

A photograph of industrial water treatment equipment, showing multiple rows of white cylindrical modules with metal pipes and valves. The equipment is arranged in a structured, repetitive pattern, typical of a large-scale water processing facility.

# **Concentrate Management Process to Recover Minerals from Brackish Water Earth Water Minerals.**

**Scott Reinert, EPWU  
Hubble Hausman, EWM**

# Enviro Water Minerals Company (EWM), Public Private Partnership

- Partnership between EPWU and EWM
- Construction of a new plant adjacent to existing desalination plant.
- EWM uses EPWU concentrate to recover minerals.
- EPWU receives an additional 1 million gallons of potable water from EWM.

# Enviro Water Minerals Company (EWM), Public Private Partnership

- The company will add 10 new jobs with average salaries of 50K per year in return the City will rebate about 2 million dollars in taxable property.
- EWM project will allow EPWU the opportunity to produce more concentrate allowing for expansion of the KBH desalination plant, without having to drill more injection wells.

# Concentrate from Kay Bailey Hutchison Desalination Plant

- EPWU uses deep well injection to dispose of the concentrate that is generated at KBH plant. EPWU's permit allows up to 3 MGD of concentrate to be injected in three wells.
- EWM will use 1.25 MGD of KBH concentrate.
- EWM provides an additional injection well of injection capacity for the KBH plant.

NEW MEXICO

TEXAS

DEEP WELL  
DISPOSAL SITE

BLEND WELLS &  
COLLECTION LINE

Loop 375

CONCENTRATE LINE  
BY DEEP WELL DISP.

SOURCE WELLS

RO PLANT SITE

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# Concentrate from Kay Bailey Hutchison Desalination Plant Water Quality

Arsenic- 39.8 mg/l  
TDS-11,000 mg/l  
Calcium-742 mg/l  
Flouride-2.58 mg/l  
Sulfate-1290 mg/l  
Chloride-5260 mg/l  
Magnesium-181 mg/l

# Enviro Water Minerals Company (EWM), Public Private Partnership

- Enviro Water Minerals Company is using cutting edge technology to recover minerals from waste brine from desalination plants.





# Enviro Water Minerals Company (EWM)

- All contaminants are extracted from the concentrate stream, leaving only permeate and thereby alleviating the desalination plant's concentrate discharge and its associated environmental hazards.



# Enviro Water Minerals Company (EWM), Public Private Partnership

- EWM uses proven commercially available technologies to chemically separate minerals from concentrate.

