

Contingency Plan for Loss of Potable Water Supply Emergencies Kaiser Trentwood Works

1. System Characteristics

Kaiser has one well field consisting of two wells. There are limited alternatives to meet the impacts of the loss of this wellfield. The impacts will likely be severe, affecting the entire facility. The following summary of the system characteristics is relevant to understanding operational contingencies.

- Kaiser serves a non-resident population (approximately 1400) and provides one service connection to the adjacent Bonneville Power Administration's substation. There are two production wells (West Well and North Well) that have a capacity of 600 gpm each.
- The two wells are located near each other in a well field. The West Well has a depth of 126 feet. The North Well has a depth of 190 feet and a static water level of 75 feet below ground surface.
- Kaiser does not currently have any interties. Kaiser should evaluate establishing an intertie with an adjacent water district.
- System demand ranges from 240-260 gpm with an average flow of 246 gpm.
- Kaiser relies on two 10,000-gallon hydropneumatic surge tanks for storage (20,000 gallons total).
- Kaiser potable water supply needs are small enough that adjacent systems could possibly supply water to Kaiser.

2. Short Term Action

The nature of the emergency would determine how Kaiser would respond. If the potable water supply was contaminated and deemed unsuitable as a drinking water supply, Kaiser would rely on bottled water for drinking water purposes. Depending upon the nature of the contamination, the contaminated water may still be used for lavatories, toilets, irrigation and other non-drinking purposes.

If either well is out of service because of a pump failure, the other well has sufficient capacity to supply adequate flows. It is unlikely that wells would be subjected to an extended power outage because of the nearby Bonneville Power substation that provides for Kaiser's electrical needs.

Fire flows and process waters are provided in separate water systems.

3. Long Term Action

Kaiser will likely pursue some of the following options to meet their long term needs.

- Evaluate the idea of constructing an intertie with neighboring water districts [Spokane Industrial Park (SID) or Trentwood Irrigation District (TID) #4]. Interties with Irvin Water District, Modern Electric Water Company, Consolidated Irrigation District or Vera Irrigation District would not be considered because they are located across the Spokane River, and would be costly.
- Buy water from a neighboring district (SIP or TID) while Kaiser's well remains contaminated.

- **Conserve and Ration Water:** The majority of consumption is for drinking water purposes and the public health. Reduction in use of water for manufacturing process would have benefit to Kaiser by reducing the capacity of water that is needed and make better use of available water. However, the reduction is expected to be minor when compared to over-all consumption.
- Provide treatment in some cases, depending upon the contamination and type of treatment necessary.
- Drill a new well outside of the zone of contamination.

4. Unacceptable Alternatives

The following alternatives have been reviewed and are considered unacceptable at this time.

- Rely solely on a neighboring water district completely for Kaiser's potable water supply.
- In some cases, treatment may be too costly.
- Purchase of suitable property outside Kaiser's boundaries as a future well site. Purchasing land for a well on speculation would be a costly and expensive alternative. Costs could exceed \$100,000 and may not solve a contamination problem. All other options should be explored before consideration of the purchase of an off-site well site.

5. Summary

Due to its one well field, Kaiser has few options to mitigate the loss of its wells. In the event of a contamination, all options would be explored to determine the most logical and cost effective course of action.