

Questions for DPR Panel August 24/25 2021  
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1. The State of California is about to legalize human composting. (<https://calmatters.org/politics/2021/08/human-composting-california-law/>) Will there be regulations necessary to ensure that pathogens from human bodies do not enter the groundwater from the compost used in the garden? What regulations will be needed at the processing site to ensure a pathogen-free compost? Are we sure there is no gene transfer?
2. From a recent bulletin (Summer 2021) of the International Society of Antimicrobial Chemotherapy and the Alliance for Prudent Use of Antibiotics, it states: "Therefore, the issue of increasing antimicrobial resistance (AMR) following the high rate of antibiotic utilization for patients with COVID-19, particularly in severe cases, should be seriously considered." It then goes on to say that "In addition, regular monitoring of AMR data in every hospital would help establish an epidemiologic database for clinicians' reference for prescribing antimicrobial agents". The question then is how do we monitor hospital wastewater flows to ensure that the antibiotic resistant bacteria and genes sent to the wastewater plant are removed during the DPR process? Would a pre-processing step at every major hospital be advised?
3. For the last year, the State of California has been directing various wastewater plants to monitor the PFA levels. (<https://www.citizensjournal.us/ten-county-wastewater-plants-told-to-measure-pfa-levels/>). We know that PFAs have been found in fertilizer. Maine has recently banned PFAs. What is the cost of completely removing PFAs from potentially drinkable wastewater and has this been achieved in California?
4. Is there a working model of DPR in California or the world which has provided safe drinking water? If so, please elaborate.
5. In November 2019, the EPA released protocols for PFA review and treatment. (<https://www.wateronline.com/doc/epa-releases-review-protocol-for-pfas-0001>) Conferences like this are regularly discussing water quality with respect to pathogen removal on the path to direct potable reuse. (<https://www.citizensjournal.us/are-we-ready-for-potable-reuse-of-wastewater/>) This appears to be a chicken-and-egg problem: which came first the protocol or the treatment? How do we map the treatment to the protocol and the protocol to the treatment? Don't we need an interim stage where the protocol is prototyped for safety?
6. In a previous DPR webinar, one of the panelists said that the DPR framework "changes 100 years of public health policy". (<https://www.citizensjournal.us/toilet-to-tap-dpr-changes-100-years-of-public-health-policy/>) How can such a major change be implemented en masse without a series of measured pilot programs?
7. The framework speaks of the number of infections per year, but there is nothing about deaths as a result of these infections. Is there a chart predicting deaths by infections incurred from tainted water?
8. Prions evade sewage treatment as research shows. (<https://www.nature.com/articles/news.2008.926>) Prions like PFAs should be on the test matrix for all wastewater treatment plants. How would a new DPR treatment remove prions?
9. San Diego is about to start a DPR project called "Pure Water". The environmental reports are all pre-covid. Wouldn't it be prudent to revise those reports in light of requirements for eliminating Covid in wastewater? (<https://www.sandiego.gov/public-utilities/sustainability/pure-water-sd/reports>)