Association of Irritated Residents Tom Frantz, President 29389 Fresno Ave Shafter, CA 93263

March 25, 2020

California EPA <u>https://calepacomplaints.secure.force.com/complaints/Complaint</u> CalGem <u>webmaster@consrv.ca.gov</u> State Water Board <u>info@waterboards.ca.gov</u> Regional Water Board <u>info5@waterboards.ca.gov</u> Clay Rogers <u>clay.rodgers@waterboards.ca.gov</u> Ronald Holcomb <u>Ronald.Holcomb@waterboards.ca.gov</u> Kern Report <u>https://kernreport.org/report</u> Rohit Sharma <u>Rohit.Sharma@conservation.ca.gov</u>

Re: Complaint about buried oil field drilling sumps on prime farmland

To whom it may concern:

This is a formal complaint. In the North Shafter Oil Field, currently operated by California Resources Corporation, there are two specific sites where drilling sumps were used which are the subjects of this complaint. Each was used for drilling one or more oil wells. These sumps were subsequently filled in and the ground was leveled to the same height as before, and smoothed over. These sites were then either totally or partially returned to the farmer. At both of these locations almond trees have been planted above the buried sumps and many of the almond trees have died or are stunted. These same specific locations were productive like the surrounding fields before this land was taken by the oil company and drilling sumps were dug.

This complaint has two parts:

1. The land was returned to the farmer in a condition much degraded from its original condition. It is likely that various well drilling and oil production related materials, including solidified liquids, were left in these sumps before giving the land back to the farmers. This material has come to the surface at both locations in the form of materially varied chunks of somewhat soft, crumbly concrete mixed with soil. Most of this material came to the surface as the farmers tried to open up the soil by deep ripping and by digging holes with a backhoe before attempting to plant and/or replant almond trees.

These two areas have been abandoned by the oil company and returned to the farmers. Common sense says that these areas should have been returned in a condition similar to when they were confiscated for drilling and oil production. I have been told that CalGem rules state that abandoned oil production property must be remediated to its native condition as nearly as possible. Unfortunately, CalGem also told me that drilling sumps are under the jurisdiction of the State and Regional Water Boards. I assume that the Water Boards have a similar rule about abandoned sumps. Clearly, the two sites which are the subject of this complaint have not been returned to the farmer in any form similar to their previous condition as productive farmland. This problem must be fixed!

2. In attempting to grow almond trees at these two sites, the farmers are irrigating the soil with drip irrigation similarly to how they irrigate the neighboring soil adjacent to these sites where almond trees are growing properly. This irrigation water is naturally percolating into the soil and into the buried material that was left in these pits. The potential for this irrigation water to percolate into the underlying soil and into the ground water under these sites is strong and nearly a certainty. The potential for chemicals and toxic substances used and produced in drilling these wells, including lubricants, cuttings, and whatever else, plus chemicals and toxic substances used in fracking these wells which may have entered these sumps as blowback material or even unused material from tanks, plus chemicals and toxic substances which may have been dumped into these sumps from elsewhere while the drilling was taking place (the figure 3 Google Earth photo below indicates this possibility on the north end of the sump, plus there is anecdotal evidence from nearby neighbors, which I was told firsthand, that they repeatedly witnessed tanker trucks unloading at sumps in the area). Given this situation, testing of the soil underneath these two specific sites for chemicals and substances which are not natural to the site must be done. Any evidence of non-native toxic or dangerous substances percolating below these sites demands remediation because of the threat to groundwater.

Inspection and thorough soil testing must take place at these two sites with appropriate follow up action including remediation to protect groundwater used by nearby farmers and residents!

Note: It is also assumed that there are other sites in the area similar to the two listed in this complaint where problems of soil contamination and threats to ground water exist. It is also known that substances other than drilling mud were illegally dumped into another nearby sump (Sill 2-14H) a few years ago by the same oil company responsible for the sites in this complaint. If an investigation of these two specific sites shows a problem that needs attention, then a more thorough investigation is demanded of all other drilling sites and past sump locations in both the North Shafter oil field and the Rose oil field near Wasco where drilling sumps were used and the material dumped into them was not removed.

Below is a detailed description of the two specific sites in this complaint.

Site One

Former drilling sump for California Resources Corporation, aka Vintage Petroleum, aka Occidental Petroleum, TULARE Well #310-8H.

Location: 35.3576 N, 119.2699 W

Quarter mile north of Madera Ave on Mannel Ave, Shafter, CA 93263

Below is a March 2020 photo of the currently active oil well at this location.



Figure 1 Oil Well TULARE #310-8H

Before this well was drilled, shown below in this April 2008 Google Earth photo, it appears that the farmland surrounding the site, in all directions, was uniformly productive and similar to the productivity in the rest of the field.



Figure 2 Google Earth land before drilling

During the drilling of this well, shown below by this April 2011 Google Earth photo, the location of the drilling sump and drilling equipment is clearly visible. Notice the north or upper end of the drilling sump where there appears to be foreign material deposited other than drilling mud.



Figure 3 Google Earth land during drilling

In this August 2018 Google Earth photo, the drilling sump area has been planted to almond trees, along with the rest of the field. The almond trees in the sump area and on the north edge of the cleared site are not growing well. Many have died and some have been replanted but not successfully. The area is under drip irrigation.



Figure 4 Google Earth land after drilling and replanting

Below is a March 2020 photo taken at the site of the drilling sump where almond trees in the first three rows are struggling to grow, unlike in the rest of the field where the trees are healthy and much larger.



Figure 5 sump area with dead almond trees

Site Two

Former drilling sump for California Resources Corporation, aka Vintage Petroleum, aka Occidental Petroleum, SWICO Well #34-12H.

Location: 35.3576 N, 119.2699 W

One half mile north of Shafter Ave on Jack Ave, Shafter, CA 93263

Below is a March 2020 photo of the currently active oil well at this location.



Figure 6 Well head SWICO #34-12H

Before this well was drilled, shown in this April 2011 Google Earth photo, it appears that the farmland at this site, in all directions, was uniformly productive and similar to the productivity in the rest of the field. The almond trees appear young and growing normally.



Figure 7 Google Earth photo of land before drilling

In this August 2012 Google Earth photo, land has been cleared, two or three wells have been drilled, and the area of the related drilling sump is being smoothed over by equipment. Water tanks from drilling and fracking are visible.



Figure 8 Google Earth photo of land immediately after drilling and fracking

In this March 2015 photo below, three rows of almond trees have been replanted on the drilling sump site. The ground is visibly wet from irrigation under these three rows of newly planted trees.



Figure 9 Google Earth photo of land after replanting

In this August 2018 Google Earth photo below, the three rows of trees contain many dead and missing trees, especially in the first two rows.



Figure 10 Google Earth photo of most recent situation

This March 2020 photo below shows the area where the two rows of almond trees would not grow at all.



Figure 11 Google Earth photo of missing almond trees above sump area

We await a response and are willing to meet with anyone at the two specific locations in this complaint.

Sincerely,

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Tom Frantz President, Association of Irritated Residents