

# "DARK WATERS" COME TO ORANGE COUNTY

by JEREMY N. JUNGREIS and JASON DADAKIS

Every generation seems to face a new challenge in cleaning up or remediating chemicals previously believed to be safe. In the past, it was Polychlorinated Biphenyls (PCBs) routinely sprayed on dirt roads to suppress dust, or volatile organic compounds (solvents or VOCs) ubiquitous in dry cleaning and other degreasing operations that leaked into the groundwater. Both chemicals were allegedly linked to increased cancer risk and other adverse health effects through a variety of exposure pathways—including drinking water.<sup>1</sup> Many of the VOC and PCB sites have now been cleaned up, but not without expensive litigation spanning decades.<sup>2</sup> Now, as chronicled in the recent motion picture *Dark Waters*, there is growing concern about a new class of chemicals with the potential to adversely impact human health and the environment in Orange County. Per- and polyfluoroalkyl substances, abbreviated as PFAS, and nicknamed the “forever chemicals” because of their resiliency in the environment, are now receiving extraordinary regulatory scrutiny—spurring strict new state regulations and spawning litigation throughout the country.<sup>3</sup>

## What are PFAS, and Why Should I Care?

Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are the two PFAS in the regulatory crosshairs of the State of California and the Federal Environmental Protection Agency (EPA). However, there are thousands of unique PFAS that have entered the stream of commerce in the United States, and by extension, the environment, over the last fifty years.<sup>4</sup> What makes PFAS cleanup such a difficult regulatory problem is that PFAS are literally everywhere. They are in Scotch Guard, GoreTex, Teflon, and countless other household products. Moreover,

recent evidence suggests that our own bodies may have become a source of PFAS discharges to the environment—with PFAS residuals showing up in wastewater treatment plants throughout Southern California.<sup>5</sup>

Recent studies suggest prolonged exposure to some types of PFAS, and in particular, PFOA and PFOS, may be associated with potential adverse effects on human health. According to the EPA, there are associations between PFOA exposure and high cholesterol, increased liver enzymes, decreased vaccination response, thyroid disorders, pregnancy-induced hypertension and preeclampsia, and testicular and kidney cancer.<sup>6</sup> The EPA indicates there is also possible association between PFOS and high cholesterol, decreases in fertility, and decreased birth weights.<sup>7</sup>

PFAS chemicals have been detected in water sources throughout the United States, but for reasons unique and complex, PFAS are particularly prevalent in the inland portion of the Orange County Groundwater Basin (OC Basin) underlying much of northern and central Orange County. The result is a highly dynamic situation. Water agencies within the OC Basin have received strong recommendations from state regulators to shut down—until such time as expensive treatment can be designed and implemented—up to seventy-one separate wells, amounting to temporary curtailment of a large portion of northern and central Orange County’s water supply. These shut downs are set to occur during the first half of 2020.<sup>8</sup> Meanwhile, litigation against PFAS manufacturers, and other parties responsible for releasing PFAS into the environment, is on the near horizon, along with new legislation, and possible administrative challenges to actions taken by the

State Water Resources Control Board Division of Drinking Water (DDW).<sup>9</sup>

## How Did We Get Here

As the movie *Dark Waters* chronicles, concerns over the safety of PFAS are not new—at least in parts of the country where PFAS is manufactured. According to the allegations of plaintiffs in West Virginia and Ohio, manufacturers of PFOS and PFOA have known about the potential dangers of PFAS for a long



period of time, and they allegedly tried to cover it up. In 2017, DuPont and Chemours agreed to pay \$671 million to resolve multi-district litigation in Ohio that alleged that DuPont improperly dumped cancer-causing chemicals, thereby harming people exposed to the chemicals through drinking water and other exposure pathways.<sup>10</sup> In 2018, 3M reached an \$850 million deal with the State of Minnesota settling litigation that alleged 3M knowingly dumped chemicals into groundwater, impacting local wildlife and posing health risks to local water supplies.<sup>11</sup>

