



NOAV# 1175528  
 PIT# 101099, 101100, 101101  
 Doc# 2303222  
 Date: 02/20/2006

February 20, 2006

Mr. Jim Warner  
 Magpie Operating, Inc.  
 2707 S. County Road 11  
 Loveland, CO 80537

RE: Rediess Tank Battery / Earthen Pits  
 NESW Section 18 – T1N – R56W  
 Morgan County, Colorado

Dear Mr. Warner:

As you are aware, Magpie Operating, Inc. (Magpie) was required to cease the discharge of produced water into the earthen pits at the Redeiss lease as set forth in Colorado Oil and Gas Conservation Commission (COGCC) correspondence dated September 28, 2005. Additionally, Magpie was required to inform the COGCC of future operational plans for the Redeiss lease by October 31, 2005.

Magpie reported in correspondence dated October 28, 2005 that all discharge of produced water had ceased as of September 30, 2005. Magpie also has proposed to install a pipeline to transfer the produced water to a location approximately ¼ mile south in the NENW of Section 19, T1N, R56W. Magpie has submitted two Form 15's – Earthen Pit Permit applications for this site. The proposed location is outside of the City of Brush Wellfield, a specified area established by the Water Quality Control Commission (WQCC) of the Colorado Department of Public Health and Environment (CDPHE).

To consider this proposal, COGCC staff conducted a regional study of the unconfined ground waters surrounding the Redeiss lease. A subsurface structure map was constructed on the static water level within the aquifer. Results showed that ground water beneath the location of the proposed earthen pits would flow toward the northeast and into the classified sensitive area.

Given this determination, the pit permit applications submitted on October 28, 2005 are denied. Produced water discharged into the current pits or the proposed pits would still exceed the chloride, sulfate, and benzene standards of the Colorado Basic Standards for Ground Water as established by the Water Quality Control Commission (WQCC) of the Colorado Department of Public Health and Environment (CDPHE). Please refer to the tabulations below.

**DOMESTIC WATER SUPPLY – HUMAN HEALTH STANDARDS**

PARAMETER	ROUSE WELL	REDEISS PW TREATER	REDEISS PW PIT	CDPHE STANDARD
CHLORIDE	436	2000	1630	250
SULFATE	2600	368	341	250
IRON	ND	ND	ND	0.3
MANGANESE	ND	0.0097	0.035	0.05
pH	7.29	8.91	7.93	6.5-8.5

**AGRICULTURAL WATER SUPPLY**

PARAMETER	ROUSE WELL	REDEISS PW TREATER	REDEISS PW PIT	CDPHE STANDARD
IRON	ND	ND	ND	5
MANGANESE	ND	0.0097	0.035	0.2
pH	7.29	8.91	7.93	6.5-8.5

**GROUND WATER – ORGANIC CHEMICAL STANDARDS**

PARAMETER	ROUSE WELL	REDEISS PW TREATER	REDEISS PW PIT	CDPHE STANDARD
BENZENE	ND	210	380	5
TOLUENE	ND	230	72	1000
ETHYLBENZENE	ND	25	ND	700
XYLENES	ND	209	350	1400

ND = non-detectable

Domestic and Agricultural Standards units = mg/l

Organic Chemical Standards units = µg/l

**SUMMARY**

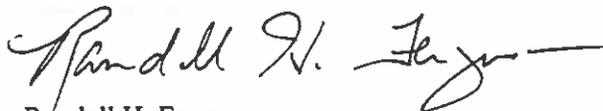
The Redeiss pits are currently located in a sensitive area as defined in COGCC Rule 100 and Appendix II. The new proposed location in Section 19, T1N, R56W is also considered to be in a sensitive area. Rule 904.a.(2) specifies that produced water pits in sensitive areas must be lined. The Redeiss pits are not currently lined. In addition, the discharged produced water exceeds the standards specified in Appendix II. Therefore, they are not in compliance with Rule 904.a.(2). The proposed discharge of produced water into earthen pits in Section 19, T1N, R56W would also be a violation of Rule 904.a.(2).

If Magpie intends to continue to use the current Redeiss pits or in the proposed new location for disposal of produced water, then either the pits must be lined or the produced water must be treated to concentrations of organic and inorganic contaminants that are at or below all of the ground water quality standards in Tables 1-4 of the Colorado Basic Standards for Ground Water (see attached). This must be fully demonstrated to COGCC staff. Therefore, Magpie must inform the COGCC of proposed operational plans for handling and disposing of produced water at the Redeiss lease by **March 31, 2006**.

The Form 27 – Site Investigation and Remediation Workplan was submitted on October 28, 2005 for the cleanup of oily soils at the lease. Approval of this workplan will depend on the future operational plans. Should the current pits require closure, all remediation requirements will be covered by one workplan.

Should you have any questions, I may be reached at (303) 894-2100 ext.118.

Respectfully,



Randall H. Ferguson  
Environmental Protection Specialist

Cc: Brian Macke – COGCC Director  
Debbie Baldwin – COGCC  
Kevin Lively – COGCC