



# NARPM 2008

National Association of Remedial Project Managers

18th Annual Training Conference

July 7 – 11, 2008

1:30 – 3:00 Thursday, July 10<sup>th</sup>

**Remedy Rescue**

a.k.a.

How Did This Happen??!!??

and

How Can I Make Sure It Never Happens Again??!!??



**Moderator:** Ravi Sanga, Region 10

**Panelists:** Mary Peterson, Region 7  
Kira Lynch, Region 10  
MJ Nearman, Region 10



# Define the “End Game” Upfront

- Does it really make sense? Is it achievable? Do you have an exit strategy to define when the cleanup is complete?
- Nail down your Conceptual Site Model.
- Resist the urge to “punt”. Force the team to clearly define the objectives for each media.
- Thoroughly understand your ARARs and all their subtleties. Document the specific applications for your site for each contaminant and media.



# Surround yourself with the best and **LISTEN!!**

- Nothing replaces a good team of qualified pragmatic individuals. Don't give up until you have one.
- Identify the key decision makers for each critical decision. Then, allow them to do their job and bring recommendations back to the team.



# Form a Hypothesis and Test It Constantly

- Look at multiple lines of evidence. What conclusions can you draw?
- Keep cycling from the “big picture” to specific technical details and back again. Does it all fit together and still make sense?
- Don't be afraid to modify your hypothesis along the way. The worst mistake is to keep on the wrong track for fear of looking foolish.



## **Groundwater Restoration vs. Groundwater Containment**

- NCP Preamble: pp. 8732-8734
- Ground-Water Protection Strategy: To return beneficial uses (i.e., to MCL levels) within a reasonable timeframe throughout the plume **regardless of current use.**
- Groundwater Containment: When restoration is not practicable, focus on plume containment to prevent contaminant migration. Establish alternate points of compliance to define containment area.



# Failures During Operations and Maintenance

- Establish clear performance standards for each media and waste stream. Document fundamental objective and corresponding rationale (i.e., why is it important to meet this standard?)
- Pay attention to compliance. Don't put it on autopilot.
- Adjust performance standards when they no longer make sense if appropriate.



# When Is Enough Enough??

- Back to hypothesis testing – We were so optimistic when we wrote the ROD but are our objectives still reasonable?
- Is the timeframe to reach cleanup goals still reasonable ?
- Have we reach diminishing returns for risk reduction vs. dollars spent?
- Is it time to consider modifying the ROD or – implementing a TI waiver??