CITY OF SIMI VALLEY • MEMORANDUM

DATE: August 23, 2006

TO: Mike Sedell, City Manager

FROM: Al Boughey, Director of Environmental Services

SUBJECT: STRONTIUM-90, PERCHLORATES AND GRADING WITHIN THE RUNKLE CANYON SPECIFIC PLAN AREA

Concerns regarding hazardous materials in Runkle Canyon were raised at the City Council meeting of August 21, 2006. In response, staff has investigated the information used to prepare the Environmental Impact Report (EIR) for the Specific Plan and the conditions applied to the project to mitigate related risks.

The presence of strontium-90 in Runkle Canyon was thoroughly studied by three separate consultants: QST Environmental (1999), Foster Wheeler Environmental Corporation (1999), and Miller Brooks Environmental, Inc. (2003). Each of these companies conducted various tests on the site and the information discovered was used by the subsequent studies to analyze the potential health risk. The EIR summarized this information and concluded that the strontium-90 detected on the site does not pose a public health risk. This information was considered by the City and was available for review during the public review and hearing process.

The three consultants hired to study strontium-90 conducted numerous soil tests throughout the Runkle Canyon Site. The results of many of these tests exceeded the EPA's Preliminary Remediation Goals (PRG). However, PRGs are not de facto cleanup standards and should not be applied as such. The PRG is set to indicate whether additional study is required to determine if the site is contaminated or a health hazard exist. The EPA uses a cancer risk range of one-in-10,000 to one-in-1,000,000 for residential soil testing. This means exposure limits are set so a substance would not cause more than one case of cancer per 10,000 people with an ideal goal of one case per million people exposed. The three background reports and the EIR concede that strontium-90 exists on the site in excess of background and EPA PRG. Additional analysis was conducted to determine if these levels would expose people to a health risk pursuant to the EPA's cancer risk range.

Miller Brooks and a sub-contractor called Enviro-Tox conducted this analysis. The results were published in a report issued on September 17, 2003 and referenced by the Runkle Canyon EIR. Based on the levels of strontium-90 on the site, the calculations indicate an increased cancer risk of 0.26 cases of cancer in a million. This is well outside the EPA risk range and is indicative of a site that poses no public health risk. On March 16, 2004, staff met with Heriberto Robles, PH.D of Enviro-Tox to verify the results and methodology used for this calculation. Dr. Robles indicated the methodology was based on the EPA's Soil Screening Guidance for Radionuclides. This is the EPA's accepted method for determining acceptable site-specific radionuclide levels. Dr. Robles also corrected a typo in the original Miller Brooks report that initially indicated strontium on the site would cause 0.77 cases of cancer per million people. This is the level reported in the Los Angeles City Beat article on March 11, 2005.

However, Dr. Robles indicated the correct result is 0.26. In either case, the results satisfy the EPA requirements and the EIR concluded there is no public health risk from strontium-90 due to development of the site.

Based on the concentration of strontium-90 and the cancer risk associated with that concentration, exposure to dust from the site would **not** pose a public health risk on or off site. Even though there is no health hazard associated with strontium-90 in fugitive dust, dust impacts were analyzed in the EIR and dust mitigation was required. The applicant is required to submit a fugitive dust control plan to the Air Pollution Control District (APCD) for approval prior to approval of a grading plan for the site (Conditions I-4 and I-5). The plan must minimize the amount of disturbed area during clearing, grading, earth moving, and excavation operations on a weekly basis; sufficiently water excavated, graded, and exposed soil areas that are inactive for over four days at least twice daily; re-establish vegetation in areas where grading and excavation are complete; limit construction traffic to 15 miles per hour, water all earthen material that may be transported within the site; sweep all adjacent paved streets used by construction vehicles at least once daily; curtail all clearing, grading, earth moving, and excavation operations during periods of wind that exceed 20 miles per hour averaged over 1 hour. These measures are required at a minimum and the APCD may require more actions to reduce airborne dust. It should be noted that review and approval of the fugitive dust control plan by the APCD is not normally required of projects.

In regard to perchlorate, no concentrations of percholorate were detected in any water samples taken from the site. Perchlorate was only detected in two silt samples collected at depths of 37 and 56 feet below the ground surface. The levels detected were 130 to 156 times **below** the Environmental Protection Agency's (EPA) preliminary remediation goal for perchlorate in residential soil. The EIR concludes that: "Based on the fact that perchlorate has not been detected in the surface soil or water, the depth of the two silt samples containing perchlorate, the fact that soil disturbances due to grading should not reach the depth of the detections, the low levels detected (significantly below the EPA PRG for perchlorate in residential soil), the non-detectable results in other samples, and the lack of exposure pathways, there is no indication that there will be a significant impact to human health." To provide protection in the event that dewatering is required during grading, a mitigation measure was placed on the project that requires water testing and a National Pollution Discharge and Elimination System permit to be issued prior to discharge of groundwater (Condition I-131).

Since the approval of the EIR, there has **not** been any new information made available to City staff to indicate that risks from strontium-90 or perchlorate on the site have been inadequately studied or disclosed.

If there are any questions about this memorandum, the testing done on the site, or the content of any of the studies conducted for Runkle Canyon, please contact me and my department will provide you with additional information.

Attachment

cc: City Attorney
Director of Public Works
Senior Assistant City Attorney
Assistant City Manager ✓
Deputy Director/City Planner
Principle Planner/Zoning Administrator
Senior Planner, L. Funaiole
Senior Planner, T. Preece