Nuclear Weapons, Polluted Water & Our Health

California’s Lawrence Livermore National Laboratory was founded in 1952 to compete with Los Alamos Lab in NM in the creation of new types of nuclear warheads and bombs. Every nuclear weapon in the U.S. arsenal was developed at either Los Alamos or here at Livermore Lab.

Livermore Lab has two physical locations, a Main Site on the eastern edge of town and a high explosives testing range, founded in 1955 and called Site 300, in the hills near Tracy.

Nuclear weapons activities at the Main Site and Site 300 have resulted in hundreds of toxic and radioactive releases to the air, soil, groundwater aquifers and some surface waters. Leaking contaminants include radioactive hydrogen (tritium), uranium, plutonium, high explosives, perchlorate, hexavalent chromium, mercury, volatile organic compounds (VOCs), and more.

Both localities are federal EPA-listed “Superfund” cleanup sites. The Superfund Law was passed by Congress to address the nation’s most hazardous sites involving uncontrolled releases of toxic and radioactive materials.

The Superfund cleanup of soil and groundwater aquifers at both Livermore Lab locations is complex and includes multiple and often commingled plumes of toxic and radioactive wastes. The projected timeframe for cleanup is multi-generational, lasting 50-80 years, or more.

To make matters worse, Livermore Lab - faced with budget cuts and following its institutional tradition of excessive secrecy - is severely limiting its community involvement programs while simultaneously extending its deadlines for making technical progress. Together, these two trends threaten the completeness and effectiveness of the overall cleanup.

If full cleanup is not achieved, what will that mean for the health of our water resources, our communities and our children?

Decisions made this year will determine the immediate as well as long-term success of the cleanup. Here are just three of the key issues that Tri-Valley CAREs is addressing.

- Some technologies are commingling radioactive and hazardous constituents in groundwater at the Lab’s Main Site, which vastly complicates cleanup. The Lab began a study of potential solutions, but has essentially abandoned the effort.

Getting Through the Fence!

Tri-Valley CAREs is organizing community tours this fall inside the classified fences of the Livermore Lab Main Site and its Site 300 high explosives testing range near Tracy. These tours will include major areas of contamination being cleaned up under the Superfund Law. We are offering seats on a “first come-first served” basis.

The Site 300 tour will be held on Wed., Nov. 18 from 9am to 12:30pm. Site 300 was established to conduct open-air bomb tests with toxic and radioactive materials. Current operations allow for contained tests and open-air detonations; high explosives R&D, machining and manufacturing; and, waste burning and storage.

We are in discussion with the Lab about precisely which areas we will visit at Site 300, but we are planning to go to one of the “firing tables” where high explosives and uranium were detonated out in the open; unlined dumpsites where the groundwater aquifer has mixed directly with toxic and radioactive wastes resulting in a 2-mile long contaminant plume; a corrective action management unit for PCB-contaminated soil; and, the off-site contaminant plume beneath Corral Hollow Road.

The Main Site tour will be held on Thurs., Nov. 19 from 9am to 12:30pm. The Main Site contains most of the Lab’s principal nuclear weapons development facilities, including the plutonium facility and vaults, hardened engineering test building, tritium facility, radiography facility, high explosives application facility, National Ignition Facility, and others.

We have requested to visit an aquifer treatment facility to which contaminated off-site groundwater is brought via a pipeline; two areas with radioactive hydrogen (tritium) pollution in the groundwater aquifer; a waste drum storage yard; and, 4 “pilot project” cleanup areas.
Tri-Valley CAREs’ board, staff and membership met this summer for our annual strategic planning retreat.

The day began with a review of all that Tri-Valley CAREs has accomplished in the past year, and an impressive review it was.

Then, utilizing expert facilitation, great discussion, and an examination of strategic opportunities, the participants chose Tri-Valley CAREs’ program priorities for the coming 12 months.

The following program priorities received a sufficient number of votes to be chosen for the year.

Here they are in “rank order:”

1. Ensure the Cleanup of Pollution at the Livermore Lab Main Site & Site 300.
2. Cut the Nuclear Weapons Budget to Stop New Bombs and Bomb Plants.
3. Curtail the National Ignition Facility’s Role in Nuclear Weapons Development & Promote Its Removal From NNSA.
4. (tie) Promote Global Nuclear Disarmament, Non-Proliferation & the “Rule Of Law.”
4. (tie) Obtain Justice for Sick Workers with a Focus on Livermore & Sandia Lab Workers Made Ill by on the Job Exposures.
5. Advocate for a “Green Lab”; Transform Livermore & Sandia Labs to Civilian Science.

Gathering to chart a strategic path forward for Tri-Valley CAREs assists staff all year long. The group also learned new strategies for fundraising and effective letter writing, and shared an amazing potluck lunch.

