

February 28, 2007

The Honorable Mayor Paul Miller & City Manager Mike Sedell  
City of Simi Valley  
2929 Tapo Road  
Simi Valley, Ca. 93063

Dear Honorable Mayor Miller and City Manager Mike Sedell;

We appreciate the opportunity to participate in the City of Simi Valley's outreach to the California Department of Health Services (CDHS) regarding potential safety concerns related to the Runkle Canyon development project.

First, we want to say that we do understand that the time for comment on the Runkle Canyon Environmental Impact Report (EIR) has past. We realize that we did not voice our current concerns before the City approved the EIR in April 2004.

The reason for this is simple: we weren't aware of problems with the EIR, and of the significantly high readings of the radionuclide strontium-90 (Sr-90) found in the canyon, until the March 17, 2005 publication of "Neighborhood Threat – Runkle Canyon is poised to be Simi Valley's newest neighborhood. But did the city misinterpret the risk of radioactive material in the ground?" in *Los Angeles CityBeat/ValleyBeat*.

It should be noted that two residents, Patricia Coryell and Terry Matheney, did voice concern over the project during the 2004 approval process as it proposed building within about 1 1/2 miles away from Boeing's Santa Susana Field Laboratory (SSFL). As you know, the lab was the scene of the worst nuclear meltdown in U.S. history, releasing hundreds of times more lethal radionuclides into the environment in 1959 than the Three Mile Island nuclear disaster did in 1979. The history of SSFL's pollution problems have been well documented, especially on the *EnviroReporter.com* website you refer to in your Nov. 21, 2006 letter to CDHS.

The City's efforts to review this issue again are laudable. We have outlined our basic concerns below. They are addressed in more detail in our list of questions to CDHS.

- We are concerned that the City relied on the 2003 Miller Brooks study for the EIR. City planning director Peter Lyons told *CityBeat* in 2005, "The Miller Brooks study of 2003 was truly the report that we used, and Impact Sciences used, to do the EIR." Yet this report was discounted by the CDHS in its Nov. 8, 2006 letter to you: "The Miller Brooks survey is not considered useful due to its high minimum detectable activity..."
- We are concerned that CDHS and KB Homes/Lennar are using the CDHS 2005 survey of Runkle Canyon as an indicator of the soil's safe levels of Sr-90 for several reasons: 1) CDHS told the City (and *CityBeat*) that it did not generate a report for this survey and had just reported the results (which had to be requested and were not offered to the City or *CityBeat*). 2) CDHS "split," or divided the five soil samples with the developer's lab, Dade Moeller, and yet Dade Moeller's results registered 2-19 times higher than CDHS'

readings of the very same soil. These highly varied readings of the same soil, combined with no report, do not inspire confidence that Runkle's soil is safe especially considering the very high readings of Sr-90 in previous, more extensive tests and the proximity of the property to SSFL.

- We are concerned that high readings that exceed of the preliminary remediation goal (PRG) for Sr-90 did not result in adequate "additional study," which is what Al Boughey, the City's director of Environmental Services, said should happen when the PRG is exceeded. Boughey cites the 2003 Miller Brooks report as further study, when we now know that CDHS says that report is "not useful."
- We are concerned that new evidence of surface water pollution found last November in the canyon (pictured on both *EnviroReporter.com* and *StopRunkledyne.com*), has not been investigated even though there is clearly a chemical sheen to this water. This pollution-impacted water is located downhill from the 11-acre drainage into Runkle Canyon from SSFL at 34°13'54.55"N and 118°43'55.64"W. We urge the City and developer to locate this water and have it tested for the chemicals perchlorate and trichloroethylene as well as Sr-90, tritium and cesium-137.
- Finally, we are concerned that residents opposed to this project are being falsely portrayed as open-space advocates when we are clearly not. The Runkle development plan calls for plenty of open space. Concerned citizens that are homeowners are aware that the project, if built on soil that has been adequately tested and characterized, would actually cause their home values to increase.

We believe that these concerns can be addressed by going back to test Runkle Canyon's soil for Sr-90, and associated radionuclides, before the final permits are issued. Yes, this costs money but considering the stakes, isn't the health and well-being of the citizens of Simi Valley of the utmost importance and deserving of the kind of sound science that would accurately determine the safety of this project? We think so and believe that you do too.

