Public Comment
2018 Draft MOA between SWRCB & DOGGR
Deadline: 6/25/18 by 12 noon

CENTER for BIOLOGICAL DIVERSITY
Because life is good.

RECEIVED
6-25-18
SWRCB Clerk

June 25, 2018

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814
commentletters@waterboards.ca.gov

Via email

Re: Draft Revision to 1988 MOA Between DOGGR and the State Water Board Regarding Cooperative Regulation of Class II Injection and Surface Discharges of Produced Water

Dear Ms. Townsend,

The Center for Biological Diversity ("Center") thanks you for the opportunity to submit informal comments on the revision to the 1988 Memorandum of Agreement ("MOA") between the State Water Resources Control Board ("State Water Board") and the Division of Oil, Gas, and Geothermal Resources ("DOGGR") regarding cooperative regulation of Class II injection and surface discharges of produced water. The Center is pleased that the two agencies are updating this agreement. In addition, there are several areas in which the MOA can be improved to clarify certain obligations, which we identify below.

Section IV: Responsibilities and Requirements Regarding Underground Injection Control

Aquifer Exemptions

The fact that the MOA recognizes that the agencies can and should limit and condition UIC approvals based on a review of the aquifer exemption applications and initiated as part of the exemption process, and that DOGGR "will" incorporate them into all new and revised UIC project approvals involving that aquifer, is a step in the right direction.

At the same time, the Center reminds the state agencies that there are current hundreds of wells illegally injecting into water that is protected as Underground Sources of Drinking Water under the Safe Drinking Water Act. This water and other groundwater that may subjected to exemption requests in the future is likely to become increasingly necessary with longer and more intense droughts worsened by climate change. It is irresponsible for the State Water Board, charged with protecting the state's water, to allow the illegal injection to continue. It is further irresponsible for the State Water Board to sacrifice these aquifers based on outdated criteria that was itself based on now decades-old water production and purification technology, and to do so based on applications and data submitted by oil companies who have clear financial interests in receiving

the exemptions, and given the state's limited knowledge of its own hydrology. The process of submitting aquifer exemptions to Administrator Pruitt's EPA must stop, and all illegal injection halted immediately.

UIC Projects

The state's Application for Primacy (section R) and the Memorandum of Agreement between DOGGR and EPA state that DOGGR (section F.1.) state that DOGGR shall provide a 15-day comment period for new and modified UIC projects, with additional public notice if there substantial changes to an approved plan.[1] This MOA needs to include this requirement, explaining at what point in the process this will occur, and how the two agencies will review, analyze, and respond to public comment.

The Center is glad to see the agencies working toward a centralized system for tracking progress on review of UIC project applications and reviews. The database should also be publicly accessible.

Section V: Responsibilities and Requirements Regarding Discharges of Class II Fluids to Land

The Center is pleased to see that DOGGR and the State Water Board are working closely on surface water discharges. There are two critical issues that should be addressed here, however. One is how the two agencies will work together to end the dangerous and damaging practice of allowing wastewater discharges into unlined pits. The other is how the agencies will work together to address and end the practice of irrigating crops with inadequately tested oil and gas wastewater.

Discharges to Unlined Pits

California is the only oil-producing state that allows oil and gas wastewater to be discharged directly into unlined pits and sumps, letting harmful chemicals leach into the ground and evaporate into the air. There are an estimated 1165 pits in the state, 790 of which are active. The vast majority of pits are in the Central Valley (1113 total, 746 active), and the remainder are in the Central Coast region.[2]

Disposing of wastewater into pits is highly dangerous because the "primary intent of unlined pits is to percolate water into the ground, [and] this practice provides a direct pathway for the transport of produced water constituents, including returned stimulation fluids, into

[1] California Department of Conservation, Division of Oil, Gas and Geothermal Resources and U.S. Environmental Protection Agency Region 9, Underground Injection Control Program Memorandum of Agreement (1982), *available at* http://www.conservation.ca.gov/dog/for_operators/Documents/MOU-MOA/MOA_EPA_UIC_1982.pdf; California Department of Conservation, Division of Oil, Gas and Geothermal Resources, Application for Primacy in the Regulation of Class II Injection Wells Under Section 1425 of the Safe Drinking Water Act (April 1981), *available at* http://www.conservation.ca.gov/dog/general_information/Documents/Application%20for%20Primacy.pdf

[2] Clean Water Action, *Still in the Pits* (March 2016) ("CWA, Still in the Pits"), *available at* https://www.cleanwateraction.org/sites/default/files/docs/publications/Still%20In%20the%20Pits%20-%20March%202016.pdf.

groundwater."[3] Pits are also dangerous because they allow chemicals to evaporate into the air or escape the pit as runoff after heavy precipitation. Pits also harm birds and other wildlife that are attracted to the water.

