

MEMORANDUM

To: Mike Hightower, Program Director, New Mexico Produced Water Research Consortium

From: John Rhoderick, Acting Director, Water Protection Division, NMED

John Digitally signed by John Rhoderick Pate: 2022.07.05 12:49:31-06'00'

Cc: Rebecca Roose, Deputy Cabinet Secretary

Dr. Dan Arvizu, Chancellor, New Mexico State University

Dr. Pei Xu, Research Director, New Mexico Produced Water Research Consortium Government Advisory Board, New Mexico Produced Water Research Consortium

Date: July 5, 2022

Re: Updating and replacing the January 3, 2022, memo; Protecting water quality and public health

during research activities

The New Mexico Environment Department (NMED) appreciates our ongoing collaboration with New Mexico State University and the New Mexico Produced Water Research Consortium (Consortium) to advance sound scientific study to fill gaps in knowledge related to the treatment and reuse of produced water for activities unrelated to the oil and gas industry (aka, "off-field activities"). NMED is committed to developing strong science-based regulations for any future authorized off-field activities related to the "discharge, handling, transport, storage, recycling or treatment for the disposition of treated produced water." See NMSA 1978, § 74-6-4(P). NMED will look to the Consortium's research data to develop appropriate proposed standards and regulatory permitting processes to move through a public rulemaking before the New Mexico Water Quality Control Commission (WQCC).

Throughout the Consortium's research efforts in coming years, some activities may require advanced authorization or project plan and design modifications in order to comply with all existing state environmental and human health protection requirements, such as the New Mexico Produced Water Act (Chapter 70 NMSA 1978); Water Quality Act and WQCC regulatory requirements related to the protection of groundwater and surface water quality (§§ 74-6-4(P); 74-6-8, 9(B), 20.6.2 NMAC, and 20.6.4 NMAC) and licensing by NMED's Radiation Control Bureau in accordance with the Radiation Control Act (§§ 74-3-1 to -16) and implementing regulations (20.3.14 NMAC). The New Mexico Produced Water Act (Chapter 70 NMSA 1978) requires a person to obtain a permit from NMED prior to using produced water or treated produced water for activities unrelated to the production of oil and gas. NMED is unable to issue such a permit until such time as the WQCC has rules in place to regulate such uses. Those rules do not currently exist.

During the Consortium's third year (2022), it will build on the successes of 2021 and advance progress around our shared research priorities, which are captured in the January 2022 Research Plan and Gap Analysis. Any technical Request for Proposals (RFP) issued by the Consortium during calendar year 2022 will lead to technical projects that demonstrate treatment technology capabilities, develop more robust analytical methods for produced water characterization, support advancements around produced water

data availability and geospatial analytics, establish quantitative risk and toxicology testing related to human health and environmental impacts of treated produced water reuse applications, and develop or refine new tools for further research around fit-for-purpose reuse applications.

Consistent with current state law, off-field discharges of produced water or treated produced water associated with Consortium pilot projects or other non-Consortium pilot projects are not allowed.

During 2022, NMED will work closely with you and others in Consortium management to review and revise, as necessary, all Consortium guidance and procedures that apply to pilot projects. Strong governance by the Consortium is essential to successful research that adheres to the highest standards of scientific integrity and rigor and complies with existing environmental and public health regulatory requirements. All entities involved in implementing produced water pilot projects associated with the Consortium must have a clear understanding of their reporting and recordkeeping responsibilities, as well as all federal, state, tribal and local government regulatory obligations. Together, we will ensure the ongoing research activities of the Consortium are informed by the Department's expectations for quality assurance and quality control measures and lay the foundation for strong, science-based regulations in the future.

This Memorandum supersedes prior memos on this topic dated January 3, 2022 and January 20, 2021. Questions about this Memorandum should be directed to me at john.rhoderick@state.nm.us.