Again, we truly appreciate the opportunity to ask the attached CDHS questions. We have also included background information to help put our questions into proper context.

Sincerely,

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## QUESTIONS FOR THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES

Before addressing questions to CDHS, it is useful to review what previous environmental testing of Runkle Canyon has revealed. Our questions follow this overview.

### Overview

- Runkle Canyon is located less than half a mile from the former Rocketdyne facility, Boeing's Santa Susana Field Laboratory ("SSFL"), which is highly polluted due to numerous nuclear accidents and the dumping of radioactive and chemical waste. The worst nuclear meltdown in American history occurred at SSFL in 1959 with two other partial melts in 1964 and 1969.
- Five laboratory tests conducted in Runkle Canyon from 1998-2005 found high levels of strontium-90.
- The strontium-90 data from the first two lab reports, listed below, were included but were mischaracterized in the Runkle Environmental Impact Report that was approved by the Simi Valley City Council in 2004, according to the article "Neighborhood Threat" (*LA CityBeat*, 3/10/05).
- The high levels of strontium-90 found in Runkle Canyon may pose a serious health threat to local residents if Runkle Canyon is developed because it will launch 112 tons of dust in the air according to the EIR. Even CDHS' estimations are that the amount of Sr-90 in the dust, 1.12 picocuries per gram, exceeds the US EPA's "preliminary remediation goal" of 0.231 pCi/g by five-fold.

### What tests show that the strontium-90 in Runkle is high?

1. **QST Environmental** (hired by Greenpark Runkle Canyon in 1998) found strontium that exceeded the EPA average local background concentration in all of its samples. Four samples had up to 17 times the EPA background level. They speculated that the radiation was coming from Rocketdyne.
2. **Foster Wheeler Environmental Corporation** (hired by Greenpark Runkle Canyon in 1999) collected 58 soil samples that averaged nearly 27 times above the typical EPA background level. The hottest sampling spot measured over 411 times the normal background for the radionuclide according to a 1995 EPA estimate of the Sr-90 background in the area.
3. **Miller Brooks Environmental** (hired by Greenpark Runkle Canyon in 2003) took 6 soil samples on the proposed Runkle development site and sent them to Energy Laboratories in Casper, Wyoming. Even though Energy Laboratories testing techniques had weak detection abilities, the samples still tested over 70 times normal background.
4. **California Department of Health Services (CDHS)** (June, 2005) retested 5 locations in Runkle Canyon and split the soil samples with Greenpark's newest lab, **Dade Moeller**. Dade Moeller's samples all tested over the EPA background, with the hottest level 8 times over background. CDHS did not generate a report on this testing. CDHS' testing results were 2-19 times lower than Dade Moeller's for reasons yet explained.

### **Why do we believe that these strontium-90 levels in Runkle pose a health risk?**

- The EPA calculates the presumably safe levels of radionuclides by using “preliminary remediation goals” or PRGs.
- PRGs for each substance are based on a fatal cancer risk so that the substance would cause no more than one death per every 10,000 people exposed. The ultimate goal is no more than one death per million people exposed.
- The PRG for strontium-90, and its accompanying decay product, yttrium-90, is 0.231 picocuries per gram (pCi/g).
- Foster Wheeler Environmental Corporation’s soil samples averaged 1.39 pCi/g, or six times the EPA’s preliminary remediation goal with the hottest sampling spot measuring 12.34 pCi/g, which is over 54 times the EPA’s PRG and 411 times the normal background for Sr-90 in the area.
- The Miller Brooks Environmental soil samples sent to Energy Laboratories had readings of 2.1 and 2.2 pCi/g, nearly ten times over the EPA goal.
- The samples collected by the California Department of Health Services split with Dade Moeller were nearly twice the EPA’s preliminary remediation goal for Strontium-90.
- In 2005, the prestigious National Academy of Scientists released a groundbreaking report that no amount of radiation can be considered safe.

