

## Groundwater U Evaluation

The objectives of Groundwater U were to help the public 1) build an understanding of groundwater; 2) understand how contaminants behave in groundwater; and 3) prepare to review and comment on the SSFL Sitewide Groundwater Remedial Investigation Report.

*Note where the count of responses does not total to 54, the balance did not respond to the question*

**1. With these objectives in mind, do you feel that the information provided during the six Groundwater U presentations helped you:**

- a. Develop an understanding of groundwater?

51 checked "Yes"                      1 checked "No"

- b. Understand how contaminants enter groundwater and how they behave?

50 checked "Yes"                      2 checked "No"                      1 wrote "partially"

- c. Do you feel better prepared to review the Groundwater Remedial Investigation Report?

51 checked "Yes"                      1 checked "No"

**2. Why did you register to attend Groundwater U? (check all that apply)**

32 checked "To learn more about groundwater in my community"

1 checked "To learn more about groundwater contamination at SSFL"

29 checked "To prepare to review the SSFL Sitewide Groundwater Remedial Investigation Report"

23 checked "To prepare to comment on the SSFL Sitewide Groundwater Investigation Report"

14 checked "Other" and responses provided included:

- I am a former environmental consultant and have done similar work in the past
- To learn more about groundwater flow and contaminants
- I live here, was an environmental engineer, and dealt with hazardous waste and worked for Rockwell for a short time
- To get a better understanding of my drinking water quality. What being done to help better our waste and to clean up the effects of SSFL
- To prepare for watershed management plans in the area
- To gain personal knowledge
- To learn basic information
- To observe and assess the risk to West Hills
- Learn about groundwater in the San Fernando Valley
- Learn more about groundwater in general, rad in general, SSFL in general
- To see if something is finally going to be done to stop the flow of contaminants
- Interest in future prospects at the site

- To be more effective PPG participant
- Get an idea if the groundwater at my home is contaminated

3. **Thinking about the presentations given during Groundwater U, was the information provided:**

8 checked “Too Technical”

39 checked “Just Right”

6 checked “Too Basic”

4. **Was there a particular session that was (most helpful)/(least helpful) (circle one) to you?**

Responses included:

- All
- All were good
- All: All were very interesting
- All: All sessions were helpful
- All: Most helpful!
- All: Very helpful. I like the room set up better with round tables, but I live much closer to Corporate Pointe
- I missed the first session and wish I could see a video of it.
- 1: The tanks which illustrated fluid flow/spread was good. The field trip was also good. Each built on the prior session.
- 1: It assumed no prior knowledge and set positive information base for the rest of the sessions
- 1: Set expectations for the entire series
- 1: It provided the foundation for all other sessions
- 2: Because I already understood how groundwater flows
- 2 - 3: Things began to solidify in my mind and I had a true moment of understanding the material
- 3: Examined remedial options
- 4: Dave McWhorter (country boy) was good. His delivery is perfect and he is very believable
- 4: Specific groundwater and hydrogeology of SSFL built on and made attendance at previous sessions a worthwhile effort
- 4: Least helpful
- Field Trip: Because it helped me understand how the information and data are obtained and how hard the scientists work
- Field Trip: Applied what we learned in class
- Field Trip: I needed to see the site
- 4 - 6: Most helpful as focused on SSFL
- 4 - 6: Most helpful in addressing my needs as a geologist (first 3 were not specific enough)
- 4 - 6: Most pertinent to SSFL
- 5: Discussed actual flow of groundwater
- 5: All were good but Dr. Beth Parker was particularly good and easy to follow
- 5: Wrapped up previous sessions and set the stage for #6
- 5: I could understand
- 5: Most helpful as the most basic information
- 5 & 6: Helpful: to help me understand the types and extent of groundwater contamination
- 5 & 6: More information on the study results provided as compared to background information

- 5 & 6: Plume progress sessions and models provided the conceptual model for the existing plumes
- 6: Helpful: brought all the information together
- 6: Dr. Cherry was most helpful - he has the ability to communicate to non-technical levels
- 6: Good summary of a complicated topic
- 6: Most helpful

5. **Were the written materials provided (binders & handouts) helpful in your understanding of groundwater?**

53 checked "Yes"                      1 checked "No"

And, were the levels and types of information provided:

7 checked "Too Technical"   41 checked "Just Right"   5 checked "Too Basic"

- a. Do you plan to refer to the Groundwater U written materials during your review of the Groundwater Remedial Investigation Report?

38 checked "Yes"   1 checked "No"   9 checked "Not Sure"   5 checked "I do not plan to review Report"

- b. Have you shared these materials with members of your community who were unable to attend Groundwater U?

22 checked "Yes"                      27 checked "No"                      3 wrote "not yet"

1 wrote materials no, concepts yes

6. **Was the Saturday, April 30<sup>th</sup> site tour beneficial in helping you understand the groundwater investigation at SSFL?**

29 checked "Yes"                      0 checked "No"                      18 checked "I did not attend"

7. **Have you visited the ETEC/DOE website to view the materials or videos of the Groundwater U sessions?**

19 checked "Yes"                      30 checked "No"

- a. If so, was it easy to find the information you were seeking? 16 checked "Yes"   0 checked "No"

- b. Is it useful to have this information available on the website? 15 checked "Yes"   0 checked "No"

8. **How did you find out about Groundwater U? (check all that apply)**

0 Advertisement in the Daily News

11 Email from NASA

4 Advertisement in the Ventura County Star

1 DTSC Website

3 Advertisement in the Simi Valley Acorn

1 ETEC/DOE Website

20 Email from DTSC

6 DOE's Clean Update newsletter

11 Email from Boeing

4 NASA's Field Notes newsletter

8 Email from DOE

7 Postcard from DOE

17 Other, responses included:

- Not sure whose email

- (Checked but not specified)

