

John Young

11/10/04

To: Whitacre Thomas; danny katzman; mat johansen
Cc: laurie trevizo; Michael Dale; Chris Vick; pat longmire; Cobrain Dave
Subject: R-34 discharge

Tom, Danny, Mat, and Pat,

Except for an acetone detection (830 ug/L; the RCRA LDR is 280 ug/L) and a bis(2-ethylhexyl)phthalate detection (0.70 mg/kg) I don't see anything remarkable so I believe you are ok from HWBs stand point to discharge the water.

At this time HWB considers the acetone detection to be the result of the degradation of drilling fluids and not from releases from the facility; however, NMED would like to know how acetone and bis(2-ethylhexyl)phthalate are behaving during post-drilling/monitoring phase of the wells drilled using foam/polymers. I noticed R-23 still shows 50 ppb acetone as of the 4/04 to 8/04 quarterly monitoring report. If these contaminants are not reaching non-detect levels, we need to more closely scrutinize the chemistry. In other words, HWB may have to consider the acetone detections in the regional aquifer the product of operational releases (perhaps historic TA-35 or TA-50 discharges) rather than degradation of foam (LDRs may then apply). We may also need to develop a more stringent well development procedure to ensure removal of drilling fluids and/or need to redevelop these wells if we don't see improvement. Also, in addition to TOC, you may want to add acetone as an indicator of when to stop well development. I'd like to hear what Pat has to say about residual acetone and the proposal to add acetone to the well development stop criterion.

I did notice that there are some R-34 QA/QC issues: Antimony, calcium, manganese, copper, iron, lead, nickel, and silver were detected in the method blank. You may want to question your laboratory.

Let me know if you have any questions.

John

LANL
OFFSITE
(Granddunk, well R-34, San I defense)