We invite you to help us carry out this year’s priorities. And, consider joining our strategic planning event next year.

Never Again! More than 300 activists gathered at Livermore Lab on August 6, the 70th anniversary of the U.S. atomic bombing of Hiroshima. Keynote speakers included Daniel Ellsberg, A-bomb survivor Takashi Tanemori, Marylia Kelley, Jackie Cabasso and Chizu Hamada. Country Joe McDonald provided a rousing musical interlude. The rally was followed by a march to the Lab’s West Gate where Hamada led the crowd in a traditional Japanese Bon Dance. Peace advocates then staged a “die in” and had their bodies chalked on the roadway to symbolize the victims vaporized in Hiroshima and Nagasaki. More than 50 protesters, including Ellsberg, chose not to disperse and were arrested, cited and released. Links to photos, articles, video & radio broadcasts are on our website.

Hazardous Waste. We conducted significant outreach to encourage public comments on the Hazardous Waste Permit for Livermore Lab. The comment period is now closed. We thank all of you who sent in comments and/or participated in the hearing. Under the direction of Staff Attorney Scott Yundt, our Legal Intern, Julie Kantor, compiled a detailed technical comment (available on our website). While we wait for the CA Dept. of Toxic Substances Control to respond to all comments, we continue to update the agency as new information comes to light. In sum, the draft permit DTSC circulated was deficient and requires serious improvement. Stay tuned.

Continuing Resolution. Congress once again finds itself unable to pass an appropriations bill before the federal fiscal year ends Sept. 30. As we go to press, work is proceeding on a Continuing Resolution. Reportedly, it contains no “anomalies” that would boost nuclear weapons funding above last year’s limits. This is good news because it would limit any surge in funds for the new Long-Range Stand Off warhead that Livermore Lab is designing. It is likely, however, that there will be a series of short-term CRs, and we will remain vigilant as an “anomaly” for nuclear weapons could pop up in any one of them. To add to the drama, House Republicans may shoot down any CR in favor of shutting down the government over Planned Parenthood funding. Whatever has happened by the time this newsletter arrives, stay tuned... there will be more turmoil to come!

Iran Deal Moves Ahead. On Sept. 17, the 60-day congressional review period for the Iran agreement expired. In the preceding days, the Senate voted on multiple resolutions to prevent the Administration from waiving sanctions on Iran as required under the Joint Comprehensive Plan of Action. All resolutions failed to gather the necessary 60 votes to stop the agreement. This means the U.S. Congress will not undermine the deal. In our summer Citizen’s Watch, we asked you to thank Sen. Feinstein for her support of the agreement and to call on Sen. Boxer to support it, which she did. Further, we asked you to call Rep. Swalwell and ask him to support the deal. You did... and he did, as did Rep. McNerney from the adjoining district. We thank them all. Iran must complete a number of actions before sanctions are fully lifted, and the JCPOA must pass Iran’s internal review—but the outlook is good. Now, let's press upon the 9 states that possess nuclear weapons (U.S., UK, Russia, France, China, Israel, India, Pakistan & No. Korea) that nuclear weapons are not legitimate for any nation. There can be no right hands for wrong weapons.

Citizen’s Watch
September 24, 2015

Dear Tri-Valley CAREs Supporter,

**Tri-Valley CAREs is a trailblazing organization**, leading, innovating and creating positive social and political change. As I am sure you recognize, our programs build a strong grassroots movement **locally** and influence nuclear and environmental policy **nationally**.

Today, I invite you to help us achieve success on **both** levels with a single tax-deductible donation – online at www.trivalleycares.org or by postal mail.

**Your gift will address three critical issues that affect our lives:** polluting nuclear weapons activities, excessive secrecy that shields environmental and other nuclear policy issues at Livermore Lab from democratic debate, and longstanding disempowerment of the surrounding communities.

You know that nuclear weapons activities at Livermore Lab **have massively polluted California’s land, air and water**.

I write today to defend the water. Radioactive and toxic materials are oozing from the Lab’s Main Site into Livermore’s groundwater aquifer, which is in the San Francisco Bay watershed. And, contamination from the Lab’s high explosives testing range, called Site 300, near Tracy is migrating into **multiple** aquifers in the San Joaquin River watershed.

I know you understand that **clean water is essential to our future**, and I thank you for your help in safeguarding this precious resource. Livermore Lab’s two sites are on the EPA’s “Superfund” list of most heavily contaminated locations in the country. **Cleanup of the groundwater aquifers is expected to take up to 80 years**, or longer. And, 7 million people now live within the affected 50-mile radius around the Lab’s Main Site and Site 300.

**Key decisions in the coming months** will determine the scope of the cleanup and the long-term quality of our California watersheds. Additionally, what happens with cleanup here at Livermore Lab will influence whether or not the government walks away from cleanup at nuclear weapons sites all across the country.

