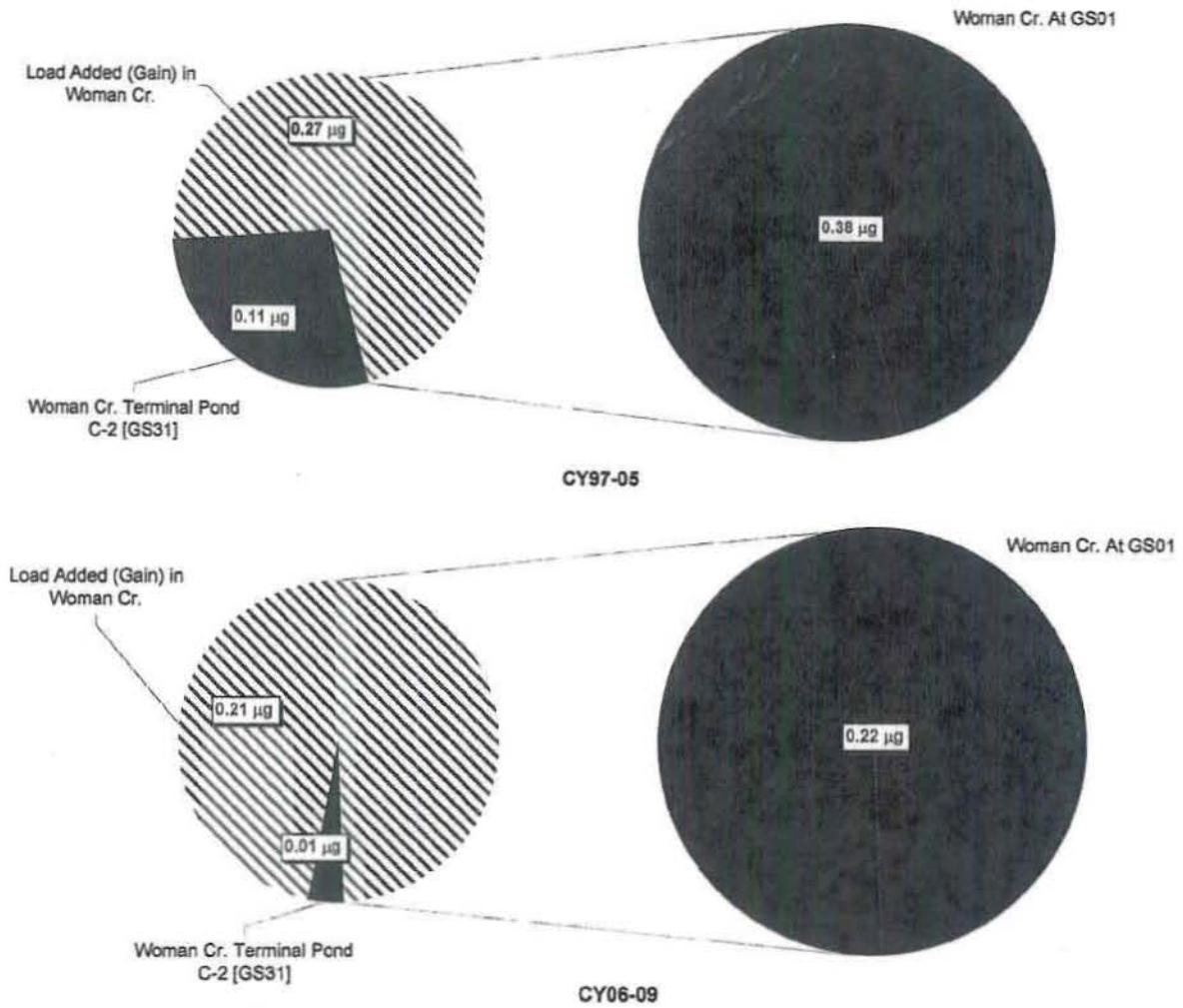


Figure 3-143. Relative Average Annual Am Load Totals at GS01 and GS31

Table 3-64. Total U Loads at GS01 and GS31: CY 2003-2009

Calendar Year	Total U (g)	
	Pond C-2 (GS31)	POC GS01
2003	129	790
2004	92	808
2005	115	918
2006	0; No C-2 discharge	235
2007	0; No C-2 discharge	1,016
2008	0; No C-2 discharge	174
2009	95	761
Total	430	4,702