### **SPECIFIC QUESTIONS FOR CDHS**

During a March 2005 meeting of the Santa Susana Field Laboratory Workgroup in Simi Valley, citizens expressed concerns about a March 10, 2005 article, “Neighborhood Threat – Runkle Canyon is poised to be Simi Valley’s newest neighborhood. But did the city misinterpret the risk of radioactive material in the ground?” in *Los Angeles CityBeat/ValleyBeat*. CDHS’s Robert Greger said that his department would look into information about high levels of strontium-90 in Runkle Canyon.

According to the *CityBeat* article “Hot Property -- Runkle Canyon developers claim mysterious new state tests have erased previously high levels of radioactive contamination,” CDHS went and took five soil samples in Runkle Canyon on June 7, 2005 and “split” them with a lab hired by the developer hired to analyze them for Sr-90, Dade Moeller. In January 2006, CDHS told *CityBeat*, and in the fall of 2007 the City of Simi Valley, that the department did not generate a report associated with this testing.

- Why didn’t CDHS generate a report regarding its 6/7/05 visit to Runkle Canyon that including sampling and testing along with another Dade Moeller?
- Is it normal procedure for CDHS not to generate reports on important sampling/testing events?
- How can this be justified as sound scientific procedure according to CDHS?
- Why didn’t CDHS tell the SSFL Workgroup of this sampling/testing?

CDHS' October 27, 2006 letter to the City stated "It is our understanding that the Environmental Protection Agency has previously stated, at a Santa Susana Field Laboratory Work Group public meeting, that the strontium-90 soil concentrations identified by soil sampling at the Runkle Canyon site are considered safe for residential development such as is planned for the Runkle Canyon site. The (DHS) has no reason to dispute that finding by the EPA. We will therefore, concentrate our efforts on the health hazards posed by airborne strontium-90 during site development activities."

- Is CDHS aware that EPA denied saying that in the November 17, 2006 edition of the *Ventura County Star*? According to the paper, "Steve Armann, with the EPA, said the comment about the soil concentration made at the public meeting was off the cuff and not an air-tight conclusion."
- Was this misunderstanding by CDHS of what the EPA actually meant the reason that it did not include a soil-impact review that would consider the long-term implications of living on the site, such as the ingestion of the soil by children living at the Runkle development? Is this why CDHS decided to only analyze potential dust hazards?

In the CDHS Radiologic Health Branch letter of November 8, 2006 to the City, CDHS states that "The Miller Brooks survey is not considered useful due to its high minimum detectable activity..." The City relied on this report for the Runkle EIR. "The Miller Brooks study of 2003 was truly the report that we used, and Impact Sciences used, to do the EIR," City planning director Peter Lyons told *CityBeat* in 2005.

- Did CDHS inform the City that the Miller Brooks survey wasn't useful before final approval of the Runkle EIR in April 2004?
- Assuming that the 11/8/06 CDHS letter to the City was the first time it told the City this information, this would be 'new' information for the City, correct?
- Does CDHS feel that it is proper procedure for an entity, in this case a city, to base an important part of its EIR on a report that CDHS says "is not considered useful"?

In the CDHS 11/08/06 letter to the City, it is noted that the discrepancy, by a factor of nearly five, of the results of CDHS' and Dade Moeller's 6/7/05 sampling and split-sample testing. Actually, the range of difference was CDHS' results was 2-19 times lower than the developer's lab. CDHS notes that "The previous results averaged 6.45 pCi/g for the five locations, the CDHS results were approximately 1/100 of those previous sampling results."

- Despite these enormous discrepancies, despite not having even generated a report on the sampling, CDHS maintains that "there does not appear to be sufficient justification at this time to attempt to resolve the reason for the differences between the 1999-2003 and the CDHS 2005 sampling results." On what basis of fact is this statement made?
- CDHS says that it "could not precisely match the previous sampling locations." Even though there is no report to address this sampling, can CDHS explain why it is or isn't important to match the precise location for comparison evaluation?

CDHS says that “The CDHS sampling was prompted, in part, because unusually low Cs-137 soil concentrations from the previous surveys challenged the validity of the reported Sr-90 concentrations.”

