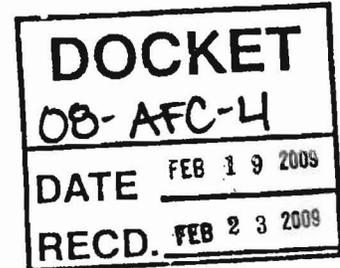


Archie D. McPhee
40482 Gavilan Mountain Road
Fallbrook, CA 92028
February 19, 2009

State of California Energy
Resources Conservation and Development
1516 Ninth Street
Sacramento CA 95814



Attention: Mr. Celli

Dear Mr. Celli,

After much consideration I decided to identify, in plain English, my principle concern of the endangerment of California's workers and the general public as previously identified in my response to Mr. Babula. These concerns and violations of "California Health Laws Related to Recycled Water" (CHLRRW) may not be evident in my initial reply to the casual, non-technical reader, and are, namely:

- 1) Endangerment of the health of the Orange Grove Energy Power Plant (OGP) workers and others by permitting the use of tertiary treated sewage water, also known as (a.k.a.) tertiary treated reclaimed water a.k.a. tertiary treated recycled water a.k.a. CHLRRW "Water Code" - Recycled Water (Section 13050(n)) **instead of** the lawfully required "Disinfected tertiary recycled water" (Title 22, CHLRRW, June 2001 Edition Section 60301.230). This Disinfected tertiary recycled water is oxygenated, filtered, clarified and disinfected to an extremely high continuous degree of purity for the health protection of human beings. See pages 12, 13, and 14 of my response to Mr. Babula which includes detailed definitions of "Disinfected tertiary recycled water" as well as its lawfully required uses on pages 8, 9, and 10 of the this reply to Mr. Babula. "Disinfected tertiary recycled water" by lawful definition is **not** CHLRRW "Water Code" Recycled Water or, disinfected and/or un-disinfected, tertiary treated recycled water.

- 2) The Fallbrook Public Utility District (FPUD) is required by California Law to provide “Disinfected tertiary recycled water” to the OGP for the health protection of power plant workers and others per Title 22 of the CHLRRW. Constant monitoring must also be required by an independent qualified Chemist, experienced in water chemistry, to ensure its high quality during the life of FPUD’s contract with OGP for the continuous health protection of workers and the general public.
- 3) “Section 60307, Uses of recycled water for other purposes” states the following uses of recycled water: “Part (3), Industrial process water that may come into contact with workers” shall be “disinfected tertiary recycled water”. **This California Law is for the health protection of all workers (See page 8, A,4 #3 of my response).**
- 4) It appears that some State of California Commissioners may unknowingly endanger the health of workers and some members of the general public for the convenience of SDG&E. Is it to heck with California health laws in favor of SDG&E? Were these health laws (CHLRRW, Title 22, June 2001 Edition) enacted only to be ignored?
- 5) Enclosure 1 of my response to Mr. Babula presents “FPUD’s Reclaimed Water Quality Chemistry Profile” for almost 2 years. Chemical Analyses of this profile coupled with the Standard Disinfection Curve displayed in Enclosure 2 verifies that FPUD’s reclaimed water is not disinfected. If it were disinfected all of the Ammonia listed in Enclosure 1 would have been converted to chloramines. For complete disinfection there must, by law, be free available chlorine (un-reacted hypochlorite) in disinfected water which is not listed in FPUD’s Reclaimed Water Quality Chemistry listing in Enclosure 1. FPUD presently uses liquid chlorine for disinfection.

Archie McPhee

Archie McPhee

Copy to: California Attorney General
San Diego County District Attorney



California Health Laws Related to Recycled Water

"The Purple Book"

Excerpts from the Health and Safety Code, Water Code, and Titles 22 and 17 of the California Code of Regulations

Last Update: June 2001

The document is meant to be an aid to staff of the Drinking Water Program within the Department of Health Services Division of Drinking Water and Environmental Management. It should not be relied upon by the regulated community as the State of California's representation of the law, since the published codes are the only official representations of the law.

Published codes are available on the Internet at <http://www.leginfo.ca.gov/> (statutes) and <http://ccr.oal.ca.gov/> (regulations). They are also available at law libraries – call your County Bar Association for the nearest location.

Every effort has been made to assure the accuracy of this compilation. Readers who find an error or who are aware of an omission should contact Jeff Stone of DHS' Recycled Water Unit at jstone1@dhs.ca.gov.

* (i) "Water quality control" means the regulation of any activity or factor which may affect the quality of the waters of the state and includes the prevention and correction of water pollution and nuisance.

(j) "Water quality control plan" consists of a designation or establishment for the waters within a specified area of all of the following:

(1) Beneficial uses to be protected.

(2) Water quality objectives.

(3) A program of implementation needed for achieving water quality objectives.

* (k) "Contamination" means an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. "Contamination" includes any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected.

(l) (1) "Pollution" means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:

(A) The waters for beneficial uses.

(B) Facilities which serve these beneficial uses.

* (2) "Pollution" may include "contamination."

(m) "Nuisance" means anything which meets all of the following requirements:

(1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

(2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

* (3) Occurs during, or as a result of, the treatment or disposal of wastes.

* (n) "Recycled water" means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefor considered a valuable resource. 

Title 22, CALIFORNIA CODE OF REGULATIONS ←

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milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 day period.

60301.230. Disinfected tertiary recycled water

"Disinfected tertiary recycled water" means a filtered and subsequently disinfected wastewater that meets the following criteria:

(a) The filtered wastewater has been disinfected by either:

(1) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or

(2) A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

(b) The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

60301.240. Drift

"Drift" means the water that escapes to the atmosphere as water droplets from a cooling system.

60301.245. Drift eliminator

"Drift eliminator" means a feature of a cooling system that reduces to a minimum the generation of drift from the system.

Archie D. McPhee
40482 Gavilan Mountain Road
Fallbrook, CA 92028

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State of California Energy
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1516 Ninth Street
Sacramento CA 95814
Attention: Mr. Celli

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