

MEMO

State of Idaho

Department of Water Resources

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Date: August 22, 2012

To: Gary Spackman

From: Dennis Owsley

cc: Sean Vincent

Subject: Review and response to Monitoring, Recording, and Reporting Plan for Permits 63-32089 and 63-32090

The Department has reviewed the attached ground water monitoring plan in accordance with the Final Order for Permits 63-32089 and 63-32090. The final order states the following:

“Prior to diversion of water under this right, the right holder shall develop and the Department must approve a monitoring, recording, and reporting plan for the observation wells.”

In addition, the final order states:

“Prior to diversion of water under this right, the right holder shall construct/identify four observation wells for future monitoring. Three wells shall be located in close proximity to one or both of the production wells. One of the wells shall be completed in the shallow aquifer, one in the immediate aquifer, and one in the deep aquifer. A fourth observation well shall be located at a more remote distance from the production wells. The completion interval for the fourth well shall be in the deep aquifer. The location and design of the observation wells must be approved by the Department prior to construction or designation of the observation wells. Each observation well must be constructed so that ground water in the well is derived only from one aquifer zone, and must also be constructed so that water levels in each well can be easily measured.”

The monitoring plan dated June 26, 2012 meets the requirements stipulated in the final order. In summary, the plan stipulates:

1. Three wells will be constructed: one shallow (55 feet deep), one intermediate-depth (150 feet deep), and one deep (300-400 feet deep). The locations are

provided on a map in the monitoring plan and appear to be adequately located to monitor the aquifers in the vicinity of the production wells. Conceptual designs for the three monitoring wells are included in the monitoring plan and appear to be adequate to facilitate the monitoring requirements.

2. The plan suggests that the requirement to install and monitor a fourth observation well at a more distant location could be satisfied by monitoring a deep monitoring well that was recently installed by IDWR. This well satisfies the requirement for an off-site deep monitoring well since this well is completed in deep aquifer (open from 640-670 feet). IDWR is currently monitoring this well.
3. Volumetric discharge from the production wells will be monitored through flow meters that are currently installed on Wells No. 3 and No. 4. The meters will be calibrated to IDWR standards and the calibration results will be reported to the department following the calibration. The discharge records will be summarized in a report and submitted to IDWR on an annual basis.
4. IDWR will conduct the installation, maintenance, and routine measurements of all of the monitoring equipment required to collect data from the monitoring wells proposed in the plan. IDWR will install and download data from the pressure transduced data loggers to be equipped on the three new monitoring wells. A data logger is currently installed and collecting data from the existing off-site deep monitoring well.

In conclusion, the monitoring plan dated June 26, 2012 appears to satisfy the requirements stipulated in the final order. I recommend that the plan be approved as submitted and should be approved as presented.