

Enviro Water Minerals Company (EWM), Public Private Partnership

- EWM's technology recovers the minerals from waste brine discharged from brackish water reverse osmosis plants using their integration technologies.



Enviro Water Minerals Company (EWM)

➤ EWM chemically separates the concentrate into high-purity industrial grade minerals products that are highly valued in commercial markets.

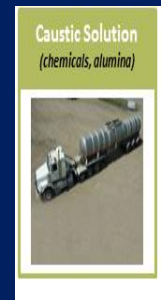
➤ High Purity Salt
(Bleach, Chemical)



➤ Agricultural Gypsum
(Metals Free)



➤ Caustic Solution
(Chemicals, Alumina)

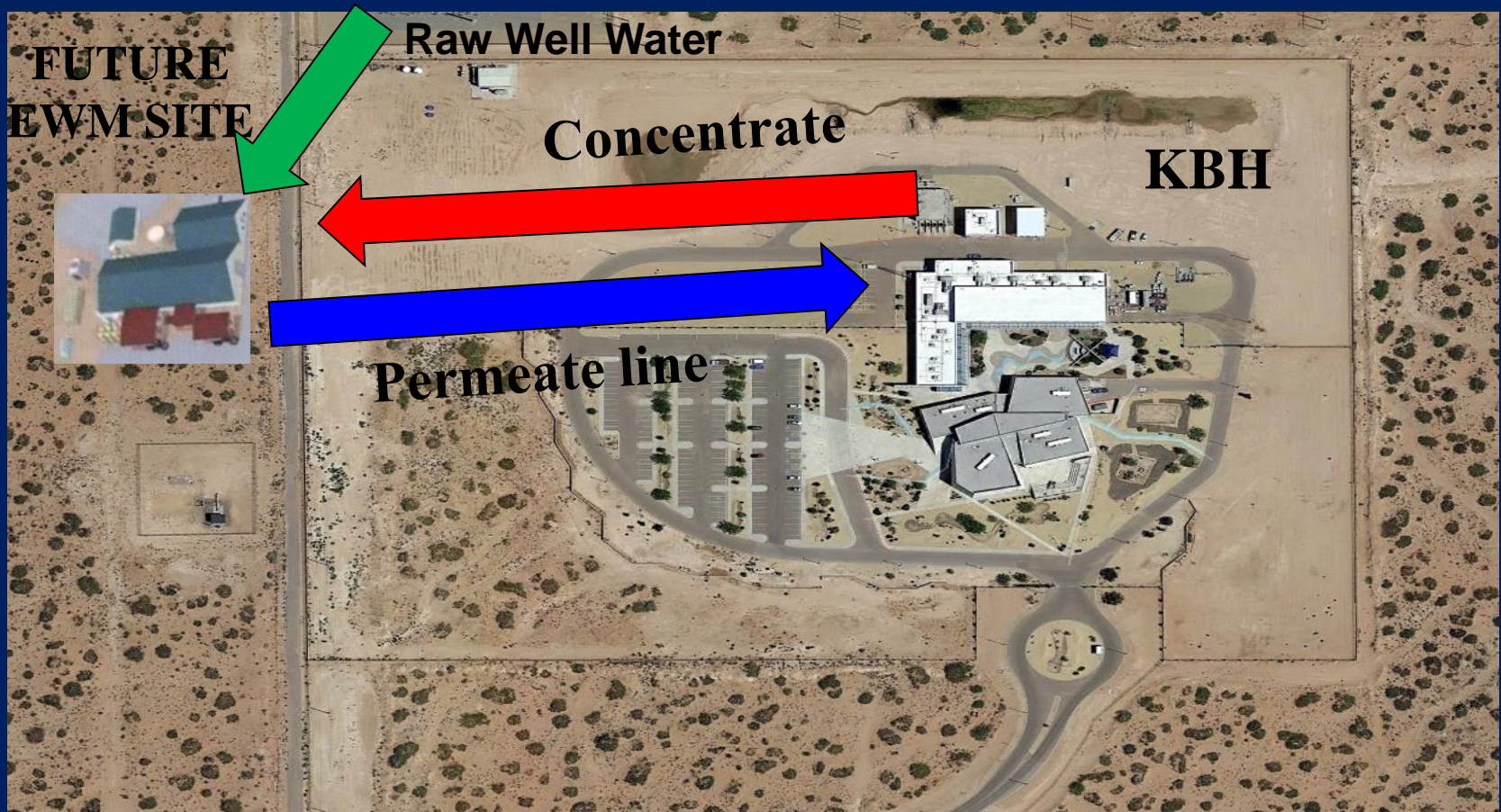


Enviro Water Minerals Company (EWM)

- EWM chemically separates the concentrate
- into high-purity industrial grade minerals products that are highly valued in commercial markets.
- Potash Liquid Fertilizer
- Bromide Rich Brine (Power plant mercury scrubbing)
- Milk of Magnesia (Water treatment)



Proposed EWM Concentrated & Effluent Alignment



EWM Proposal & Agreement to EPWU

- EWM will receive concentrate generated from the Kay Bailey Hutchison (KBH) desalination facility.
- The concentrate will enter EWM's brine treatment process which consists of stripping, electro-dialysis, nano-filtration, and biological selenium removal.

EWM Proposal & Agreement to EPWU

- Once the minerals are removed from the liquid concentrate, the minerals will then pass through a mineral recovery process.
- The process consists of mechanical vapor recompression crystallizers, vacuum crystallizers, and hydrometallurgical leaching.

EWM Proposal & Agreement to EPWU

- In the event KBH plant is not producing concentrate from their reverse osmosis facility. EWM will be able to receive brackish groundwater from KBH source wells.

EWM Proposal & Agreement to EPWU

- Permeate will be treated to meet TCEQ drinking water standards where it will then be pumped into EPWU's potable water distribution system.



EWM Project Schedule

- EPWU is in design of pipelines and modifications to bring the concentrate to EWM.
- EWM is in design of plant.
- Plant start up in October 2016

Questions



Water Resources Department

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