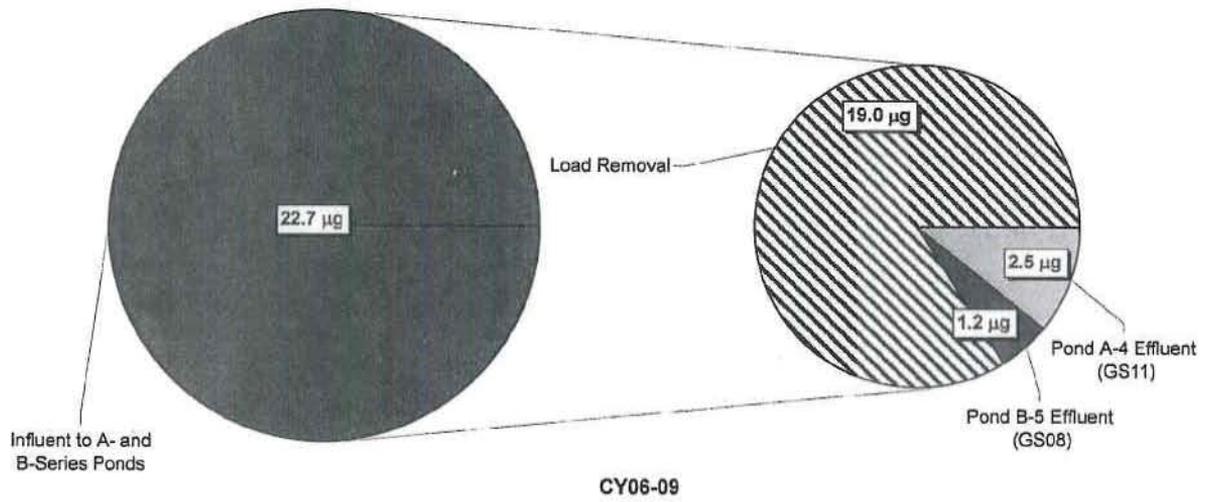
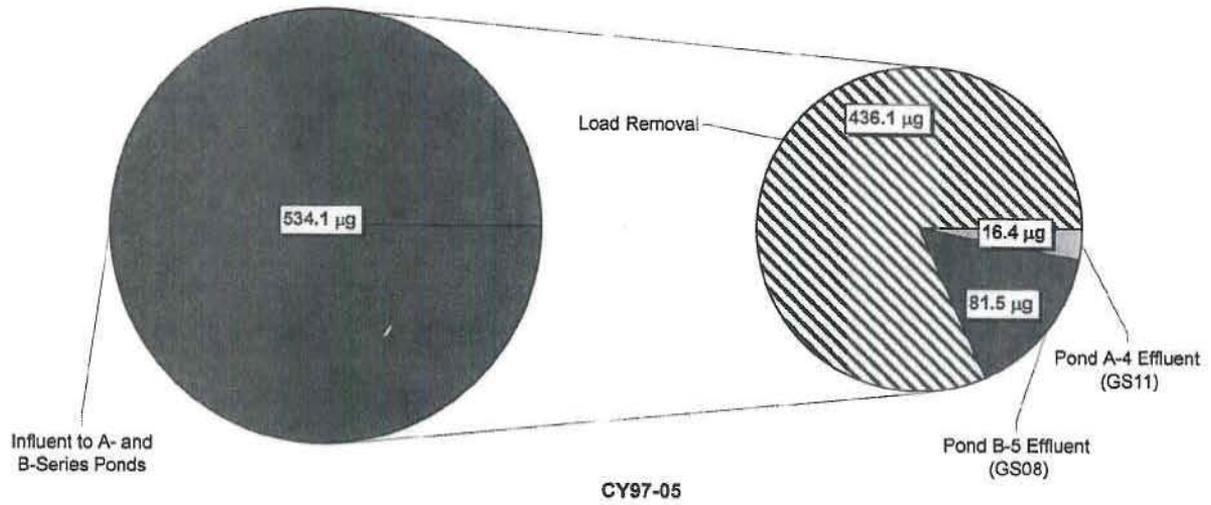


Figure 3-153. Relative Average Annual Pu Load Totals for the A- and B-Series Ponds