Revelations from the litigation in the Midwest spurred the EPA to action. In May 2016, the EPA released a Lifetime Health Advisory of a combined 70 parts per trillion (ppt) for PFOS and PFOA in drinking water. In July 2018, DDW, which directly regulates California public water systems, established interim drinking water Notification Levels (NL) and Response Levels (RL) for PFOA and PFOS, based on recommendations from the California Office of Environmental Health Hazard Assessment (OEHHA). Results above the NL required water agencies to notify their local governing body (i.e., city council) and the governing bodies of other local agencies. DDW also set an RL for PFOS and PFOA at the same level as the EPA advisory.

In April 2019, DDW sent monitoring orders to more than 200 public water systems across California, including many in Orange County, requiring suppliers to test for PFOA and PFOS. The list of monitoring orders included 612 drinking water supply wells selected on the basis of proximity to landfills, municipal airports, and locations with past detections of PFAS.

In August 2019, DDW announced a new Notification Level for PFOA and PFOS, 5.1 parts per trillion (ppt) and 6.5 ppt, respectively, based on new recommendations from OEHHA. The RL for PFOA and PFOS would temporarily remain at the EPA level of 70 ppt for both contaminants. However, DDW indicated informally it was likely to revise the RLs to levels significantly below EPA advisory levels, 40 ppt for PFOS and 10 ppt for PFOA. These suggested low levels would cause a significant number of wells within inland north-central Orange County to be in non-compliance with DDW's proposed standard without any kind of public regulatory process. Meanwhile, the California legislature, not content with allowing regulation of PFAS and PFOA to proceed via the normal regulatory process, passed AB 756.<sup>12</sup> AB 756 requires water agencies who confirm PFAS in a drinking water source above the

a designated RL, to either remove the source from service within thirty days or engage in an extensive public notification campaign, in multiple languages, and in print, electronic, and newspaper forums, that ensures every single customer of the water agency receives notice of the exceedance, the possible health effects of PFAS, and the agency's decision not to take the drinking water source out of service.<sup>13</sup>

AB 756 took effect on January 1, 2020. The new RLs for PFOS and PFOA were not far

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Basin . . . .

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behind. DDW released them, without formal regulatory process or public hearing, on February 6, 2020.<sup>14</sup> As anticipated, the RL for PFOA was set at 10 ppt, and the RL for PFOS at 40. In the same advisory, DDW indicated it was considering establishing NLs and RLs for seven other classes of PFAS.<sup>15</sup> DDW concurrently issued guidance indicating AB 756's public notification requirements would apply prospectively via a running annual average of quarterly samples, providing additional time for local agencies with PFOA or

PFOS detections to come into compliance without triggering AB 756's public notification requirements.<sup>16</sup>

### **A De Facto Maximum Contaminant Level**

The magnitude of the RL for PFOA in Orange County is significant—42 wells tested to date exceed the RL with approximately 30 more projected to exceed the new RL should testing be expanded. This fact, combined with the dearth of scientific evidence supporting the lower RLs, and the extremely stringent notification requirements triggered by AB 756, has led some attorneys to contend that DDW has engaged in the setting of a de facto maximum contaminant level (MCL) that violates California administrative law.<sup>17</sup>

The setting of an enforceable MCL is a process that ordinarily requires significant scientific (epidemiological and toxicological) study, and a thorough cost/benefit analysis. New Hampshire, seeking to be one of the first states to set an enforceable MCL for PFOS and PFOA (and two other PFAS compounds), learned this the hard way when their MCL was enjoined by a New Hampshire state court judge on December 31, 2019.<sup>18</sup> The court in New Hampshire enjoined enforcement of the MCL, which took effect on September 30, 2019, putting on hold New Hampshire's 12 ppt for PFOA and 14 ppt for PFOS standards.<sup>19</sup>

Back in California, recent actions by DDW to set the revised RL for PFOA and PFOS raise some of the same concerns as those expressed by water agencies in New Hampshire, namely an overly rapid process, inadequate public participation opportunities, and an unwillingness by regulators to follow the procedures set forth in the Federal Safe Drinking Water Act (SDWA) for setting enforceable drinking water standards. California regulators would likely respond to that criticism by contending that the RLs are not mandatory and that the law, as currently written, does not require public participation or comment prior to RL implementation; RLs are, DDW would likely argue, just very strong suggestions.

