



## Treating Contaminants Stored in Plumes

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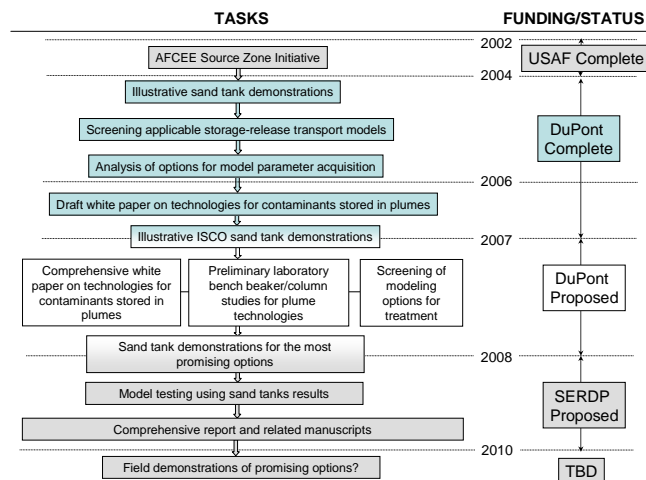
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In 2005 DuPont and the Center for Contaminant Hydrology at Colorado State University embarked on a research initiative addressing contaminants stored in plumes. The driver for the effort was a concern that contaminants stored in plumes pose significant challenges that were not being rigorously accounted for in site remedy decisions. Through 2005 and 2006 the following task were completed:

- Demonstrative laboratory studies,
- Identification of models that can be used to resolve governing processes,
- Testing of innovative site characterization approaches,
- Sharing our knowledge with numerous regulators and other technical staff
- Pursuing complementary funding from the US Department of Defense (DoD)

Results these efforts are presented in Lee Ann Doner's 2007 master thesis and in two journal manuscripts (one in review and one in draft). Unfortunately, our 2007 proposal to the DoD was not accepted. In large part this was due to the DoD's limited appreciation of the problem in 2006. The good news is our related knowledge transfer activities have brought the issue of contaminants stored in plume to the DoD's attention. This is reflected in the attached 2007 DoD Statement of Needs (SON) for the SERDP Program. Note we responded to the SERDP request for proposal on January 7, 2008.

In 2007, our focused evolved to identifying technologies that can treat contaminants stored in plumes. Activities currently supported by DuPont included a draft white paper screening options and an ongoing demonstrative sand tanks experiment. Our vision is that our current solicitation of \$742,000 from the DoD will allow us to continue this initiative through 2010.



The end vision of this project is an understanding of the effectiveness and cost of technologies that can treat contaminants stored in plumes. Consideration will be given to both current and novel technologies.