I **ask you to join me in financially supporting exciting initiatives** that Tri-Valley CAREs is launching to protect our water and empower people who are affected by nuclear pollution.

I want to let you know that **Tri-Valley CAREs is expanding its outreach** to more neighborhoods in Livermore and Tracy and translating significant materials into Spanish. Many families in Livermore and, especially, in Tracy are totally left out of cleanup decisions because the Lab has refused to translate *any* Superfund information into Spanish!
Furthermore, we will be holding a **time-critical Community Meeting** in Tracy next month, titled, “Bomb Tests, Polluted Water and Our Future.” I invite you to check out the enclosed flier – and to join us if you can.

We have also engaged our environmental scientist, Peter Strauss, to produce a new report on the status of the Superfund cleanup. **Your donation now will help print and disseminate this report – in English and Spanish.**

I am also excited to announce the opening this month of our **Youth Video Contest.** You and I know the importance of involving young people in nuclear weapons issues and water protection decision-making. Our 2015 theme confronts the multi-generational nature of cleanup by asking youth to consider this central question: **Nuclear Weapons or Healthy Environment?**

Last year, Tri-Valley CAREs inaugurated the video contest, and we were deeply moved by the power, creativity and urgency of the videos we received. We don’t have foundation funding to cover the contest expenses, including the prizes. **May I count on you to help reach and involve our youth?**

Tri-Valley CAREs’ work is unique: it addresses the cleanup of severe pollution stemming from Livermore Lab’s past weapons activities and, in stopping new bomb projects, it is simultaneously forward-looking to promote nuclear disarmament and protect the community from future accidents, spills and leaks.

Our guiding philosophy is that cleaning up the environment and preventing future abuse requires an alert, informed, empowered and active public, and it is to this end that I ask your help today. **Please give as generously as you can!**

For peace, justice and a healthy environment,

Marylia Kelley,
Executive Director

**P.S. Don’t risk putting this letter aside and losing it.** Mail your tax-deductible donation today. Or go to trivalleycares.org to use our secure credit card donation site. **THANK YOU!**

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**Tri-Valley CAREs**
2582 Old First St.
Livermore, CA 94550

**YES! Here is my tax-deductible donation of**

___$50  ___$25  ___$100  ___$350  ___$1000  ____Other

Name ____________________________________________________________

Address __________________________________________________________

State _________  Zip __________

Phone __________________________

City __________________________

Email __________________________
BOMB TESTS, POLLUTED WATER & OUR FUTURE

What you need to know today to protect your family’s health and the community tomorrow

You are Invited to a Time-Critical Community Meeting in Tracy

Join your friends and neighbors to explore how activities at Lawrence Livermore National Laboratory’s Site 300 High Explosives Testing Site near Tracy affect the environment – and what you can do to ensure cleanup and protection of your water supply, your health and your future.

WHEN: Thursday, Oct. 22, 7 PM – 8:30 PM

WHERE: Tracy Transit Center, Room 103, 50 East 6th St. (near the Grand Theater)

SPEAKERS: Environmental Scientist, Peter Strauss; Tri-Valley CAREs Executive Director, Marylia Kelley; EPA Project Manager, Andrew Bain; Tracy Community Resident, Gail Rieger; and Tri-Valley CAREs’ Staff Attorney, Scott Yundt, with Q & A and discussion.

Expert panelists will explain the history of Site 300, its placement on the EPA Superfund cleanup list, the toxic and radioactive contaminants leaking into the water, and time-critical actions community members can take.

What goes on at Site 300 on Corral Hollow Road?

The photograph is of a hydrodynamic (bomb core) test at Site 300. The “streaking” effect is from shards of a pyrophoric, radioactive metal, called uranium-238, hurtling through the air.

U-238 is one of the contaminants of concern in the Site 300 Superfund cleanup. It was found in the aquifer. Recently, U-238 has also been found contaminating Site 300 soils at greater distances from the blast area than expected. No cleanup level has been set yet for these soils.

This is one example of why your participation matters!

SNACKS & DRINKS WILL BE PROVIDED. FIND OUT MORE: WWW.TRIVALLEYCARES.ORG
2015 YOUTH VIDEO CONTEST

NUCLEAR WEAPONS or HEALTHY ENVIRONMENT?
What do you think? What is important to you?

FACT: Due to Nuclear Weapons research, both the Lawrence Livermore nuclear weapons lab’s Main Site and its Site 300 High Explosives Testing Facility in Tracy are on the EPA’s “Superfund” list of the most contaminated sites in the country.

What does this mean to you?

Leaking Hazardous Waste Drums at Livermore Lab

Create a Video that Represents Your Perspective
Enter your 2 minute (or shorter) video for a chance to win $500!

Submission is open. All videos are due by October 31, 2015.

