# BIOSOLIDS
## Management Facility

## CITY OF WEST RICHLAND

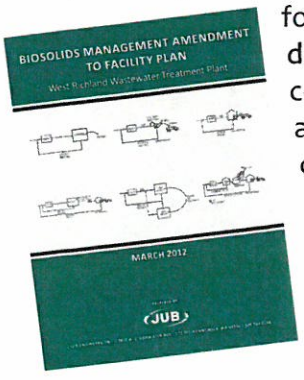
**Biosolids, not a sexy subject in any community...**

Thanks to the encouragement from the IACC and the Department of Ecology, the City of West Richland was able to turn an odoriferous eyesore into a state of the art wastewater facility. The new City of West Richland Biosolids Facility not only conserves fossil fuel, it reduces odors and processes solids in a timely and hygienic manner. In fact, the facility was one of the few in the state to be funded in part by Green Power Reserve Funding from the Department of Ecology. Here is the rest of the story.

*Old Lagoon*

In 2012, the City of West Richland turned to J-U-B Engineers to evaluate the solids management strategy at their 1.5 MGD wastewater treatment plant. The waste activated sludge (WAS) was discharged into a bentonite clay lined lagoon for long term storage and additional degradation. The biosolids accumulated in the lagoon and required costly periodic dredging and disposal. The Washington State Department of Ecology (WDOE) expressed concern over the integrity of the lagoon liner and requested the lagoon be lined to meet current standards **the next time it was emptied. Lining a lagoon is a significant capital expense; therefore, the City took the** initiative to study alternatives for biosolids management.

J-U-B prepared an engineering report that compared several alternatives for management and disposal of solids - including life cycle analyses to help the City select the most economical solution for the long term. Several **different alternatives and** combinations of management and disposal options were considered. The preliminary analysis showed that mechanical dewatering of the WAS would be the most economical alternative.



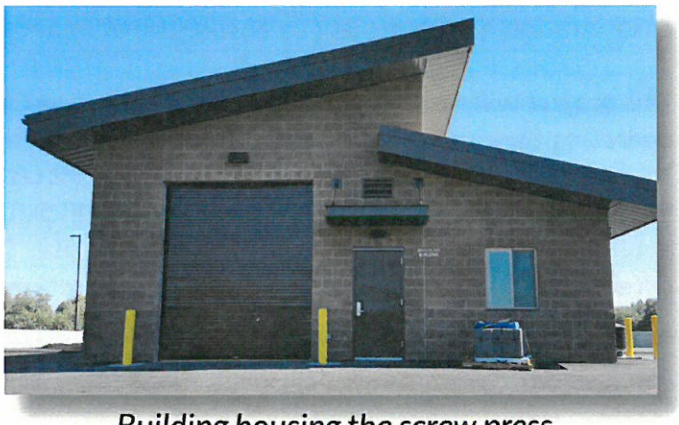

Based upon the selected alternative, several pieces of dewatering equipment were then pilot tested at the City's facility.


*Pilot Testing*

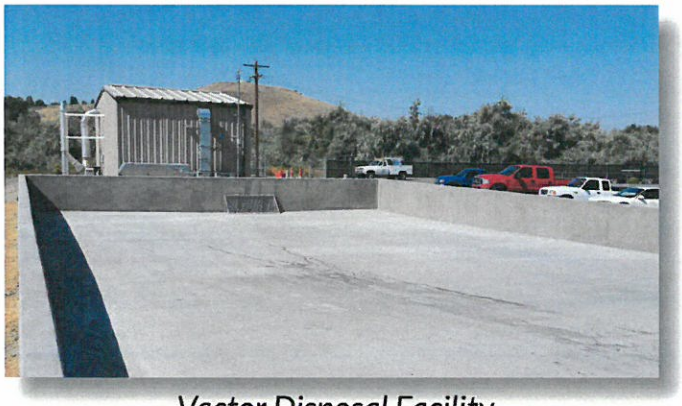
IACC was instrumental in educating the City and J-U-B in regards to funding options for the project as well as tips for a successful funding application. J-U-B assisted the City in securing a low-interest Department of Ecology State Revolving Fund loan for financing the project. The $1.7 million project was advertised in 2015 and construction was completed by POW Construction in 2016.

## COMPLETED FACILITY

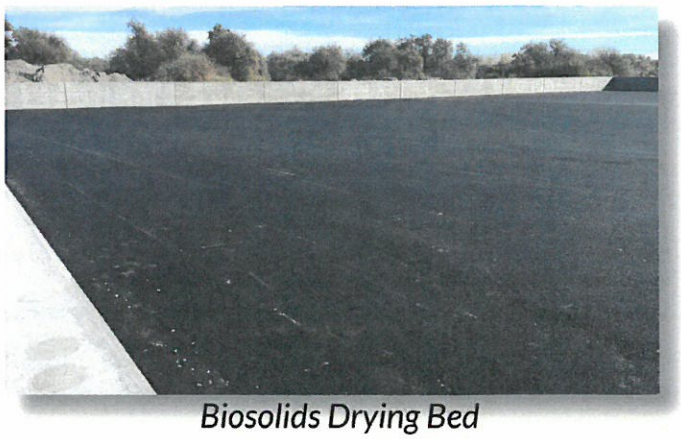
*Screw Press Technology*



*Building housing the screw press*



*Vactor Disposal Facility*



*Biosolids Drying Bed*