1R - 2565

APPROVALS

YEAR(S):

2012

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Tuesday, September 04, 2012 6:16 PM
To: Leking, Geoffrey R, EMNRD
Cc: Hack Conder (hconder@riceswd.com); Laura Pena (lpena@riceswd.com); Katie Jones <kjones@riceswd.com> (kjones@riceswd.com)
Subject: FW: ROC - Justis E-23 AD (1RP-2565) Multimed
Attachments: Justis E-23 AD (1RP-2565) Soil Data.jpg; Justis E-23 AD (1RP-2565) Multimed.inp; Justis E-23 AD (1RP-2565) Multimed.pdf; Justis E-23 AD (1RP-2565) Chloride Graph.pdf; Justis E-23 AD Soil Data.xlsx

Geoff,

I have reviewed the attached demonstration that "...the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the [ground water] standards... ." The demonstration is acceptable to OCD.

If you have any questions, please give me a call,
Edward J. Hansen
Hydrologist
Environmental Bureau
505-476-3489

From: Laura Pena [mailto:lpena@riceswd.com]
Sent: Thursday, August 30, 2012 9:58 AM
To: Hansen, Edward J., EMNRD
Cc: Hack Conder; Katie Jones
Subject: ROC - Justis E-23 AD (1RP-2565) Multimed

Mr. Hansen,

The following details the attached Multimed file for the Justis E-23 AD (1R-2565), as requested during the meeting between ROC and NMOCD on August 7th, 2012.

This file uses the parameters submitted to NMOCD in the Multimed Study report. Site specific parameters are as follows:

- Initial Concentration: an average of all vertical and soil bore in and near the installed liner (SB-1, SB-2, SB-3, SB-4, SB-5 and Vertical 3) data of 2,200 mg/L . The top 5 ft of SB-1, SB-2, SB-3, and Vertical 3 were excavated and replaced with soil containing a chloride concentration of <250 mg/L; therefore, 250 mg/L was used at those depths to calculate the average concentration.
- Layer Thickness: an average of all soil bore depths subtracted from the depth to groundwater (75 ft – 49 ft) to yield 26 ft or 8 meters.
- An estimated area of 35 ft x 67 ft (2345 ft^2 or 218 m^2).
- An aquifer thickness of 20 ft (6.10 meters).

The result of this model indicates that the maximum chloride concentration is approximately 212.4 mg/L at 143 years, falling below the WQCC standard of 250 mg/L. A graph depicting chloride concentration over time is attached.

Let Hack Conder, Katie Jones or me know if you have any questions or require any additional information.