ANSWERS TO QUESTIONS ON

CHROMIUM 6

1. What happened to our water?

   The water you are now drinking is the same water you have been drinking for years. The State of California recently set a new standard for hexavalent chromium (Chromium 6) which is 10 ppb. We are the only state in the union that has created a standard for chromium 6. The water in 55% of our supply exceeds this new standard.

2. Does our water have high levels of chromium 6?

   The State set a new water quality standard with a maximum contaminant level of 10 part per billion (PPB) of chromium 6 in June of 2014. The District's water has chromium 6 in levels ranging from 3 to 16 (PPB). The level of Chromium 6 in Hinkley (Erin Brockovich movie) was 580 ppb per Wikipedia.

3. What are the health risks with this? Can someone shed some light?

   It was determined by the California Dept, of Health Services that 12 theoretical cancer cases could be avoided Statewide by setting the maximum contaminant level for Chromium 6 at 10 ppb. Chromium 6 is a heavy metal that if ingested over many years may cause cancer.

4. I live near Mc Clellan air force base, how do I know what the level is at my house?

   The water from all of the wells throughout our system is mixed together. Even though you may live next to a well site it may not turn on regularly. Typically the majority of our water comes from a well on 30th and Q St. The average chromium 6 level in the system is 11 parts per billion. If you would like to know the level at your individual home or at your private well you will need to contact a laboratory to perform a test on your water.

5. What are we doing about the chromium 6? What are the options?

   The District has already done one pilot study on a treatment process to remove the chromium 6 from the water. We are currently doing another pilot study to determine if a different treatment technology is better for our water supply.

   The District has also done a study to determine the best location to drill new wells.

The District is currently doing a blending study on our large producing well. It is our hope that we can either blend the water with another source or plug a section of the screens instead of having to treat with chemicals at this site.

The District is looking for grants to fund the new treatment and well projects that will be needed to comply with the State's new chromium regulation.

6. Who do we contact for information on the hydrogeologic study?

   It is available through our office at the cost of 10 cents per page if a public records request is provided to our office.

7. The federal standard is x parts per ????.

   There is currently no Federal Standard for Chromium 6. California is the first state to set a standard for this constituent. The Federal standard for total chromium is 100 ppb and the State Standard for total chromium is 50 ppb.

8. The State standard is 10 parts per billion (ppb). How much is this in a 12 oz glass of water?

   It would equal 3.54882 ppb per 12 oz glass of water.

9. Is Rio Linda Elverta Community Water district's supply a blended supply?

   Yes, Individual wells do not serve individual neighborhoods.

10. What are the methods to treat water? Mix and chemicals or something else?

    Strong base acid is what we are proposing. Water passes through a resin filter. When the filter becomes saturated with chromium and other constituents it is stripped with an acid and the acid is shipped away. Depending on what is in the acid mixture it may go the EBMUD to be disposed of in the ocean or it may need to go to a class 1 dump site (very expensive).

11. Estimated costs to treat at the well-head?

    $10.3 million is the current engineers estimate.

11. Costs to drill a new well or use other methods to draw water- like at different levels?

    $3.5 million per well is the estimate.

12. What if the standard were changed to test water in the system instead of the well head?

    It would not make a difference. All well water is blended together in the distribution system. System average chromium 6 is 11 ppb.

13. In the Erin Brockovich- Hinkley case what was the level in there water?

From Wikipedia Main article: Hinkley groundwater contamination 580 ppb Hexavalent chromium was found in drinking water in the southern California town of Hinkley and was brought to popular attention by the involvement of Erin Brockovich. The 0.58 ppm (580 ppb) chromium VI in the groundwater in Hinkley exceeded the Maximum Contaminant Level (MCL) of 0.10 ppm (100 ppb) for total chromium currently set by the United States Environmental Protection Agency (EPA). The source of contamination was from the evaporating ponds of a PG&E (Pacific Gas and Electric) natural gas pipeline compressor station, which were used to dry the precipitate from the cleaning solution for the cooling stacks. It also exceeded the California MCL of 0.05 ppm (50 ppb) (as of November 2008) Note that since no MCL exists for chromium VI the total chromium standards apply.

A more recent study found that from 1996 to 2008, 196 cancers were identified among residents of the census tract that includes Hinkley — a slightly lower number than the 224 cancers that would have been expected given its demographic characteristics. In June 2013 "Mother Jones" published an article regarding work by the Center for Public Integrity that was critical of the study, and some others by the same researcher. Average Cr (VI) levels in Hinkley were recorded as 1.19 ppb with a peak of 3.09 ppb. The PG&E Topock Compressor Station averaged 7.8ppb and peaked at 31.8ppb. Compare to the California proposed health goal of 0.06 ppb. The same day the study came out, the plume of contaminated water was reported to be spreading. Ongoing cleanup documentation is maintained at California EPA's page.