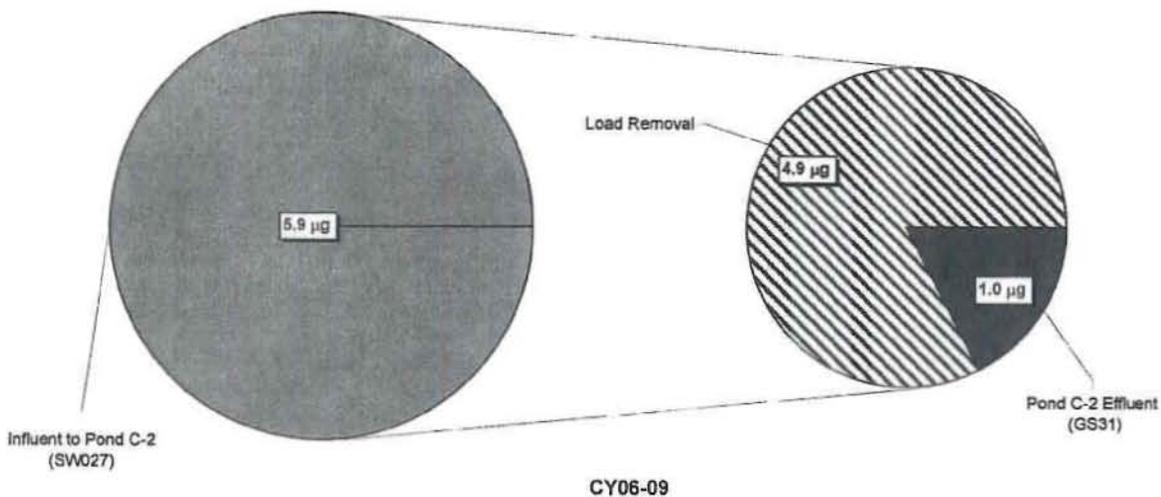
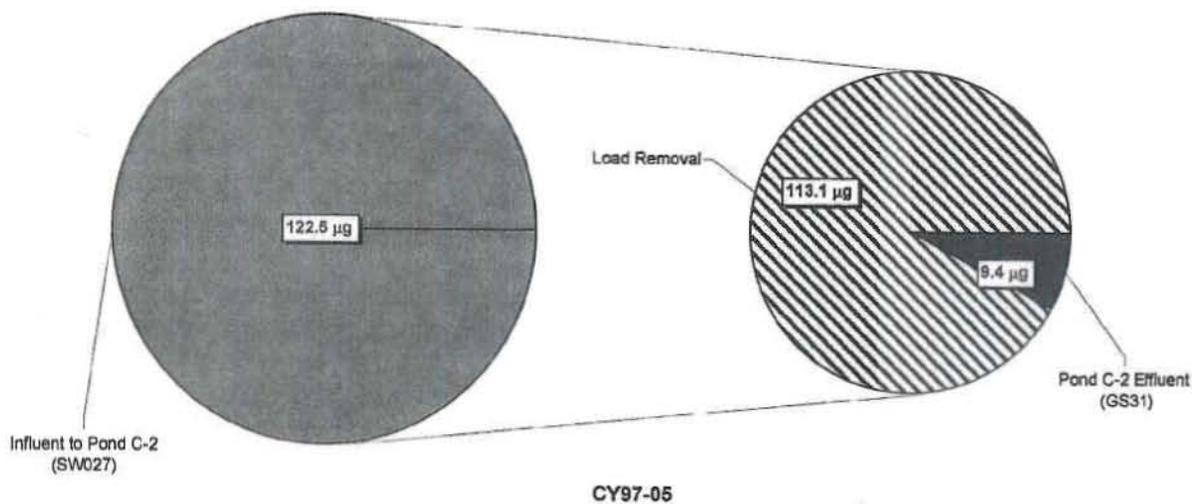


