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October 30, 2007

Laura Behjan
Assistant City Manager
City of Simi Valley
2929 Tapo Canyon Road
Simi Valley, CA 93063-2199

Subject: Water Quality Issues Related to the Runkle Canyon Development

Dear Laura:

Your letter of September 20, 2007 letter asked several questions regarding the Runkle Canyon Development, and transmitted the following documents for my review:

July 16, 2007 letter from Scott Ouellette, authorized representative to Runkle Canyon LLC, to Michael Sedell, City Manager, and the Runkle Canyon Water and Soil Sampling Report dated July 13, 2007, transmitted with the letter.

August 14, 2007 report prepared by Tetra Tech, Inc., entitled "Laboratory Analytical Results for Surface Water and Surface Soil Samples Collected from the Proposed Runkle Canyon Development, July 2, 2007."

This letter presents my responses to your questions based on my professional experience and my review of these documents. As I indicated to you, I am comfortable addressing the water quality issues, but not the soil quality issues.

Background Information

I thought it would be helpful to present background information concerning drinking water standards and water quality standards and to review the Runkle Canyon monitoring data prior to responding to your water quality-related questions.

State Drinking Water Standards

State drinking water standards include primary maximum contaminant levels (MCLs). Primary MCLs are set at levels such that persons drinking the water over a lifetime would

face a small risk (say 1 in a million or 1 in 100,000) of getting cancer or some other disease.

Drinking water standards apply at the tap rather than in the raw water supply.

Pursuant to the federal Surface Water Treatment Rule, all surface waters must be filtered and disinfected prior to use as a municipal water supply. If this level of treatment is insufficient to attain the Primary MCLs, then additional treatment is required.

Water Quality Standards Applicable to Surface Waters

Under the federal Clean Water Act, States are required to designate the beneficial uses of their surface waters and to adopt water quality objectives necessary to protect the designated uses.

In California, the beneficial uses are designated in the Basin Plans adopted by the various Regional Water Boards.

Pursuant to Basin Plan provisions, State drinking water standards are adopted as in-stream water quality objectives for those waters designated as having a Municipal and Domestic Supply (MUN) beneficial use.

None of the surface waters in the Simi Valley area, or for that matter in the Calleguas Creek watershed, are designated as having a MUN beneficial use. Therefore, the State drinking water standards do not apply to Runkle Canyon or downstream surface waters.

Consequences of Exceeding Water Quality Standards

Many surface waters throughout the State exceed (i.e., violate) applicable water quality standards. These include surface waters in the Simi Valley area, the Calleguas Creek watershed, and most other surface waters in Los Angeles County and Ventura County.

The federal Clean Water Act requires that waters not meeting standards be placed on an impaired water body list (the section 303(d) list). The Act further requires that Total Maximum Daily Loads (TMDLs), sufficient to achieve the standards, be developed for all listed water bodies. Most of the main surface waters in the Calleguas Creek watershed are listed as impaired for one or more constituents. TMDLs have been developed to attain all the standards, except for the bacteria standard. The bacteria TMDL is currently being developed. Pursuant to the approved TMDLs, the applicable standards will be attained over the next several to 20 years, depending on the specific standard. In other words, the Clean Water Act recognizes that surface waters may exceed standards even after implementation of technology-based controls required under the Act, and establishes a process to bring those waters into compliance with standards.

Of the constituents analyzed in the above two reports, only copper, mercury, nickel, selenium and zinc were identified as causing impairments within the Calleguas Creek watershed.

Runkle Canyon Surface Water Monitoring Data

According to the above referenced reports, Runkle Canyon surface waters were analyzed for a variety of constituents in nine separate tests. One test was conducted by Pat-Chem Laboratories (Pat Chem) on samples collected on May 18, 2007. Two tests each (one upstream and one downstream) were conducted by three laboratories (Pat Chem, American Environmental Testing Laboratory (AETL), and Advanced Technology Laboratories (ATL)) on samples collected and split into thirds by a representative of Pat Chem on July 2, 2007. Two additional tests were conducted by ATL on samples collected upstream and downstream by a representative of Geocon Consultants on July 2, 2007. In the respective reports referenced above, the surface water test results were compared to State drinking water MCLs, as an indication of the potential public health threat posed by Runkle Canyon waters. Of all the samples analyzed, only tests for arsenic, chromium and lead ever exceeded the State drinking water MCLs. Table 1 of the Attachment presents the nine test results for these three constituents. Table 2 presents an analysis of the test results in comparison with the drinking water MCLs. As can be seen from these tables, only arsenic exceeded the MCLs more than once in the nine tests, and only arsenic had a maximum test result significantly greater than the MCL. Based on these test results, of the constituents analyzed, arsenic is the primary constituent of concern with respect to surface water quality and public health.

