Stop Tainting Our Produce

Why is toxic oil wastewater being used to grow food?

Oil companies in California's Central Valley are selling the wastewater from their drilling operations to several local irrigation districts, which in turn sell it to growers to irrigate their crops. This includes some of the growers behind well-known companies like The Wonderful Company, producer of Halos Mandarins.[1] But the Central Valley Water Board has only recently begun to look into whether this is safe.[2]

The Water Board has yet to conduct its own testing of the wastewater and the crops grown in it, and cannot assure the public that the practice is safe for consumers, farm workers and the environment.[3] One major roadblock is the sheer number of chemicals used in oil drilling.

What kinds of chemicals are we talking about?

The companies that sell their water to irrigation districts reported using 173 different chemicals between January 2014 and June 2016.[4] However, nearly 40 percent of these were listed as "trade secret" or otherwise could not be identified.[5]

Of the chemicals that could be identified:

- **10 are known or suspected to cause cancer**, according to the World Health Organization.[6]
- **8 are on California's Proposition 65 list** (of chemicals known to cause cancer, birth defects or reproductive harm).[7]
- **5 are highly toxic to mammals** when consumed.[8]
- **14 have no published data** on their toxicity to mammals.[9]

The Cawelo Water District hired a laboratory to test root crops (like carrots) and citrus irrigated with oil wastewater for fewer than a dozen petroleum-based chemicals.[10] They also tested nuts and grapes for a wider range of chemicals, but this still left out many chemical additives with possible health effects used by California oil companies.[11]

Oil wastewater has no business on our food.

Tell California food companies you won't buy their products until California Governor Jerry Brown puts an end to this dangerous practice. To take action, visit:

foodandwaterwatch.org/justbanit

Chemical	Known/Suspected to Cause Cancer	Proposition 65 List*
Antimony trioxide	✓	✓
Crystalline silica (quartz)	✓	
Cumene	✓	✓
Ethanol	✓	
Ethylbenzene	✓	✓
Ethylene glycol		✓
Lithium carbonate		✓
Methanol		✓
Naphthalene	✓	✓
Nickel sulfate	✓	
Silica, crystalline, tridymite	✓	
Sulfuric acid	✓	
Toluene		✓
Xenon radionuclide	✓	

**California's Proposition 65 list of chemicals known to cause cancer, birth defects and reproductive harm*
SOURCE: Shonkoff et al. (2016)

ENDNOTES

1 Food & Water Watch analysis of Freedom of Information Act request made to the North Kern Water District in 2016.

2 Central Valley Regional Water Quality Control Board. "Project Charter." Produced for the Public Meeting of the Food Safety Expert Panel. January 12, 2016 at 1 to 2.

3 California Environmental Protection Agency. State Water Resources Control Board. [Fact Sheet.] "Food Safety Expert Panel, Recycled Oilfield Water for Crop Irrigation." At 1 and 3; Central Valley Regional Water Quality Control Board (2016) at 2 to 3.

4 Shonkoff, Seth B.C. et al. [Technical Report.] "Hazard Assessment of Chemical Additives Used in Oil Fields That Reuse Produced Water for Agricultural Irrigation, Livestock Watering, and Groundwater Recharge in The San Joaquin Valley of California: Preliminary Results." September 2016 at 4 to 5 and 7.

5 *Ibid*. at 7.

6 *Ibid*. at 7.

7 *Ibid*. at 7.

8 *Ibid*. at 7; United Nations. 2015. *Globally Harmonized System of Classification and Labelling of Chemicals (GHS)*. ST/SG/AC.10/30/Rev.6. New York and Geneva: United Nations at 120.

9 Shonkoff et al. (2016) at 7.

10 Enviro-Tox Services, Inc. "Root Crop Sampling and Analysis Technical Memorandum." November 2, 2016 at 1 to 2; Enviro-Tox Services, Inc. "Citrus Crop Sampling & Analysis Report." October 11, 2016 at iii to iv.

11 Enviro-Tox Services, Inc. "Irrigation Water Quality Evaluation." April 7, 2016 at iii, iv, 20, and 1/99 to 9/99; Shonkoff (2016) at 8.