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

1. System Characteristics

Kaiser has one Well field consisting of two operating wells and 2 emergency 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 900) and provides one service connection to the adjacent Bonneville Power Administration's substation. The wo production wells (Well 1 and Well 2) have capacities of 1250 and 1450 gpm respectively.

- The two wells are located near each other in a well field. Well 1 has a depth of 277 feet and Well 2 has a depth of 285 feet. Static water levels in both wells are approximately 160 feet below ground surface.

- Kaiser has two emergency wells, Wells 5 and 6 respectively. Well 5 is a diesel/electric well and Well 6 is electric only.

- Kaiser does not currently have any interties. Kaiser should evaluate establishing an intertie with an adjacent water district.

- Kaiser Mead has a combined potable and process water system so all water supplied must be potable.

- System demand ranges from 1450-5200 gpm with an average flow of 2028 gpm.

- Kaiser relies on one 100,000-gallon tank for storage . At capacity, water height is 126 feet above ground level to give a system pressure of 54.5 pounds pressure.

- Kaiser's 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 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 emergency wells have 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. In the event of plant wide electrical failure, the

diesel powered well has adequate capacity to meet plant water needs.

If a single well was contaminated and had to be taken out of service, one of the emergency wells would be used to provide plant water.

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 County Water District #3 or Whitworth Water District #2 or an intertie with Kaiser South.

- 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 process water purposes. 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.

- 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.