Troublingly, pit disposal has already led to documented groundwater contamination. The California Council on Science and Technology CCST found "[t]here is ample evidence of groundwater contamination from percolation pits in California and other states."[4] At wastewater pit facilities in Kern County, wastewater constituents have been identified in the soil, and the groundwater beneath the ponds have been impacted by percolating wastewater. The contamination is flowing towards residential water supply wells near the operators' facilities.[5]

The extent of the harm to state's groundwater is not yet known, in large part due to inadequate information about where the pits are located and what chemicals are being discharged and an insufficient assessment of the groundwater that may be present underneath these pits. After assessing the risks of wastewater disposal into pits, the CCST recommended joining the vast majority of states by phasing out the practice of open pits disposal.[6]

The lack of oversight and action has resulted in water degradation. For example, in Kern County, the CV Board admitted that wastewater has contaminated soil and groundwater near multiple pits operated by Valley Water Management Company (Valley Water), threatening dozens of nearby water wells and surface waters in the Kern River and Cottonwood Creek.[7] Despite issuing the original notice of violation in 2013, and a recommendation from its own staff that the facility be shut down immediately, the CV Board never took enforcement action against the operator, opting instead to continually extend a deadline for compliance. In its most recent action, the CV Board extended the compliance date until July 1, 2019.

The CV Board recently adopted three sets of blanket waste disposal requirements (WDRs) for wastewater discharges into pits.[8] These WDRs require an operator to submit a Notice of Intent to discharge under one of the three potentially applicable sets of requirements, and the CV Board may issue a Notice of Applicability to allow wastewater disposal at the facility.

Furthermore, the General Orders improperly allow discharges in excess of basin plan limits to degrade waters designated for beneficial use. The General Orders also allow operators to continue wastewater discharge for up to seven more years if they claim to be pursuing a groundwater "de-designation" determination.

In addition, *although discharging wastewater from stimulated wells is prohibited*,[9] these orders allow operators to do just that. Operators were given 3 years to continue disposing of well

---

[3] California Council on Science and Technology, *An Independent Assessment of Well Stimulation in California,* Vol. II (July 2015) at p. 110 ("CCST Vol. II"), *available at* http://ccst.us/publications/2015/160708-sb4-vol-II.pdf.
[4] CCST Vol. II at p. 112.
[5] *Id.*
[6] *Id.* at 151.
[7] California Regional Water Quality Control Board Central Valley Region, Cease and Desist Order No. R5-2015-0093 (Dec 7, 2017) *at* p. 7.
[8] California Regional Water Quality Control Board Central Valley Region, Orders R5-2017-0034, 0035, and 0036 (Waste Discharge Requirements General Order for Oil Field Discharges to Land, General Orders 1, 2, and 3).
[9] 14 Cal. Code Regs., § 1786(a)(4): "produced water from a well that has had a well stimulation treatment … *shall not be stored in sumps or pits*."

stimulation wastewater into pits even in direct violation of state regulations.[10] At the end of the three-year period, well stimulation fluid disposal may continue if the operator "demonstrate[s] that the produced wastewater does not contain well stimulation treatment fluids in concentrations that could adversely affect beneficial uses of waters."[11]

Meanwhile, in the Central Coast Region, only 3 of the 52 pit locations[12] have a permit of any kind for waste discharge.[13] The Central Coast Regional Water Board does not appear to have any applicable waste discharge requirements in place.

The regional water boards have authority to regulate surface discharges of wastewater. But it was only recently that the regional water boards even took an inventory of wastewater pits to tally how many pits existed. Alarmingly, even when presented with uncontroverted evidence of water contamination, regulators have failed to take action.

Given the risks involved in disposing of oil waste into sumps, it is critical that this MOA reiterate that the State Water Board and regional water boards will no longer issue WDRs for discharges of oil wastewater to unlined pits and sumps, and address how DOGGR and the State Water Board will work together to ensure this harmful practice ends.