More Contest & Background Information:
www.trivalleycares.org/contest2015
www.facebook.com/youthvideocontest2015

Questions? (925) 443-7148 or scott@trivalleycares.org

This contest is sponsored by Livermore-based Tri-Valley CAREs (Communities Against a Radioactive Environment). Youth from 10 to age 30 are invited to submit a video. Winning videos will appear on our website, www.trivalleycares.org, and at a public awards ceremony on December 8, 2015 at the Livermore Public Library.
Polluted Water... Cont. from Page 1

Moreover, the draft document was never circulated to the public. Presently, there are no deadlines to seek public involvement or make technical decisions.

- **New discoveries of contaminants are being made.** At Site 300, the Lab has found much more widespread contamination with uranium-238, or depleted uranium (DU), than previously known. Further, there is no agreed-upon limit for uranium contamination in soils at Site 300. Tri-Valley CAREs is concerned that an excessive pollution level could be chosen as the “cleanup level.” Further, a new contaminant plume of perchlorate has been found recently at Site 300, and there has been a new discovery of radioactive tritium in the groundwater aquifer at the Lab’s Main Site.

- **The Lab refuses to translate Superfund cleanup documents into Spanish.** Although significant numbers of Spanish speakers live in Section 8 and other apartments near the Main Site fence line, the Lab has steadfastly refused to translate key documents. And, in Tracy, where 40% of the population is of “Hispanic origin” according to census documents, the Lab has likewise dismissed our repeated requests to translate cleanup materials into Spanish. Our Spanish-speaking neighbors have been historically disenfranchised, and the Lab is continuing to exclude their voices.

**The necessity to address this pollution is more urgent than ever.** Regional droughts are becoming more severe and of longer duration. The current 4-year drought has been called the worst on record in California. Our groundwater aquifers are precious resources that must be protected.

**Other costs to our health are also at stake.** The EPA has calculated that the largest off-site groundwater plume at the Main Site, if left untreated, could reach municipal water wells. If that occurred, the pollution would result in one additional cancer for every thousand Livermore residents drinking the water. At Site 300, the EPA estimated the risk of drinking the water pumped from wells at the fence line at one cancer for every hundred people.

The Superfund cleanup at Livermore Lab can be improved by public participation and advocacy. Tri-Valley CAREs is offering ways to inform and empower your voice. Join us for a time-critical Community Meeting in Tracy on **October 22**, a unique “inside the fence” tour of cleanup areas at the Lab’s Site 300 on **November 18**, and a similar tour of the Main Site Superfund cleanup on **November 19**.

And, if you are a young person between 10 and 30 years of age, we also invite your participation through our Youth Video Contest. You will find more information and fliers enclosed.

Fence... Cont. from Page 1

For either tour, participants must call us and provide their badges on or before Wed., Nov. 4. Livermore Lab is a classified nuclear weapons facility and badges are required. We are arranging for special briefings from Lab technical staff along the way.

If you are interested in attending one of these unique tours, please reserve your space today. The required data for badging is: Your full name, valid drivers license or passport number, date and place of birth, social security number and current address and phone.
Youth Video Contest is Now Open!

If you are between ten and thirty years old, we ask you to create a two-minute video with your thoughts about nuclear weapons. If you are over thirty, we ask you to invite the young people in your life to participate.

The Youth Video Contest is part of our work to engage the next generation in nuclear weapons and environmental policy and to ensure that their voices are heard. “Youth voices are often left out of environmental decision-making at Livermore Lab,” noted Staff Attorney, Scott Yundt, who is coordinating the contest. “Our 2015 Youth Video Contest allows young people to speak to issues that will impact their future through video, a format of interest to many youth.”

Nuclear Weapons or a Healthy Environment? is the theme of this year’s contest. The basic instructions are simple: Describe what is important to you through the medium of video. While submitters may take a broad perspective, contest rules require that the video address some aspect of environmental pollution or nuclear weapons activities at the Livermore Lab’s Main Site in Livermore or its Site 300 near Tracy, CA.

Video submittals can be cartoons, live-action, documentary style, etc. Contestants can film with such technologies as cell phones and laptop web cams. Videos must be two minutes or less. We are offering a Grand Prize of $500, a Second Place prize of $250, and a Third Place prize of $100.

Contestants need not be from Livermore or Tracy. Nuclear contamination affects us all. A committee that includes a professional videographer has been empaneled to judge the videos.

All videos are due electronically by October 31, 2015. Winners will be notified in November 2015. The three winning videos will be shown at a special awards ceremony and party on December 8.

The contest attracted impressive entries in its debut last year; and the three 2014 winning videos can be viewed on the contest webpage at http://www.trivalleycares.org/new/contest2015.html. Please see the enclosed insert for details and links you will need to submit your video.