Figure 3-161. Relative Average Annual Pu Load Totals for Pond C-2

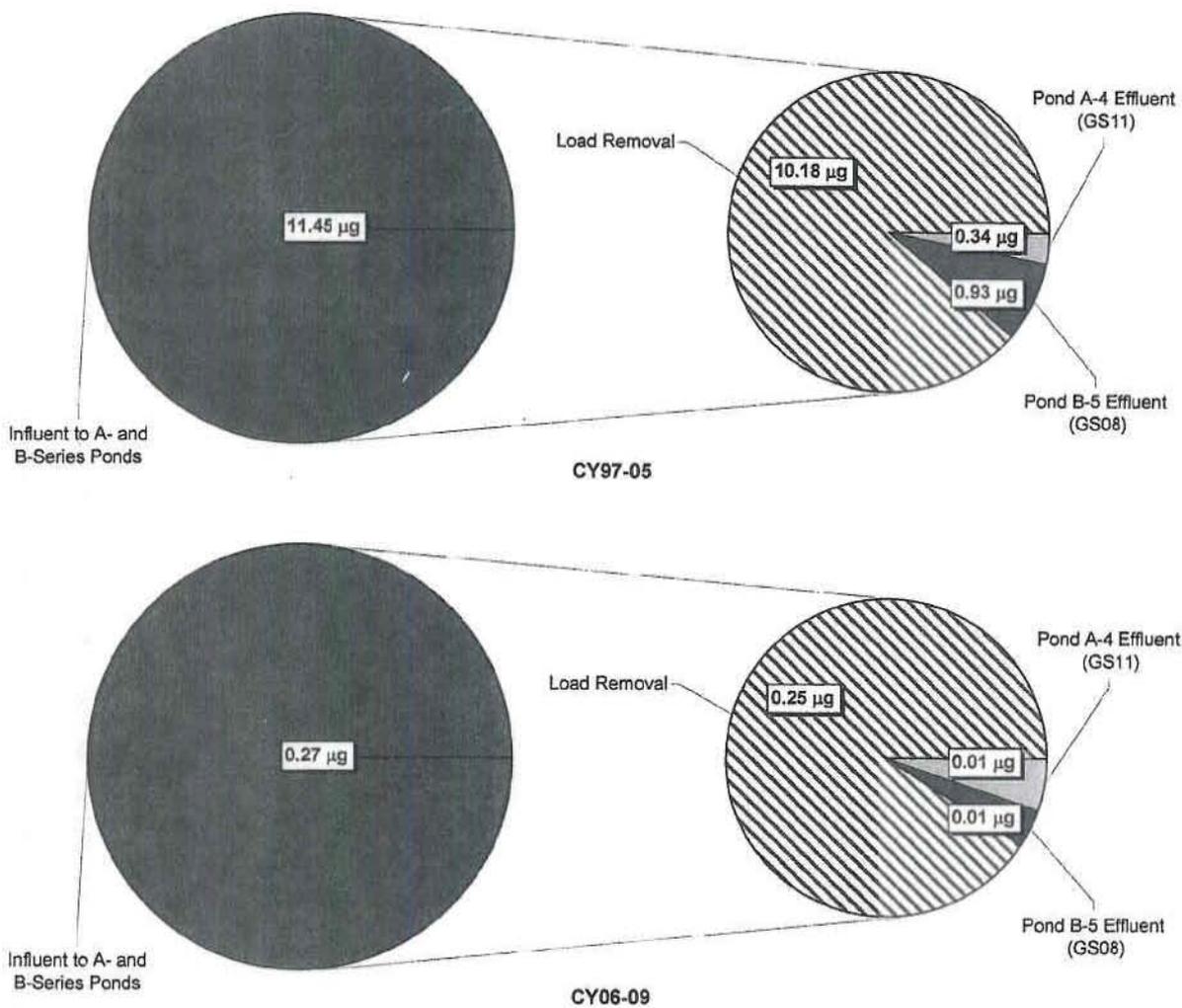


Figure 3-155. Relative Average Annual Am Load Totals for the A- and B-Series Ponds

