



March 15, 2018

Caleb Hiner, Manager
Pinedale Field Office
Bureau of Land Management
1625 West Pine St.
Pinedale, WY 82941

Re: True Oil, LLC – Lander Peak Area Exploratory Proposal – BLM Must Address Potential Downhole Impacts to Usable Water in Compliance with Onshore Order No. 2

Dear Mr. Hiner:

I am writing to bring to your attention potential impacts to underground sources of drinking water (i.e., “usable water”) from True Oil Company’s proposed Klaenhammer Federal 42-27H and Klaenhammer Federal 23-15 wells in the Pinedale Field Office. In light of recent disclosures by industry trade associations of widespread non-compliance with Onshore Order No. 2, we believe the BLM must conduct site specific NEPA analysis of the potential impacts to usable water before issuing a final decision on True Oil’s APDs.

The environmental assessment (EA) prepared by the Bridger-Teton National Forest states, in part, that:

Drilling would target the gas producing zones in the Hilliard Shale Formation at approximately 7,400 feet true vertical depth. It is anticipated each well would contain a horizontal leg within the Hilliard Shale. ... Any usable water zones encountered during drilling would be adequately protected in accordance with the Federal Onshore Oil and Gas Orders and the 43 CFR § 3100 regulations by installing surface or intermediate casing as approved by the BLM Authorized Officer and reported.

EA page 30.

Although the EA does not disclose water quality in the Hilliard Shale Formation or in any other geologic formation potentially impacted by the True Oil drilling proposal,¹ general information

¹ The EA indicates (at 192) that “No site-specific groundwater quantity or quality data is available within or in the vicinity of the Project Area because there are only a few shallow water wells, all of which are at least 1 mile east of the Project Area and on the east side of the Prospect Thrust Fault. The focus of the data collection from existing oil and gas wells was generally on the deeper formations from which oil and gas production was anticipated, so geologic and geophysical logs for most of the wells start a few hundred feet below surface. ...”

presented in the EA suggests that usable water may be present well below the freshwater zones,² potentially including the Wasatch, Frontier and Mesaverde formations. *See* EA sections 3.22.3 Current Conditions – Groundwater Quantity and Quality and 3.22.4 Environmental Consequences – Groundwater Quantity and Quality.

https://www.fs.usda.gov/nfs/11558/www/nepa/65262_FSPLT3_3985463.pdf

Despite the contention in the EA that useable water will be protected, recent disclosures by oil and gas industry trade associations in formal filings submitted to the United States Department of Interior suggest otherwise. Since 1988, BLM's Onshore Order No. 2 has required operators to conduct casing and cementing programs to isolate and protect aquifers containing "usable water," defined as having up to 10,000 ppm total dissolved solids (TDS). 53 Fed. Reg. 46,798, 46,801, 46,805 (Nov. 18, 1988). BLM adopted the 10,000 ppm standard because it matched the definition of "underground source of drinking water" used by EPA in administering the Safe Drinking Water Act.

Industry trade associations have admitted to widespread non-compliance with the usable water requirement, despite the fact that Onshore Order No. 2 is a legally-binding regulation promulgated by notice and comment rulemaking. *See* Fed. Reg. at 46,798; 43 C.F.R. § 3164.1(b). In their September 25, 2017 comments supporting BLM's proposed recession of the hydraulic fracturing rule (excerpts attached), Western Energy Alliance and the Independent Petroleum Association of America (collectively, WEA) told the agency that the 10,000 ppm standard is "inconsistent with existing practice for locating and protecting usable water." Sept. 25, 2017 WEA comments at 59. Instead, companies in Wyoming typically set well casing to a depth of only "100 feet below the deepest water well within a one mile radius of [the] oil or gas well" - usually 1,000 feet below ground or less. *Id.* at 84. WEA claims requiring companies to protect all underground sources of drinking water would result in substantial additional costs for "casing and cementing associated with isolating formations that meet the numerical definition of usable water under the [Onshore Order No. 2 standard], but which are located at depths deeper than the zones that state agencies and BLM field offices have previously designated as requiring isolation," and predicts compliance with the 10,000 ppm standard would cost industry nearly \$174 million per year in additional well casing expenses. *Id.* at 84-85.

The Wyoming Outdoor Council believes these industry admissions raise significant environmental concerns that BLM must consider as reasonably foreseeable effects before approving the True Oil APDs. *See Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 97 (1983) (an agency must "consider every significant aspect of the environmental impact of a proposed action"); *see also Davis v. Mineta*, 302 F.3d 1104, 1123 (10th Cir. 2002). Accepting WEA's statements as true, BLM and energy companies have been putting numerous underground sources of drinking water at risk. To comply with NEPA, the BLM must fully address potential adverse impacts to usable water before approving the True Oil APDs.

Onshore Order No. 2 requires that "all indications of usable water shall be reported," and requires protection of all "usable water."³ 53 Fed. Reg. 46,798, 46,805. Given industry's own

² *Fresh water* means water containing not more than 1,000 ppm of total dissolved solids, provided that such water does not contain objectionable levels of any constituent that is toxic to animal, plant or aquatic life, unless otherwise specified in applicable notices or orders. 43 CFR § 3160.0-5.

³ Note that despite the apparent availability of this information, the EA fails to disclose data collected from existing oil and gas wells in the deeper formations.

description of noncompliance with the Order, BLM must consider the downhole impacts to usable water from the proposed True Oil wells, and describe in detail exactly how usable water will be protected. Ignoring these potential impacts despite evidence of widespread noncompliance with the Order would violate NEPA. To make an informed decision on APD approval, BLM needs to know whether drilling will put underground sources of drinking water at risk, and what additional conditions of approval or other steps are necessary to prevent contamination of usable water. In light of widespread non-compliance with Onshore Order No. 2, the mere assertion that useable water will be protected is not sufficient, and certainly does not constitute the “hard look” at environmental impacts required by NEPA.

The Wyoming Outdoor Council has submitted a Freedom of Information Act request to the Wyoming BLM for copies of the True Oil APDs and related records. We anticipate seeking independent third-party review of the APDs by experts in the fields of petroleum engineering and hydrogeology, and look forward to submitting their technical analyses and reports for your consideration during the NEPA review process.

Sincerely,

/s/

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Enclosures