

**InterTech**

Providing Innovative Solutions in a Complex Environment

January 9, 2013

Colorado Department of Public Health and Environment
Water Quality Control Division
4300 Cherry Creek Drive South WQCD-P-B2
Denver, Colorado 80246-1530

RE: General Produced Water Discharge Permit Application
Parachute Treatment Facility

Received
JAN 16 2013
Water Quality Control

To Whom It May Concern:

WPX Energy Rocky Mountain, LLC respectfully submits the attached application for the discharge of treated produced water into the Hayes Gulch drainage from the Parachute Treatment Facility. The planned facility will treat produced water and flow back water from a non-conventional natural gas and Natural Gas Liquids (NGL) production operation. The proposed process consists of two (2) primary treatment systems: pretreatment and desalination by reverse osmosis technology.

The pretreatment system will consist of electrocoagulation, tube settling clarification, spiral wound ultrafiltration and weak acid cation exchange softening. The desalination system consists of a primary reverse osmosis system, a brine recovery reverse osmosis system, and chemical feed for pH adjustment and remineralization prior to discharge. The maximum anticipated flow rate to be discharged is estimated at 10,000 barrels (bbls) per day. It is estimated that 85% of the water treated will meet effluent standards for discharge. The waste stream will be disposed of in existing, permitted injection wells, planned injection wells as approval is obtained or trucked to off-site disposal facilities.

All supporting documentation requested has been included as attachments to the permit. Per the Colorado Water Quality Control Division's "Implementation of the Narrative Standard for Toxicity in Discharge Permits using Whole Effluent Toxicity (WET) Testing" document, the permittee is allowed to request the acute species to be utilized. WPX would like to request *Daphnia magna* and *Pimephales promelas* be permitted as the acceptable species for acute WET testing.

Thank you in advance for your time in reviewing the permit application. Should you have any questions, please do not hesitate to contact myself or Peggy Carter at 970-274-3435.

Respectfully,

Jana Sanders
Regional Manager