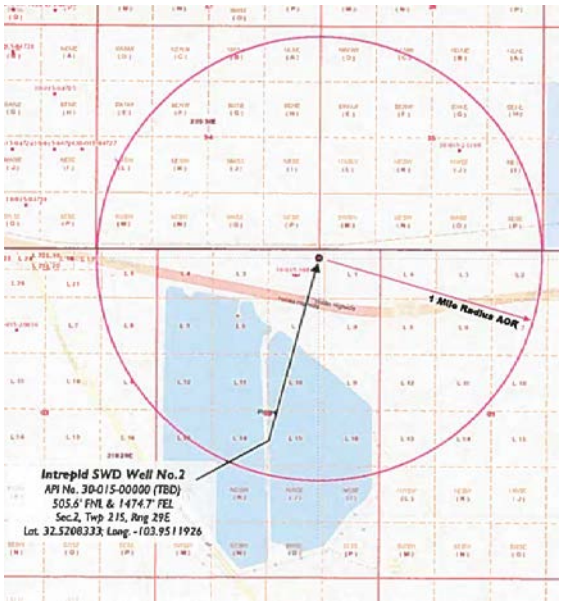
OCD REVIEW OF PERMITTING PROCESS FOR INTREPID POTASH PROPOSED MINE WELL

December 14, 2018

PROPOSED ACTIVITY:

Intrepid has proposed the completion of a disposal well capable of receiving both exempt waste from oil and gas exploration and production operations and waste discharge related to Intrepid's potash mining operation. On October 23, 2018, Intrepid filed a Division form C-108 for authority to inject as a commercial UIC Class II well for its Intrepid SWD No. 2 (Administrative application no. pMAM1829647275) located in 506 feet from the North line, 1475 feet from the East line in Section 2 of Township 21 South, Range 29 East, NMPM. The surface location for this well is immediately north of the mine waste lagoons on Intrepid mine property.



Proposed injection interval is an open-hole completion in Siluro-Devonian formations at an approximate depth from 13,530 feet to 15,475 feet. The well is to have an average injection rate of 17,500 BWPD with a maximum rate of 30,000 BWPD. Sources for disposal have identified produced waters from Yeso, Bone Spring and Wolfcamp pools (TDS ranging from 35,000 mg/L to 182,000 mg/L with sulfate present).

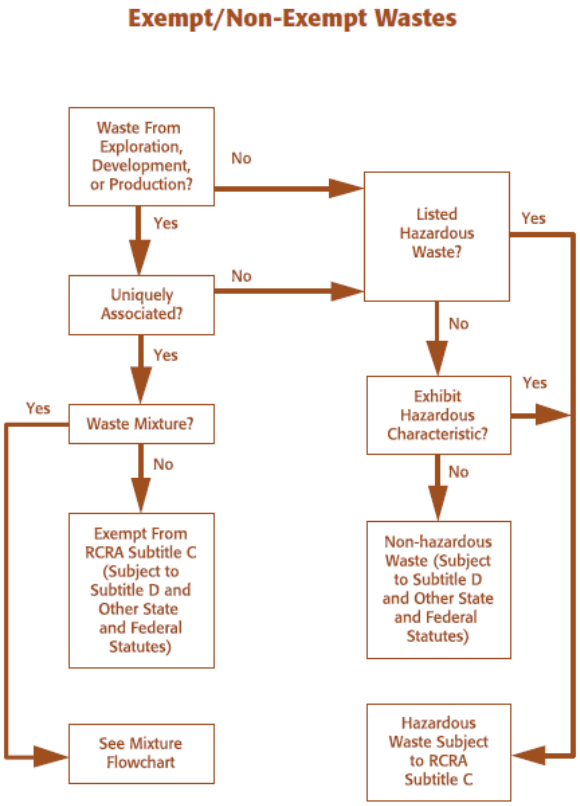
DISCUSSION:

The Division has identified a regulatory conflict for the proposed approval of the disposal well with both a UIC Class I (Non-hazardous) and a UIC Class II status. The Class II (SWD) well is designated to receive exempt waste from oil and gas exploration and production operations (exempt oilfield E&P waste). Since the source of the waste for disposal in a SWD well is defined by the source, there is no requirement for characterization including determination under 40 CFR 261.

Since the second waste stream proposed for the well is not derived from an oil and gas operation (the discharge from the lagoons associated with a mining operation), a well with a Class II status

could not accept this waste stream without characterization. As such, the applicant has proposed a "dual" permitting of a Class I and Class II for the same well.

Based on the guidance offered by the EPA in *Exemption of Oil and Gas Exploration and Production Wastes from Federal Hazardous Waste Regulations* (2002, EPA530-K-01-004; https://yosemite.epa.gov/oa/eab_web_docket.nsf/Attachments%20By%20ParentFilingId/945EF425FA4A9B4F85257E2800480C65/$FILE/28%20-%20RCRA%20E%26P%20Exemption.pdf), the waste stream from mining operation would disqualify the waste mixture the possibility of a Class II permit since the waste is neither from oilfield E&P operations nor is uniquely associated with oilfield E&P operations.



Additionally, the mixing of the two waste streams presents a potential regulatory conflict due to the characterization requirements for both initial permit and subsequent quarterly sampling of a Class I permit. There is a strong potential that the sampling for the Class I permit will result in a positive characterization of the combined waste stream (with produced water content variable) as hazardous under 40 CFR 261 which would exceed the authority of a Class I (Non-hazardous) permit.

CONCLUSION:

The proposed Class I (Non-hazardous) well permit will require review and approval through the NMED program, but the definition and limitations of sources for disposal in a Class II well makes the issuance of this type of other injection authority for the proposed well not possible. Moreover,

the inclusion of the oilfield E&P waste into the waste stream represents a potential for violation of any Class I permit approved for the proposed well.

DIVISION SUPPORT OF THE NMED APPLICATION PROCESS:

If the applicant wishes to proceed with an application for a UIC Class I Oilfield (Non-hazardous) permit, the Environmental Bureau and Engineering Bureau staff can offer the following support:

1) OCD can provide an outline for how it reviews a UIC Class I Oilfield (Non-hazardous) Injection Well Application (20.6.2.5000-5399 NMAC), which must also satisfy the requirements of a UIC Class II Injection Well (19.15.26 NMAC). This would mean the well receives a concurrent OCD UIC Class II Engineering Bureau review and an OCD UIC Class I Environmental Bureau review.

2) OCD can assist NMED in the review of a Class I (Non-hazardous) Discharge Permit to identify if the well will be in conflict with any oil and gas production or disposal activities.

3) OCD can assist NMED in the review of the submittals for the completion report following installation of the well and annual testing reports required for the permit.

4) OCD GIS is a tool available to NMED in checking for wells within the Area of Review and using OCD Online to evaluate surrounding wells for cement in the injection zone for any required corrective action(s) by the injection well applicant.

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