

# RAB NEWSLETTER

Your official community voice for the cleanup of the Titan 1A missile site

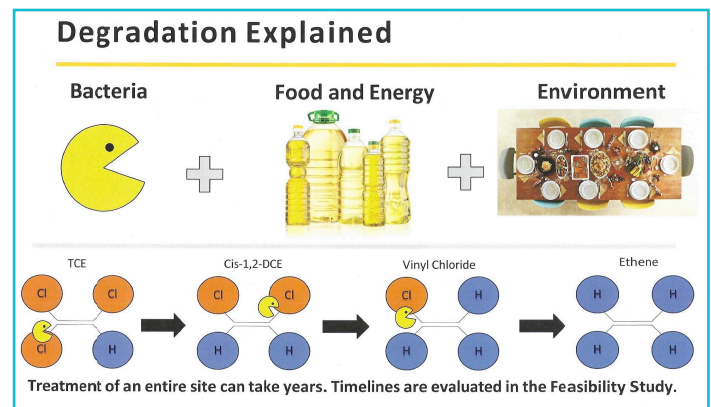
## Gobbling up TCE, naturally

By Sandi Dolbee  
Community RAB co-chair

It is an image for the ages. The hero of a 1980 video arcade game doing battle with a now-banned 19th century chemical solvent to restore land contaminated by a 1960s missile base in the 21st century.

That's the gist of a scenario presented at the Jan. 22 quarterly meeting of the Restoration Advisory Board (RAB) for the cleanup of the former Titan 1-A missile base in Lincoln.

Holding up an illustration of a Pac-Man-like character, an engineer for the company testing possible remedies led the RAB and the audience who had gathered at McBean Pavilion through the steps of how natural bacteria can be used (like Pac-Man) to gobble up the trichloroethylene (TCE) that has



Parsons Corp. illustration

contaminated the groundwater under the Cold War-era facility off Oak Tree Lane and Highway 193.

Over time, the bacteria, helped along with something like a form of vegetable oil to

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BEFORE



AFTER

## Lead contamination update

Placer County is nearly done removing the lead and other debris from when it operated shooting ranges on part of the former missile base. The work was halted by the rainy season but is expected to resume later this year. Twelve tons of lead and 441 truckloads of soil have been removed, revealing remnants of the Cold War-era underground complex. The county bought the property after the base closed. This cleanup is separate from USACE's restoration project.

Photos courtesy of Placer County

# Meeting recap: MNA, missing wells and turnover for community RAB

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provide it with food and energy, will go after the troublesome three chlorine atoms that make up the “tri” in trichloroethylene, reducing the carcinogenic threat to a non-toxic ethylene (or ethene), explained Abby Bazin, an environmental engineer with Parsons Corp., the contractor hired by the U.S. Army Corps of Engineers (USACE).

The process is an enhanced version of a remediation technique known as Monitored Natural Attenuation (MNA), so called because it will be monitored to ensure that it’s working.

Bazin said this enhanced MNA will be one of the possibilities included in a Feasibility Study expected to be released soon by the USACE, which is in charge of the restoration. That Feasibility Study will be a key component in helping the USACE decide on a remediation plan.

One drawback of MNA is that it takes several years to work. Bazin acknowledged this process “will take some time,” adding that a more-specific timeline will be in the Feasibility Study. Cost wasn’t addressed.

MNA often is used in conjunction with a more aggressive, and faster acting, remediation treatment. Perhaps coincidentally, RAB members were told at the meeting that preliminary results were promising for one of those treatments, known

as zero-valent iron.

“Right now we are going to lay them (the possibilities) all out on the table — with no favorites,” said Matt Marlatt, USACE project manager and co-chair of the RAB.

In his report, Marlatt also addressed the issue of two monitoring wells that apparently were destroyed by construction work from a nearby housing development. He said officials were discussing what to do about the two wells, which cost an estimated \$20,000 apiece. Community RAB members have suggested the wells should be replaced and USACE compensated for the mishap.

TCE was discovered in the groundwater in the 1990s and traced back to the missile base, where it was used as a solvent and degreaser. After decades of fits and starts, the USACE is expected to decide on a cleanup plan by next year, with implementation to follow.

January’s quarterly meeting was the final one for six members of the RAB’s community branch (the RAB is made up of representatives from USACE and the state water board, along with volunteers appointed by USACE). Bob Buendia, Tom Brutting, Jeffrey Callison, Sandi Dolbee, Ranny Eckstrom and Steve Sterling decided not to seek a second term.

Three new community members were introduced at the meeting: Patrick Egan, John Margowski and Jim Messelbeck. They will serve with Rick Carreiro and Tom Denzler, who have opted for a second term. If you are interested in serving on the community RAB, send an email to [SPK\\_FUDS@usace.army.mil](mailto:SPK_FUDS@usace.army.mil).

The next quarterly meeting, which is open to the public, is set for April; details to come.

**The views in this newsletter are those of the community RAB partners and do not necessarily reflect the official position of the U.S. Army Corps of Engineers.**