

CAMBRIA CSD

Emergency Water Treatment Facility

Kurt Souza

SWRCB

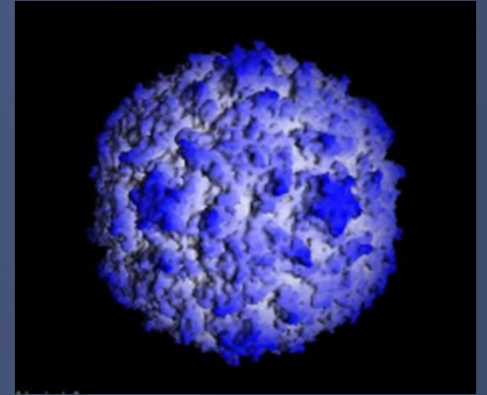
Division of Drinking Water

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- ▣ Regulates public water systems
- ▣ Sets standards for wastewater reuse to protect public health
 - ▣ “Water Recycling Criteria” in Title 22 of California Code of Regulations
- ▣ RWQCBs have the permitting and ongoing oversight authority of “Groundwater Recharge Reuse Project (GRRP)”
- ▣ DDW reviews, comments and provides requirements to be incorporated into the permit based on the Title 22 Engineering Report.

Principles of Regulations

- ▣ Replenish groundwater (GW) basins used as drinking water sources
- ▣ Low tolerable risk
 - One in 10,000 (10^{-4}) annual risk of infection from Pathogenic Microorganisms
 - Drinking water standards
 - Unregulated chemical control
- ▣ Multiple barriers
 - Includes RO and AOP (UV+H₂O₂)



Pathogenic Microorganism Control 60320.108 & 208

- ▣ Intent – ensure that pathogens will not exceed the tolerable risk dose in drinking water
- ▣ Approach - set a log reduction requirement from raw sewage to useable groundwater
 - 12-log Virus
 - 10-log *Giardia* cysts
 - 10-log *Cryptosporidium* oocysts

Response Retention Time

- ▣ Intent – that inadequately treated recycled water not enter a potable water system in the event of a treatment failure, minimum 2 months
- ▣ Between the recharge and extraction of the water, sufficient time must elapse to allow for:
 - The identification of any treatment failure
 - A response that will protect the public from exposure to inadequately treated water
 - Provide alternative source of water
 - Remedial treatment at the wellhead, if needed.

Natural Barrier

- ▣ Retention time barrier
 - 1-log virus reduction for each month of subsurface retention
 - Verify retention time with tracer study

- ▣ Cambria CSD tracer completed Sept 2014.
 - Worst case operating conditions showed 57 days of retention time to nearest well.
 - Cambria CSD has modified operating conditions to insure 2 months of retention time.
 - Letter from DDW dated November 12.

OMMP

- ▣ Operations Maintenance and Monitoring Plan
 - Includes specific operation and monitoring of the facility
 - Permit requires utility to operate facility based on the approved OMMP
 - Limits the amount of water injected and extracted
 - Monthly and quarterly reporting required
 - Includes start-up procedures and start-up sampling plan
 - DDW and RWQCB received plan on October 30.

Conclusion

- ▣ DDW provided a letter dated September 9, 2014.
 - Recommendations to the RWQCB concerning the permit for proposed facility with conditions
 - Conditions were included in the proposed permit
- ▣ Tracer Study – Letter approving with conditions dated November 12
- ▣ Continuing to review and comment on OMMP.
- ▣ DDW supports approval of the permit