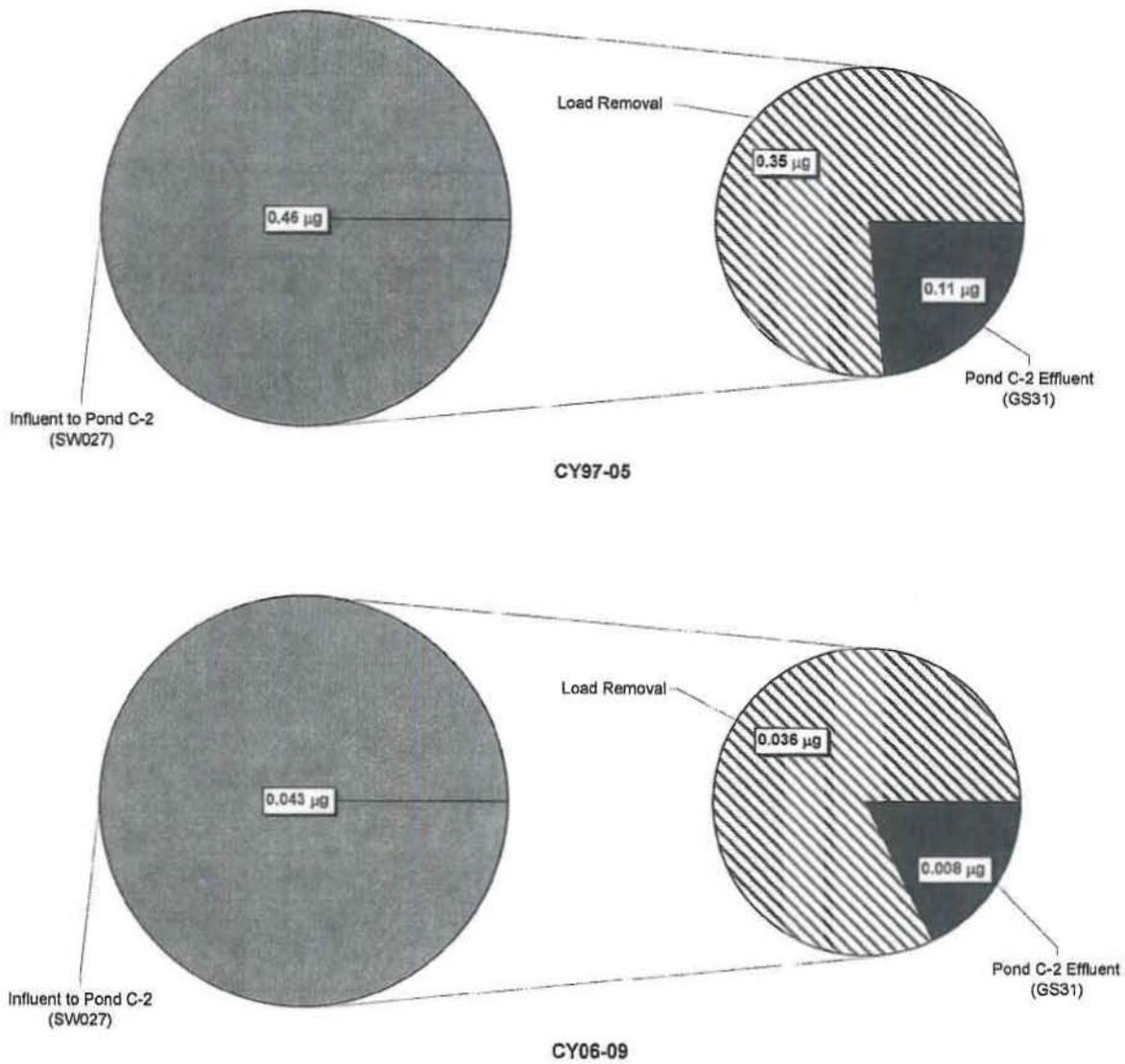


Figure 3-163. Relative Average Annual Am Load Totals for Pond C-2

List of Questions and Information Requests Sent to DOE-LM

- 1.) Please provide the rationale as to why DOE-LM would have the authority to violate the RFLMA and the intent of the CAD/ROD and the Proposed Plan.
- 2.) Please provide the exception to the regulation that would allow DOE-LM to intentionally discharge water that does not meet surface water standards to waters of the state.
- 3.) Provide the process to ensure the RFLMA is enforced to meet surface water standards prior to release.
- 4.) Please provide the associated contingency plan to contain the leachate if it exceeds the RFLMA surface water standard.
- 5.) Include the notification process, schedule to contain water, monitoring methodology, and notification process to downstream communities.
- 6.) Please provide the modeling and evaluation that was performed to determine impacts to downstream watersheds if surface water leaves the site that does not meet the regulatory standards.
- 7.) Please provide more information about the evaluation DOE-LM performed to address wildfires to ensure there are not direct, indirect, and cumulative impacts to human health and the environment related to the certainty of increased runoff from an uncontrolled fire.
- 8.) Please identify the Contingency Plan that would be implemented to prevent major erosion and release of sediment off-site.
- 9.) We request that DOE-LM provide us with the details of their Contingency Plans for the events identified in these comments.
- 10.) How will monitoring of groundwater seeps downstream of the proposed dams be evaluated?
- 11.) Please provide additional information to address how groundwater and seeps downstream of the breached ponds will be monitored to ensure water quality leaving the site is maintained.
- 12.) Please provide the analysis that the agency performed to validate the EA's rationale pertaining to its determination that there would be minimal impact to groundwater.
- 13.) Please identify the direct impacts, indirect impacts, and cumulative impacts and the modeling associated with the EA's statement.
- 14.) Was this analysis validated and if so, by whom?
- 15.) Did the evaluation consider drought years, wet years, floods, and fires?
- 16.) Please provide the details concerning how the groundwater alluvium was evaluated and how those results will be considered as part of the Points-of-Compliance.
- 17.) What will the sampling methodology be for the groundwater alluvium?
- 18.) To ensure that the RFLMA is adhered to, please provide DOE-LM's rationale for the assumption that the Draft EA sufficiently evaluates all water quality impacts for the proposed action in order to make a Finding of No Significant Impact (FONSI) and does not warrant an Environmental Impact Statement (EIS).