It remains to be seen whether formal challenges will be filed to the recently promulgated RLs. However, in the meantime, agencies such as the Orange County Water District (OCWD), which manages the OC Basin, are working to implement technical and engineering solutions that can rapidly bring groundwater pumping lost to PFAS contamination back online.<sup>20</sup> OCWD is also working with other interested agencies and the legislature to develop a regulatory process for the setting of

RLs that provides greater predictability, scientific rigor, and public participation as a formal part of any future RL development.

### Tort Suits by Local Governments and States to Recover Damages for Injuries to Drinking Water

Litigation against PFAS manufacturers has exploded during the last year, with thousands of claims now pending against PFAS manufacturers in multi-district litigation currently pending in the Federal District Court for the District of South Carolina,<sup>21</sup> as well as in various state court actions around the United States. State attorneys general, in states such as New Hampshire, Vermont, New York, Michigan, and New Jersey, have become involved too—filing lawsuits against PFAS manufacturers and alleging billions of dollars in damages for personal injury, natural resource, and property damage.<sup>22</sup> The manufacturers, for their part, contend PFOS and PFOA are not shown to harm human health, and that any release to the environment was consistent with federal law and, in some cases, military specification. How such litigation is resolved remains to be seen, but the recent large settlements in Ohio and Minnesota suggest there is potentially willingness on the part of at least some manufacturers to limit exposure through settlement—particularly where the plaintiffs can demonstrate direct discharges by a manufacturing facility that caused natural resource or aquifer damage.

PFAS, and the statutory, regulatory, and litigation actions it has catalyzed, promises to be an issue relevant to Orange County residents (and their lawyers) for the foreseeable future.<sup>23</sup>

#### ENDNOTES

(1) See, e.g., *Orange Cty. Water Dist. v. Sabic Innovative Plastics US, LLC*, 14 Cal. App. 5th 343 (2017) (litigation over cleanup of legacy VOC contamination in California); *In re Camp Lejeune N.C. Water Contamination Litig.*, 263 F. Supp. 3d 1318 (N.D. Ga. 2016) (toxic tort litigation at Camp Lejeune N.C. over alleged VOC contamination in groundwater).

(2) See *Orange Cty. Water Dist.*, 14 Cal. App. 5th 343; *In re Camp Lejeune N.C. Water Contamination Litig.*, 263 F. Supp. 3d 1318; see also *San Diego Unified Port Dist. v. Monsanto Co.*, No. 15-cv-578-WQH-JLB, 2016 U.S. Dist. LEXIS 134882, at \*8-9 (S.D. Cal. Sep. 28, 2016) (allowing PCB cost recovery action over pollution to San Diego Bay to proceed).

(3) See, e.g., *Plymouth Village Water &*

*Sewer Dist. v. Scott*, No. 217-2019-CV-00650, 2019 N.H. Super. LEXIS 18, at \*1 n.1 (Nov. 26, 2019) (describing State of New Hampshire efforts to regulate PFAS); *Hardwick v. 3M Co.*, No. 2:18-cv-1185, 2019 U.S. Dist. LEXIS 169322, at \*3-4 (S.D. Ohio Sep. 30, 2019) (toxic tort litigation in Ohio against PFAS manufacturers).

(4) XiaoZhi Lim, *Tainted Water: the Scientists Tracing Thousands of Fluorinated Chemicals in Our Environment*, Nature, Feb. 6, 2019.