- Couldn't the reverse be true? Couldn't the high Sr-90 readings indicate that the lower cesium-137 measurements may have been too low? And is it scientifically valid to compare the five CDHS results, that were not accompanied by a report delineating sampling procedures and equipment or lab techniques and methods, to the 69 soil samples CDHS is questioning that were supplemented with reports?

In ascertaining the health impact on the public, CDHS discusses radiation in terms of ‘millirem’ dose-based exposure. The 11/8/06 CDHS letter states “California regulation basically require that doses to members of the public not exceed 100 mrem per year...” As noted in the newspaper article “Neighborhood Threat,” cited above, “This ‘dose-based’ number measured in millirem is not the way the EPA measures a radionuclide’s toxicity. The agency calculates the presumably safe levels of radionuclides by using ‘preliminary remediation goals,’ or PRGs.”

The article went on to state that “EPA calculates a fatal cancer risk for each substance so that it would cause no more than one death per every 10,000 people exposed to that radionuclide. But the ultimate goal is no more than one death per million people exposed.”

- Why does the CDHS use this dose-based method of ascertaining the harm that Sr-90 potentially presents at the Runkle development when the developer and the City are using the risk-based EPA method in its final appraisal of the radiation risk of Sr-90?
- What is the reasoning for CDHS applying the considerably less strict radiation standards applied to licensed radiation-handling facilities to a residential development? In particular, what is the justification for this statement?: “While the Runkle Canyon site is not a ‘licensee’, it is appropriate for purposes of determining health and safety to use the CDHS regulatory criteria.”

In an August 23, 2006 memo to the City, director of Environmental Services Al Boughey wrote “The PRG is set to indicate whether additional study is required to determine if the site is contaminated or a health hazard exists.”

- Is the 2003 Miller Brooks study, which CDHS says is “not considered useful,” and the CDHS/Dade Moeller soil sampling of five locations on the 1,595-acre site, with no report generated, considered adequate additional study according to the CDHS?

According to Boughey, the actual risk-based scenario was actually 0.26 cancers per million due to Sr-90, corrected from a “typo” of 0.77 cancers per million. The 11/8/07 CDHS report notes that “The average from all of the above strontium-90 soil surveys, except for Miller Brooks, is 1.12 pCi/g.”

- The EPA’s PRG for Sr-90D is 0.231 pCi/g. Does this mean that 1.12 pCi/g CDHS calculation is nearly 4.85 times the PRG?
- If so, doesn't that translates to a possible cancer risk scenario due to Sr-90 in the dust of

4.85 cases per million?

- Does that mean that the CDHS estimate is 18.64 times higher than the City's 0.26 cancers per million EIR estimate that Boughey cites?

The most extensive radiological survey done on the property was Foster Wheeler Environmental Corporation testing of 58 sites/samples on the 1,595-acre property, or one sample/test per 27.5 acres. This also was the testing that showed the highest Sr-90 readings, with the highest reading being nearest the SSFL lab where nuclear work was done. The CDHS/Dade Moeller testing with no report was of 5 sites/samples, averages out to be one sample per 319 acres.

- Which study would be more representative of a site's conditions? A one sample/test per 27.5 acres or one sample/test per 319 acres?

### **New Testing**

Should the City find that its testing and analyzing of data concerning Runkle Canyon's soil was so questionable, inaccurate and incomplete, it could employ a MARSSIM-based survey, much like the one performed by Foster Wheeler in 1999. [Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM): A document developed by the Department of Energy, the Department of Defense, EPA, and Nuclear Regulatory Commission to provide detailed guidance for planning, implementing, and evaluating environmental and facility radiological surveys conducted to demonstrate compliance with a dose- or risk-based regulation. MARSSIM focuses on the demonstration of compliance during the final status survey following scoping, characterization, and any necessary remedial actions.]

- Would a new MARSSIM-based testing of Runkle Canyon for Sr-90, with one sample/test per acre, be more accurate than one sample per 319 acres and be more likely to be statistically accurate about the amount of strontium-90 in Runkle Canyon soil?
- Considering that this development will be built within 1 1/2 miles of Area IV of the Santa Susana Field Laboratory, which is in the midst of a \$258 million cleanup, would such a survey be effective in determining the safety of building a development that will make airborne 112 tons of dust?