



Oregon

Theodore R. Kulongoski, Governor

Oregon Department of Human Services

Public Health Division

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November 24, 2010

Tamio Fukuyama, P.E.
Group Mackenzie
1515 SE Water Ave #100
Portland, OR 97214

**Re: Camp Rilea - New Wells #1, #2, & #3
Group Mackenzie Project #2100230.02
Site Plan Approval - PR# 186-2010**

Dear Mr. Fukuyama:

On November 19, 2010, the Drinking Water Program (DWP) received preliminary plans calling for the construction of a new water system at Camp Rilea in Clatsop County. The plans (assigned Plan Review #186-2010) call for the installation of 3 wells, an arsenic treatment system, a 400,000 gallon finished water reservoir, and related distribution piping and appurtenances.

The site plan for the 3 wells was reviewed by me and our Geologist, Tom Pattee, and **we find the proposed site is acceptable for installation of the wells.** Although 18 ft is the minimum required casing seal depth for a well drawing water from an unconfined aquifer composed of an unconsolidated formation, **Tom Pattee recommended placing the casing seal to a depth that is 10 ft below the static water-level, anticipated to be found at between 40 and 60 feet.** In any instance, the casing seal should extend to a minimum of 18-ft below ground.

The estimated 2-year Time-of-Travel Zone (2-yr TOT) is a radius around each well that is approximately 770-ft. The actual radii will be determined once the wells have been drilled and well logs have been submitted for our review. **Once determined, Camp Rilea should work to identify and mitigate potential sources of contaminants within the 2-yr TOT as much as possible.**

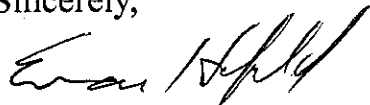
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Camp Rilea – Wells #1, #2, and #3 (PR#186-2010) – Group Mackenzie Project # 2100230.02

November 24, 2010

A separate letter will be sent regarding approval for construction of the remaining treatment and storage facilities. If you have any questions, or would like this in an alternate format, please feel free to call me at (971) 673-0419 or via e-mail at evan.e.hofeld@state.or.us.

Sincerely,



Evan Hofeld

Regional Engineer

DHS - Drinking Water Program

cc: Ron Bush Engineering and Surveying
James Arnold, Oregon Military Department
Maureen Taylor, Clatsop County Health and Human Services