From: [redacted]
[redacted]
Subject: FW: Comments (UNCLASSIFIED)
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Attachments: WasteDisposalOptionsComments.docx

Classification: UNCLASSIFIED
Caveats: NONE

-----Original Message-----
[redacted]
Sent: Wednesday, November 16, 2011 9:10 PM
[redacted]
Subject: Comments

[redacted]

Attached are comments on the IWCS TM.

The second disk never arrived in the mail. Did that one come back as well?

[redacted]

Classification: UNCLASSIFIED
Caveats: NONE

[redacted]

Nov. 16, 2011

for:

"Waste Disposal Options and Fernald Lessons Learned Technical Memorandum"

Prepared by *EnergySolutions, LLC,* Oakridge, Tennessee and *SAIC,* Columbus, Ohio

for the U.S. Army Corps of Engineers

PUBLIC PARTICIPATION

DOES THE COMMUNITY WANT A RADIOACTIVE WASTE DISPOSAL FACILITY SITED? This option was not understood by all public workshop participants. WE DON'T WANT ONE.

The sequence of issuance for Corps' Technical Memorandums seems backwards, unless the Corps' objective is to wed the community to positions before the public understands the consequences of those positions to their health, safety, economic welfare and their future.

The IWCS Technical Memorandum ("TM") comparisons between Fernald and the NFSS were heavily biased and understate the risks and impacts of the NFSS. The failure of the Corps to release all laboratory data or to allow public input on Sampling & Analysis Plans, prior to field work also serves to understate NFSS risk.

The five Corps-proposed "Technical Memorandum" topics do not parallel the Corps', "Steps in the Feasibility Study." This raises the questions about whether public participation will allow meaningful input into the decision-making process - not to make the decisions, but to have an opportunity to provide information to influence key decisions that impact us.

The decision-making process on the Feasibility Study (FS) began as far back as 2003 for other agencies, but began just three months ago for the community.

- 5 years ago the Corps declined public requests for a *series* of meetings to begin digesting very technical, extensive and available information about "Fernald Lessons Learned."
- Instead, the Corps hired a facilitator in 2011, reportedly at $125,000 per year, to institute a predetermined, narrow and swift FS agenda for public "input."

The Corps has conducted regular meetings or calls with agencies which have a role in the decision-making process. The interested public is largely in the dark as to the issues discussed, the agencies involved, and a real understanding of what authority or influence each agency has. Therefore, the public has no input before many initiatives which affect them are undertaken. Further, the Corps and DEC in the past have provided information to private Responsible Parties, not provided to the public.

In 2008 the Corps said its RAB had dissolved in 2002, (or 2006), despite continuous operation. This 2008 notification came after the LOOW RAB shifted from domination by Responsible Parties, Contractors, and Regulators, to diverse community interests and academics, (albeit volunteers.)

- The Corps response to the 2007 RAB request for a facilitator to address issues between the RAB and the Corps was declined. Instead the Corps hired a facilitator, four years later, who announced at a recent public workshop that the RAB was "replaced." The RAB has not been replaced and continues to function in the role given by the Corps since 1999, as amended.

- The community would be better served if the federal government, instead, provided the $125,000 per year to the Niagara County Health Dept. for engaging technical experts. The Corps would be expected to support such funding if it believes its investigations and analysis are scientifically defensible. County Health's Community LOOW Project identified gaps through 2007; it should be revived to identify those the Corps has since, and will potentially create prior to issuing the R.O.D.

The failure of the Corps to provide for teleconference capability (if not Skype) for its TM public workshop (or others) to enable volunteer technical experts outside the community to participate on behalf of the community, is unconscionable.

TM ISSUES

The Remedial Investigation and Addendum were flawed, but are being used to form the basis of the risk against which remedial options will be measured. This seems an inappropriate "balance" for a community which has assumed all of the risk for 70 years, and received no benefit as a result.

The Corps has not provided the community with; complete data, an opportunity to comment on sampling plans in advance of field work, or funding for technical assistance to independently review long and complex documents generated during the past several years, in addition to extensive historical documentation.

1. **Retrieval** of radioactive residue/waste is not adequately evaluated for the IWCS, (only Fernald.) This is perhaps the most significant issues for the NFSS, which the TM should evaluated at length.

