

STRAWBERRY CREEK WATERSHED COUNCIL

November 29, 2010

Bruce Wolfe, Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

BWolfe@waterboards.ca.gov

Re: CONTINUED REQUEST FOR ENFORCEMENT ACTION AT BERKELEY LAB LASER ACCELERATOR (BELLA) IN THE STRAWBERRY CREEK WATERSHED AT LAWRENCE BERKELEY NATIONAL LABORATORY (LBNL), IN BEBERKELEY, ALAMEDA COUNTY, CALIFORNIA AND REQUEST FOR SECOND SITE VISIT, INCLUDING BEVATRON SITE

Dear Mr. Wolfe:

We have received your letter, dated November 19, 2010. We are troubled that your response to our letters, dated September 21 and September 29, 2010, was rather vague and too general. This prompts many questions that need to be answered.

It is our understanding that LBNL's Industrial General Permit (IGP) was issued in 1992, permit WDID: 2 01S002421, when the size of the LBNL site was 130 acres. Since 1992 over 70 acres have been added to LBNL that are not covered by the IGP. In addition, the IGP permit covers only the following activities: material storage, power generation, and vehicle maintenance and storage, recycling, hazardous waste treatment, storage, or disposal facility, material handling, and waste water treatment. The BELLA demolition and construction activities do not fall under this industrial permit. These activities are taking place at a contaminated site (Building 71) that contains unknown quantities of **asbestos, lead, beryllium, poly-chlorinated biphenyls (PCB), radioactive materials, including but not limited to Americium-241, Cesium-137, and Curium-244, and Tritium** — inside and outside the building in soil, soil water, surface water and ground water. The 1992 permit does not cover these conditions.

- Are you aware that the BELLA project (Building 71) is located on top of two branches of the North Fork of Strawberry Creek and a historic spring? (see Map attch #1)
- Are you aware that there is an identified ground water plume of organic solvents (VOCs) at the site? (see Map attch #2)
- Have you been informed that there are plans to dig under Building 71 to construct piers as deep as 25 ft potentially disturbing this contaminated ground water plume?

- Have you seen soil sampling results from beneath Building 71 to the depth of 25 feet? What do the soil samples show regarding contamination? When were the samples collected? Was ground water encountered?
- How can you verify that there is no contact between the ground water plume and creek water under Building 71?
- Are you aware that Building 71 is located on top of an active landslide in an seismically unstable zone?
- Have you inspected the basement of Building 71 to determine if there is any water seepage during the rainy season?
- Do you know the condition of the culverts and/or piping of the creek waters and spring and sanitary sewers (gas lines?) under Building 71?
- The enclosed maps (see Maps attach #3 & 4) show many storm water drains directly discharging to the North Fork of Strawberry Creek. It also appears that storm water and sanitary sewers intermingle. Have you inspected all sanitary sewer drains to eliminate the possibility of illicit connections to storm water?
- Do you know if LBNL tests the hydrauger waters in the vicinity of Building 71 for contaminants? Which contaminants? Did you observe how the hydrauger waters are collected? Where are the hydrauger waters discharged?
- Do you know that significant breaches in the site's municipal water, sanitary sewer water, and low conductivity (cooling towers) water systems have occurred due to slope instability and seismic activities at LBNL, including the Building 71 site?
- Do you know that the Building 71 cooling tower water has included **corrosion and scale inhibitors, biocides, and chlorine**, as well as **chloramines** in the municipal water?

Because these critical questions need to be answered on behalf of the public, we ask that you request LBNL to include stable isotope ratios to be added to the routine ground water, storm water, and surface water monitoring programs.

BEVATRON

Your letter also refers to the permit issued for the Bevatron Demolition project, dated 5-6-2010, #WDID: 2 01C358121, which prompts further questions.

It is our understanding that the RWQCB staff did not visit the actual operations of the "...interior drainage designed to contain and collect storm water runoff (as well as dust control spray water) before it is discharged to the sanitary sewer system."

- Are you aware that the Bevatron (Building 51) was built on top of two

branches of the North Fork of Strawberry Creek fed by two springs? During its lifetime the Bevatron basement was filled with water requiring a sump pump.

- Do you know if LBNL tests the hydrauger waters in the vicinity of Building 51 for contaminants? Which contaminants? Did you observe how the hydrauger waters are collected? Where are the hydrauger waters discharged?
- Do you know if the water at this internal collection site has been tested for contaminants? Do you know what contaminants? The enclosed maps show that there are many storm water drains associated with the Bevatron directly discharging to the North Fork of Strawberry Creek.

We ask that the RWQCB staff return to the Bevatron site, ask for access to the basement to observe the water conditions during a rain event (not 42 hours after the rains stopped as was the case with the staff visit on October 26, 2010) and take photographs and request sample results from the sump pump water before it is discharged.

Finally, it is our request that we accompany your staff during its next visit to LBNL — during the pending rainy season. We look forward to hearing from you at your earliest convenience.

Sincerely,

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attach:

#1 Map: Interpretation of Historic Channel Network at LBNL in Strawberry Creek Watershed, Figure 5 from “Contaminant Plumes of the Lawrence Berkeley National Laboratory and their Interrelation to Faults, Landslides, and Streams in Strawberry Canyon, Berkeley and Oakland, California,” March 2007, Laurel Collins, Geomorphologist, Watershed Sciences

#2 Map: LBNL Site Map, Groundwater Contamination Plumes and Contaminated Soil Sites, Figure 2 from same

#3 Map: Groundwater Contamination Plumes in Relation to Modern and Historic Drainage Networks at LBNL, Figure 5 from same

#4 Map: Zones of Concern for Groundwater Plume Expansion along Compiled Faults, Bedrock Contacts, Landslides, Historic and Modern Creeks, Figure 18a, from same