- 19.)What changes have occurred since 2004 to conclude that the remaining dams no longer provide a water quality benefit?
- 20.)Please provide the documentation that supports this conclusion.
- 21.)Please provide in table format, the supporting data for each location and include the highest concentration and the lowest.
- 22.)Has sediment transport been modeled with the associated storm events?
- 23.)Did Wright Water Engineers, Inc. determine the peak flow in the event of a wildfire with no vegetation as part of the report attached to the EA as Appendix D?
- 24.)What would the erosion rates be and would channeling contribute to sediment transport?
- 25.)Please provide information that supports what appears to be DOE-LM's determination that the dams are failing or are suffering from other conditions that would help us make a determination concerning the safety of the dams.
- 26.)Please clarify which sampling results are expected to have increased variability and provide information as to the magnitude, frequency, and basis for calculation that was used to make this conclusion.
- 27.)How will the variability be monitored?
- 28.)How many data points will be collected and under what site conditions?
- 29.)Please provide the information on the application of surface water standards via summary statistics.
- 30.)Please provide an analysis of, and the justification for, elimination of 95% of one type of habitat (i.e., open-water habitat) as the proper trade-off for the theoretical potential gain for riparian habitat, particularly in light of the fact that the project site is located in a part of Colorado that is mainly a prairie grassland ecosystem.
- 31.)Please provide the evaluations that DOE-LM prepared to determine the enhancements to, and the viability of, the wetlands.
- 32.)Please provide the data to document the negative impacts the current system has on habitat.
- 33.)Please identify how human activities impact the ecosystems and the alterations that such activities have created at the site for the past 30 years.
- 34.)If contaminants flow offsite, what is the impact to the offsite habitat?
- 35.)Have offsite impacts to habitats been evaluated?
- 36.)Please provide us with the agency's assessment of the change in downstream habitat from the original habitat in 1979 as compared to today's habitat.
- 37.)Please provide a proper assessment of the reduction in wetlands based on the current configuration of wetlands at the site.

- 38.) Why is it necessary to collect several years of additional information and data related to habitat development and ecological changes related to the proposed flow-through condition that will be created at the terminal dams in the A and B series, but not at the terminal dam in the C series?
- 39.) How can the draft EA properly state that there will be enhanced habitat and ecological conditions that will result from the dam breaches, while simultaneously stating at the May 18, 2010 public meeting that several additional years of information and data compilation will need to be gathered at two of the three terminal dams to determine the exact habitat and ecological conditions which will result from the flow-through conditions?
- 40.) Why is DOE-LM treating the terminal dams associated with the A- and B- series ponds differently than dam for Pond C-2?
- 41.) Please provide the methods of evaluation and basis for success of the proposed flow-through operations.
- 42.) Please clarify how DOE-LM determined cost savings associated with the proposed action.
- 43.) Provide a comparison of costs against the potential cost for corrective actions to address a release of offsite contamination.
- 44.) Has a cost benefit analysis been prepared to make a comparison between the actual cost and increased risk?
- 45.) Please provide the following financial information:
- Annual cost to inspect the dams;
 - Annual cost to draft reports associated with the ponds;
 - Annual cost to perform O&M activities for the ponds;
 - Annual cost for sampling to ensure compliance;
 - The estimated construction costs to breach the dams;
 - The cost saving that would be made if the proposed action is implemented; and
 - A comparison of these dam-related costs to the overall costs of the remedy to date, and as compared to expected future costs for the entire remedy.
- 46.) When dredging the sediments and soil from the ponds and dams, will any sampling be performed to determine if there are any contaminants in the sediments?