- From someone who already knew about it
- Email from a friend
- Don't remember who sent the email
- Announcement in our organization
- Information from the PPG
- Spouse
- Coworker
- Word of mouth
- Email from a friend
- DTSC
- Personal communication
- (Checked but not specified)
- Valley Industry and Commerce Association website
- Word of mouth
- Co-worker

**9. Do you plan to provide comments on the SSFL Sitewide Groundwater Remedial Investigation Report to the California Department of Toxic Substances Control?**

21 checked "Yes, I am more likely to submit comments after attending Groundwater U"

6.5 checked "Yes, I would have submitted comments without the benefit of Groundwater U"

9 checked "No, I do not plan to submit comments" Reasons given included:

- The presentations answered my questions and addressed my concerns
- It would be a waste of my time and effort
- I attended for the educational experience
- My comments would probably be ignored anyway
- Not in my domain
- No reason given
- Too long to read
- Not qualified

13.5 checked "Not Sure"

**10. Do you have any comments regarding Groundwater U that you would like to share? Responses included:**

- The questions I developed as we went along were answered by subsequent presentations
- I already understood most of the information presented, but I wanted more specific information about SSFL. Nothing was presented about SSFL history and present dangers. Dangers of carcinogens past, present, and future
- Specific data regarding contamination migration was minimal, especially with regard to migrating in directions other than towards the NE
- I was pleasantly surprised! Groundwater U exceeded my expectations, even as a former environmental consultant with prior knowledge of the subject. I feel it was a job well done by all involved
- Very informative
- Excellent for learning about groundwater contamination and future remediation
- Excellent: It was a good lecture series.
- This is a model of what should have been done from the beginning when SSFL contamination and health effects on the population first came up

- Why wasn't a USA university chosen instead of a Canadian school? Why weren't the Army Corps of Engineers and/or US Geological Survey brought in?
- This was a great opportunity and I really appreciate the chance to participate. Thank you to all who helped put this together. I learned a lot.
- Professional - a little defensive. You tried to too technical, not all of us are technically inclined. You have to be careful to use language that all will understand.
- It was well put together. The information was useful and the speakers knowledgeable. Wendy did an awesome job moderating and holding people to the rules
- I enjoyed it and learned lots of interesting information
- Great information and it was free. The facilitator did a poor job on 5/19 of keeping the public to one question. It was open season. They each asked several questions.
- I am confused as to the other sides as they were not presented. I know all arguments have more than one side and I am disappointed
- Remediation options were skimpy
- DNAPL is a toxic chemical - why not call it correctly? It sounded like the public was being snowed under with information. Information could have been condensed more for lay people. It is disturbing to see how many toxic chemicals are in or near drinking
- I thought it was well prepared and thought out. I thought they made a difficult subject slightly easier I really enjoyed it immensely
- Would be great to enlist speakers ability to translate between the scientific community and the public
- Additional science reports which disagree with the panel's results. Information presented was incomplete. I wanted to attend tour but did not receive a response. I needed more information than was provided.
- Extremely well document and highly technical material presented in the most straightforward manner possible. Panel was enjoyable for depth of knowledge, commitment, and dry wit
- Still find it hard to believe that some traces of contaminants have not run off site with water table. Understand that plume is bulk, but question small traces
- Boeing should consider injecting KMNO<sub>4</sub> in those solvent release areas. The chemical should flow the same pathway as the contaminants
- In is very valuable education
- All the sessions were excellent. I would attend more sessions
- The site tour was extremely helpful in better understanding the first 3 sessions and getting through the last 3 sessions
- I would have liked another session that dealt with surface waster and possible offsite impacts of run-off. While compartmentalization makes sense scientifically, surface water has some effect also.

**11. What suggestions do you have for future public education about SSFL topics? Responses provided included:**

- Superfund
- Exclusive peer review discussion. Discuss hard data results. Much redundancy on basic information. Discuss interfraction mixing.
- CEQA process
- More of the same

- Health effects of exposure to contamination (basic epidemiology, radiation exposure, etc).
- This was great. Keep it up. Tables were nice and so were the coffee and cookies. No one fell asleep! The auditorium was better for the videos, but it was harder to eat the food and easier to fall asleep.
- Do a better job of letting people know about the opportunity. Why are only wells at SSFL being tested and not offsite local and private wells?
- The one question that was not addressed - What does this mean to you?
- Can it be dumbed down and condensed for Junior High and High School students. In Simi Valley, we have a Youth Advisory Board and this would be a great presentation for one of their meetings. Contact Samantha Argabrite or Sommer Brodwich at 805-522-4473
- Keep info on line for reference to help us wade through the report and refer our neighbors to it if they have questions
- Keep them continuous and keep educating the public
- Sessions with presenters other than Boeing. Gravity as a force dealt with as part of the presentation. Documentation given for each chart presented.
- Air and surface
- Surface water
- Where your drinking water comes from. Every person should know for all surrounding communities
- It would be wonderful to have a similar series on surficial contamination
- Use this as a model for further educational programs
- Someone suggested a similar U for surface water. Good idea. Also should be a separate one for rads
- I am such a neophyte that I don't know about future topics. I think it would also depend on additional findings on the chemical and radionuclides co-sampling (characterization)
- Surface water effects. CEQA balancing of total cleanup per the Administrative Order on Consent as compared to atmospheric and other community impacts of those standards applied to entire SSFL /Boeing site