Findings

State drinking water MCLs are not applicable to Runkle Canyon surface waters because neither those waters nor the waters to which they are tributary are designated in the Basin Plan as having a MUN use.

Runkle Canyon surface water arsenic levels in excess of State drinking water standards do not pose a public health threat to those who may come into contact with the water. The arsenic MCL is based on chronic exposure, i.e., drinking water over an extended period of time, rather than occasional physical contact or even occasional ingestion of the water.

At some higher concentration, arsenic would act as a poison and would pose a risk to someone who ingested even a small amount of water. I don't know what that level is, but a 2001 Report by the National Research Council¹ cites a number of communities around the world with drinking water supplies having arsenic concentrations greater than the highest level measured in Runkle Canyon surface waters. Studies of the health of these

¹ Arsenic in Drinking Water, 2001 Update, National Research Council.

communities indicate effects due to chronic exposure over a long period of time, but did not indicate that those concentrations were such as to pose a threat to someone who may occasionally ingest such water.

Anyone who ingests untreated surface water is at risk of getting sick due to pathogens. Pathogen levels, attributable to human and/or animal activity, exceed drinking water standards as well as water contact recreation standards in many surface waters. This is true of waters at ocean beaches, urban creeks and even Sierra streams.

Conclusions

1. In my professional opinion, the arsenic levels measured in Runkle Canyon surface waters do not pose a public health risk to those who may come into contact with the waters and therefore do not serve as justification for stopping the Runkle Canyon development from moving forward. This same conclusion applies to chromium and lead, the other constituents measured in surface waters at levels in excess of the drinking water MCLs.
2. The City should forward the surface water monitoring data collected on Runkle Canyon surface waters to the Regional Water Quality Control Board. As a holder of an NPDES permit, the City has a responsibility under the State Water Board's Enforcement Policy to inform the Regional Board of any information that may indicate water quality standards are being violated. Although the drinking water standards do not apply to Runkle Canyon waters, the data indicate that applicable water quality objectives for protection of aquatic life may be exceeded. I do not believe the data collected this past year would be sufficient to cause Runkle Canyon to be listed as an impaired water body, thereby requiring development of a TMDL. However, the data may prompt the Regional Board to collect additional water quality data for the purpose of determining whether the waters should be listed as impaired.

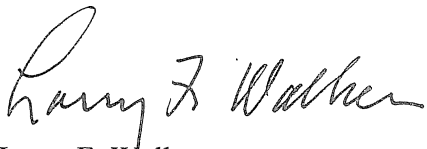
Disclaimer

The information and opinion presented in this letter are based on the water quality test results presented in the above referenced reports. My review has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same general area under the same general conditions. No other representation and no warranty, express or implied, or guarantee is included or intended in this letter. None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from information examined.

Laura Behjan
October 30, 2007
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Please contact me if you have any question.

Very truly yours,

A handwritten signature in cursive script that reads "Larry F. Walker". The signature is written in black ink and is positioned above the printed name and title.

Larry F. Walker
Chief Executive Officer

Attachment

ATTACHMENT

Table 1. Summary of Surface Water Test Results (milligrams per liter)

Constituent	May 18, 2007 Pat Chem	Upstream – July 2, 2007			Downstream – July 2, 2007			Drinking Water MCL		
		AETL (1)	Pat Chem (1)	ATL (1)	ATL (2)	AETL (1)	Pat Chem (1)		ATL (1)	ATL (2)
Arsenic	0.15	0.057j	0.12	<0.010	<0.010	0.188	0.12	<0.010	<0.010	0.050
Chromium	0.04	0.04	0.018j	<0.003	0.003	0.026j	0.06	<0.003	<0.003	0.050
Lead	<0.02	<0.05	<0.02	0.0058	<0.005	<0.05	0.02	<0.005	<0.005	0.015

Bold denotes detected value exceeding Drinking Water MCL
 < denotes the constituent was not detected in the sample at the detection level listed
 j denotes that the constituent was detected, but that the concentration was estimated
 (1) Samples were collected by Pat Chem and split into three, with each lab analyzing the same sample.
 (2) Samples were collected by Geocon and filtered prior to analysis

Table 2. Analysis of Surface Water Test Results in Comparison to Drinking Water MCLs

Constituent	Minimum, mg/L	Median, mg/L	Maximum, mg/L	MCL, mg/L	No. of Tests Exceeding MCL	Median as Fraction of MCL	Maximum as Fraction of MCL
Arsenic	<0.010	0.057j	0.188	0.050	5 of 9	1.14 X MCL	3.36 X MCL
Chromium	<0.003	0.018j	0.06	0.050	1 of 9	0.36 X MCL	1.2 X MCL
Lead	<0.005	0.02	0.02	0.015	1 of 9	1.33 X MCL	1.33 X MCL