Oil and Gas Wastewater for Irrigation

In California, large quantities of wastewater—hundreds of millions of barrels each year—are repurposed for irrigation and livestock.[14] The wastewater is used on about 45,000 acres of farmland in the Central Valley.[15] Four water districts are known to receive wastewater from oil and gas fields, including one—Cawelo Water District—from an oil field that has employed fracking in the past.[16] Water samples of post-treatment water tested by the nonprofit group Water Defense contained acetone and methylene chloride, two chemicals with known adverse health impacts.[17] Chevron's own tests detected acetone and benzene, a known carcinogen, in its wastewater.[18]

---

[10] See Order R5-2017-0034 (General Order 1), ¶ 47.
[11] *Id.*
[12] The Central Coast Regional Water Quality Control Board counts multiple pits in a location as a single "pit."
[13] CWA, Still in the Pits, at p. 8.
[14] California Department of Conservation, Division of Oil, Gas and Geothermal Resources, SB 1281 Water Report Summary, Second Quarter 2017 (showing 10,127 acre-feet used for "domestic use"—namely, irrigation—in the second quarter of 2017. This equates to roughly 314 million barrels annually.
[15] Julie Cart, "Potentially harmful chemicals found in oil field water used for irrigation," Los Angeles Times (June 20, 2015.) ("Cart 2015"), *available at* http://www.latimes.com/local/california/la-me-oil-water-tests-20150620-story.html.
[16] California State Water Board, Fact Sheet: Food Safety Expert Panel Recycled Oilfield Water for Crop Irrigation (undated), *available at* https://www.waterboards.ca.gov/rwqcb5/water_issues/oil_fields/food_safety/data/fact_sheet/of_foodsafety_fact_sheet.pdf (lasted visited Feb. 14, 2018).
[17] Cart 2015, *supra*.
[18] Amec Foster Wheeler Environment & Infrastructure, Technical Report: Reclaimed Water Impoundments Sampling (June 15, 2015) *available at* https://www.waterboards.ca.gov/centralvalley/water_issues/oil_fields/information/disposal_ponds/chevron/2015_0615_com_chevron_cawello.pdf .

After assessing the uncertainty and danger of using wastewater before knowing what chemicals may be present, the CCST called for the ban on using wastewater from fracked wells, noting, "[c]urrent water district requirements for testing such waters before they are used for irrigation are not sufficient to guarantee that stimulation chemicals are removed."[19] The same can be said for wastewater in general. No agency has studied the effects of using toxic-laden wastewater on water crops and feed livestock that we consume. The state has very few requirements for the water quality of irrigation water. For example, there is no standard for the amount of benzene that irrigation water may contain.

It was not until 2015 that the Central Valley Regional Water Quality Control Board ("CV Board"), under significant public pressure, formed a committee to begin to examine the effect of wastewater irrigation. While that committee has conducted preliminary testing on a few chemicals, it has not tested for the full array of constituents in wastewater. Nor can it, since operators are currently not required to disclose all of the chemicals used in the oil extraction process.

The MOA should address how DOGGR and the State Water Board will work together to address the concerns about the safety of wastewater irrigation. In particular, given the threat to public health from using toxic-laden wastewater for agriculture purposes, the MOA should describe how the agencies will work together to end this practice.

Section VI: Incident Response and Enforcement Coordination

Enforcement Coordination

The current language of the draft MOA regarding agency enforcement actions appears to be weaker than the original language.

The draft MOA states: if "there is a violation of water quality-based statutory or regulatory requirement, the agency *may* take any actions under its authority that the agency deems appropriate to ensure that compliance is achieved." (Emphasis added.)

The original MOA stated: if "an injection or surface disposal operation is violating the terms of its permit *or is causing an unacceptable water quality problem,* the permitting agency *shall* take any necessary actions to assure that compliance is achieved, *or that the practice causing water pollution is abated forthwith. If necessary, the permitting agency shall order work to be done and/or order operation to be halted.*" (Emphasis added.)

The MOA should continue to include language from the original MOA that *requires* the agency actions to cure a violation *or an unacceptable water quality problem or threatened water quality problem,* and that such action can include *abating* the violating activity or *halting* the operation.

[19] CCST Vol. II, p. 386.

Section VII: Additional Provisions and Agreements

Sections D. and E. under Section VII state that the "MOA is not a regulation nor does it create binding obligations for either Party," and that "This MOA is not intended for the benefit of any person or entity other than the Parties. Third-parties cannot enforce any provision of the MOA."

The Center is concerned about these provisions because they appear to remove any enforcement mechanism from the MOA. Moreover, the matters addressed in the MOA are of significant public interest and protection under multiple environmental statutes. It is improper for agencies to attempt to contract around a "matter of public right" without any ability by the public to enforce it.[20]

Conclusion

Thank you for the opportunity to comment on the draft MOA, and hope you will seriously consider the concerns raised.

Sincerely,

Maya Golden-Krasner
Senior Attorney | Climate Law Institute
Center for Biological Diversity
mgoldenkrasner@biologicaldiversity.org
(213) 785-5402

[20] See e.g., *California Homeless and Housing Coal. v. Anderson Homeless* (1995) 31 Cal.App.4th 450, 457; *California Association for Health Services at Home v.Department of Health Services* (2007) 148 Cal.App.4th 696.