2. **Groundwater** evaluation should be <u>included</u> as part of this TM and FS because remediation of the IWCS will inevitably affect groundwater.
   - Performance monitoring after construction identified water collecting inside the IWCS.
   - Increases in Uranium detections in wells near the IWCS also reflect the probability that the IWCS is already leaking
   - Residues in the IWCS were originally dewatered, but now may well be in a saturated zone. This possibility was not evaluated in the TM and should be.

3. The question of "**<u>When</u>**" remedial options are needed was not properly evaluated. "Long-term" and "short-term" are not well-defined, but should be.

4. **IWCS wastes were never characterized** for gamma and beta activity. Site characterization under the NFSS Remedial Investigation did not successfully address (include) the IWCS. This warrants discussion in the TM.

5. A more detailed and comprehensive estimate of off-site removal costs for all waste vs. just K-65 should be included. **Adding 4-6 months to a 5-10 year project to accomplish <u>complete</u> removal and clean up may be more economically advantageous** than to add another *permanent* overhead cost to the list of DOE properties.

6. The Technical Memorandum should be expanded to evaluate **Environmental Impacts** of leaving the IWCS residues/wastes in place, and include better prediction models for containment failure of the current structure. Comparisons to Fernald were skewed and should be re-evaluated to include:

   a) The **Population within 50 miles** of the NFSS could be almost 10 times greater than Fernald and should be disclosed. (This is used for dose rate calculations.)

   b) When comparing Fernald detections one mile away, the TM neglected to note **NFSS discharges of radioactive material three miles away, into Lake Ontario.** The Lake **is the sole drinking water supply** for Toronto and surrounding areas, and is heavily relied upon by Rochester and many other Upstate NY communities.

   c) The TM neglects to mention that **the NFSS is in a region the state hopes to make a world class tourist destination.**

   d) The TM did not emphasize that **a radioactive waste disposal facility was open and operating for 10 years before** the K-65 residues were removed from Fernald. Neither were

the historical permitting practices by the NYS DEC for landfills surrounding the NFSS, which also began as "local" in nature, and quickly expanded to become international.

e) The TM discusses the aquifer near Fernald, but not the **three aquifers situated beneath the NFSS,** identified by DOE.

f) TM used **improper comparisons of only adjacent land uses** and ignored the real residential distances from the IWCS vs. Fernald and nearby denser populations such as Lewiston and Niagara Falls.

g) **Impacts from groundwater pumping**, from adjacent north, east and west properties from of the NFSS was not evaluated

h) **NFSS risk from surrounding activities** such as fines for fires, reactions, leaks and "inadvertent storage of explosives" were not evaluated in the TM.

i) Instead, **photos distracted** public workshop participants from radiological danger that is not visible to the eye. The "after" photo of Fernald seems virtually identical to "before" at the NFSS and CWM Chemical, which have experienced fires, explosions, leaks, discharges and other adverse impacts.

j) Some Fernald residents may have been satisfied with **an enormous radioactive waste landfill left behind** because they have not experienced the problems that arise from them. This community recognizes the difference between waste pits and landfills, and landfills and other types of disposal have not been operated safely in this location.

k) The TM indicates that technical advisors were provided to the Fernald CAB **only during remedial activities**. If accurate, this may also account for why that community acquiesced to on-site disposal of radioactive wastes.

l) The Corps public presentation and solicitation of public input on this TM asked for future land use preferences, **before telling the public** what those preferences would mean to the level of clean-up standards (ARARS) as well as health and safety.

m) The fact that the NFSS is not on the NPL was a matter of timing as the TM noted. The NFSS is considered much higher risk than many NPL sites – a combined NPL and FURAP ranking should be undertaken with public input. If that context is not possible, the **reference to NPL should be removed** as it is otherwise misleading.

7. The travel and storage history of residues and wastes, from first arrival at the LOOW, around the LOOW, through or not through the Silo, and to the IWCS was not fully addressed. Gaps should be clearly identified. The known and potential co-mingling in categories the Corps created (K-65 vs. other vs. tower, vs. Rubble/waste vs. R-10 vs. soils) warrants more evaluation in the TM.

8. The NFSS has been temporary Storage in one form or another since the 1940s. The TM should consider other temporary storage sites in addition to Disposal sites for transfer of wastes – to dryer and more seismically stable containment.

9. There are many improperly defined or important omitted terms in the Glossary. Uranium is defined as solely naturally occurring, confusing the fact that there is Uranium at the NFSS which is not naturally occurring. Strontium-90 is not a defined term. The health hazardous of these radioactive materials and many other contaminants of concern, such as thorium, are not mentioned, in contrast to the glossary definitions for Radium 226 and Radon.