(5) Anna M. Phillips & Anthony Pesce, *Water Sources Across The State Have Traces of Toxic Chemicals; Study Is Initial Look at Contaminants Linked to Cancer in California as Officials Work on Safety Standards*, L.A. Times, Oct. 15, 2019.

(6) U.S. EPA, Long-Chain Perfluoroalkyl Carboxylate and Perfluoroalkyl Sulfonate Chemical Substances; Significant New Use Rule, Supplemental Proposal (Feb. 20, 2020) at 19-21.

(7) U.S. EPA, Basic Information on PFAS, available at <https://www.epa.gov/pfas/basic-information-pfas>.

(8) Martin Wisckol, “Forever chemicals” trigger widespread closure of water wells, Orange County Register, Feb. 7, 2020.

(9) Challenge to DDW regulation could resemble the successful challenge in *Cal. Mfrs. & Tech. Ass’n v. State Water Res. Control Bd.*, No. 34-2014-80001850, slip op. at 31 (Cal. Super. Ct. May 5, 2017). See *Rio Linda Elverta Cmty. Water Dist. v. United States*, 780 F. App’x 889, 890 (Fed. Cir. 2019) (“The Superior Court of California for the County of Sacramento overturned the Cr6 MCL because the Water Board had failed to conduct a proper feasibility analysis.”)

(10) Greenwire, *DuPont settles in toxics case, opening door to future suits*, Feb. 14, 2017, <https://www.eenews.net/greenwire/2017/02/14/stories/1060050016>.

(11) Agreement and Order, *Minnesota v. 3M Co.*, No. 27 CV 10 28862 (Feb. 20, 2018), available at <http://www.mncourts.gov/mncourtsgov/media/High-Profile-Cases/27-CV-10-28862/Agreementand-Order.pdf>.

(12) 2019 Legis. Bill Hist. CA A.B. 756.

(13) *Id.*

(14) California State Water Resources Control Board, Frequently Asked Questions: What Does AB 756 Require For Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), Feb. 6, 2020, [https://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/documents/pfos\\_and\\_pfoa/pfas\\_ab756\\_factsheet.pdf](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/pfos_and_pfoa/pfas_ab756_factsheet.pdf).

(15) *Id.*

(16) *Id.*

(17) See note 9 and cases cited therein.

(18) *Plymouth Village*, N.H. Super. Lexis 18, at \*32 (granting preliminary injunction against MCL because of failure of state to conduct adequate cost/benefit analysis).

(19) *Id.*

(20) OCWD is the agency responsible for the management of the OC Basin and has taken a central role in assisting PFAS impacted water districts and cities with reducing adverse impacts to their groundwater supplies. The temporary switch to treated surface water by affected producers is expected to increase local water supply costs for water agencies in northern and central Orange County by \$50 million per year, and OCWD is considering strategies to assist such producers to promptly develop and implement treatment. OCWD will begin formal engineering design of PFAS treatment systems in spring 2020 with the goal of completing construction to bring systems online within two years, thereby limiting the period where groundwater pumpers within the OC Basin will have to rely on expensive imported water.

(21) See, e.g., *In re Aqueous Film-Forming Foams Prods. Liab. Litig.*, 357 F. Supp. 3d 1391 (J.P.M.L. 2018)

(22) See Keshia Clukey, *N.Y. Sues Chemours, DuPont, 3M Over PFAS Contamination*, Bloomberg Environment, Nov. 5, 2019, <https://news.bloombergenvironment.com/environment-and-energy/n-y-sues-chemours-dupont-3m-over-pfas-contamination>.

(23) As an illustration of just how fast the regulatory environment pertaining to PFAS is changing, the day that we completed this article, March 10, 2020, the EPA determined that it would regulate PFOA and PFOS under its SDWA authority and requested public comment regarding same. See 85 Fed. Reg. 14098.



*Jeremy N. Jungreis is a Partner at Rutan & Tucker, LLP. Jason Dadakis is Executive Director of Water Quality & Technical Resources at the Orange County Water District.*

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