

**Diana, Sherri A. (CDC/NIOSH/EID) (CTR)**

---

**From:** Tami Thatcher  
**Sent:** Wednesday, January 20, 2016 3:16 PM  
**To:** NIOSH Docket Office (CDC)  
**Subject:** Concerning INL Petitions and Radiation Dose Reconstruction Document Inadequacy, Particularly at TRA and MTR.

Dear NIOSH at 'nioshdocket@cdc.gov'

I appreciate the difficult task of addressing Idaho National Laboratory worker radiation dose exposures, from several decades ago and more recently. The enormous variety of operations conducted at the INL at various facilities and their evolution with time would make this a difficult task. The Department of Energy's deliberate inadequate reporting and record keeping makes it a virtually impossible task.

But, rather than grant the Special Exposure Cohort on a broad basis, NIOSH decided to approach taking the approach of investigating every facility, basically always assuming that the Department of Energy did not overexpose the worker unless an air-tight case can be made that the worker was overexposed.

The problem is that the CDC's NIOSH has a long legacy of inadequate investigation and characterization of operations at the INL. One need look no further than NIOSH's incomplete and inadequate INL Technical Site Profile. It might have simply been better to have put a popular but non-scientific, hodge-podge and error-prone book in place of NIOSH's Technical Site Profile.

The CDC's 2002 "Task 5" is detailed yet completely lacks environmental monitoring or completeness. It is only a partial glimpse of what was going on at INL. Yet it fails to confess its inadequacies. It offers consolation such as: the wells used for disposing of radioactive waste were not used for drinking water. But it does not mention that the drinking water wells were close by, were for years not adequately monitored, and when levels exceeded federal drinking water standards, they were not told.

So NIOSH is evaluating the recently proposed Special Exposure Cohort for INL to address the "chem. plant" from 1963 to 1974. But when will claimants be approved for this narrow INL cohort?  
And when will the multitude of over needed cohorts be developed and approved?

We continue to see a patchwork of radiation records that point to deliberately lost or manipulated radiation exposure records.

With a brief look I can see that there were many serious fuel melt events at the Material Test Reactor that NIOSH fails to discuss. It fails to discuss the horrible conditions of the MTR canal. It fails to discuss what destructive fuel examinations and separations were conducted at the Test Reactor Area and subsequently flushed to the open-air retention basin and percolation ponds.

Very significant americium-241 contamination levels were found in soil and in shallow perched water beneath the retention basin, 100 times the drinking water MCL in 1992. No adequate characterization of the amount of various radionuclides flushed or when to the ponds exist. The waste flushed to hot waste tanks were for years flushed to open air ponds and only in later years trucked away, but NIOSH fails to recognize even that simple fact. Where is the damaged fuel from the ETR and MTR and their experiments? Their reactor waste water systems did not have radiological cleanup capability: the primary coolant system was "cleaned" by flushing to the ponds.

The aerial surveys show huge gamma levels at the ponds and they are a significant non-stack source of radiological air emissions. If NIOSH actually reconstructed the doses at the Test Reactor Area, every darn employee, especially in the early years would be approved. Does NIOSH even have a clue what the actual elevated background doses were at the these facilities? It was enormous and when I worked there, it was simply subtracted "as background."

The MTR reactor has been acknowledged to have run on plutonium. But there was such secrecy about the Navy's program at MTR, there are virtually no records of what amounts of radioactive material, particularly where did the high levels of americium-241 were flushed to open air ponds. The retention basin, by the way, always had visible water above the underground basin. So there were many more opportunities for alpha exposure at TRA than NIOSH has discussed. The MTR canal as well as reactor, the ETR sodium-cooled reactor, and the many destructively irradiated and examined fuel tests from reactor to hot cell to laboratory and much was sent down drains to the open air retention basin that was very close to the MTR building.

I have yet to see any evidence that NIOSH is coming to grips with the inadequate monitoring at the Test Reactor Area. If the doses could be honestly reconstructed, anyone who worked at the Test Reactor Area would also be given an Special Exposure Cohort.

Sincerely,

Tami Thatcher

