# Report to the Environmental Management Advisory Board

## Evaluation of the United States Department of Energy Environmental Management Strategic Planning Communication Tool

Submitted by the Risk Communications Subcommittee
Date – TBD

## Background:

In December 2012, during an Environmental Management Advisory Board (EMAB) meeting, representatives from the United States Department of Energy (DOE) recommended that a subgroup of the Risk Subcommittee review a strategic planning tool under development by Environmental Management (EM).

The review would consist of an evaluation of the software that was developed jointly for the Program, Planning and Budget Division, Office of Strategic Planning. This review would occur during the annual Intergovernmental Meeting December 12-14, 2012. Representatives of EMAB who attend the Intergovernmental Meeting included state, tribal, and local government officials.

The "Strategic Planning Tool" as referred to in this report, was developed to demonstrate the broad impacts of alternative budget decisions and funding strategies on the EM cleanup sites across the country. The simulation tool is designed to illustrate impacts of tough choices that will have to be made and to engage stakeholders in a more comprehensive fashion on high-level planning assumptions.

Four members of the EMAB Risk Communications Subcommittee, Communications Subgroup attended Intergovernmental Meeting and had the opportunity to view the simulation tool. However, due to competing technical sessions, time was limited for detailed evaluation. Members reached out to others within their groups and obtained some additional input on their experiences using the tool.

## Discussion:

DOE-EM provided technical staff to explain and demonstrate the use of the tool to the Intergovernmental Meeting attendees. These explanations were very helpful in understanding the basic parameters of the tool, the cleanup options for each site, and the individual and cross-complex impacts of choices made. The tutorials provided additional clarity on what the tool could evaluate and its limitations for making additional or alternate cleanup choices.

For the tool itself:

- ✓ Graphics were clear and understandable.
- ✓ Individual cleanup sites were easily identifiable.
- ✓ Commands for navigating the process were relatively easy with initial assistance from the EM staff.
- ✓ Response times for calculations of the selected options were good.

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The observations that follow should be considered in the context of the evaluation. Those attending the Intergovernmental Meeting are knowledgeable and informed on EM cleanup activities. They have inherent understanding of the complexities of their sites and comprehensive knowledge of cleanup needs, schedules, and priorities for those sites. They also have a general familiarity with other sites in the complex, as well as the budget and decision making processes that EM faces. Evaluation of this tool by a more general audience, such as the public and perhaps individual site citizen advisory boards, might result in much different observations.

## Observations:

- The purpose of the tool was not completely clear. If it is for use with the general public and/or outreach (media or congressional staff for example) to inform them of the difficulties faced by decision-makers and the impacts that cleanup choices have on cleanup of the cold war nuclear production complex, then it appears to achieve those goals.
- The tool did consider legal agreements (milestones) at risk and the impact of choices on meeting those agreements.
- It is too simplistic to be used as a decision tool by DOE and its regulators unless there is prior agreement on the elements to be considered and, likely, a very limited scope for the decision.
- The options that could be selected were too basic, and the choices limited for making budget or schedule decisions. "No ability to look at the whole menu."
- The tool could not incorporate the ramifications that making the specific choice would have on budget and schedule. Using the Hanford Site for an example, if you selected the option to delay cleanup in the central part of the site, it showed the budget and time impacts. But it was not able to consider factors, such as increased groundwater contamination, that would occur from such a delay and then reflect those in the cost and schedule calculation.
- The tool did not consider the significant credit that could occur for removing contamination from the environment unless that contamination is costing DOE a substantial amount of money. In that case, the savings are credited for additional effort.

  In the case where contamination exceeds a criteria designed to protect human health and the environment, but is controlled through relatively inexpensive institutional controls (e.g., fences and signs), the tool shows the cleanup negatively impacting the bottom line because no future credit is given for the cleanup.

  The tool shows the D&D of facilities that do not reduce the amount of contamination in the environment to have a positive impact on the bottom line because it reduces re-occurring S&M costs. This introduces a bias which favors D&D over environmental cleanup of soil and groundwater. Cleaning up environmental contamination is a benefit that should be accounted for in the tool.
- There is concern that the proponents within EM may believe it has a greater application for decision-makers than the tool can realistically support.
- Questions were raised on where the tool would be housed, who would have access to it, and what technical support would be provided for those using it.

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