2020 ANNUAL REPORT

INDUSTRIAL WASTE PRETREATMENT PROGRAM

LOS ANGELES COUNTY SANITATION DISTRICTS

ROBERT C. FERRANTE CHIEF ENGINEER AND GENERAL MANAGER

> SUBMITTED April 14, 2021

APPENDIX H INDUSTRIAL WASTE REPORTS ON INCIDENTS

	2020 SUMMARY OF TREATMENT PLANT INCIDENTS												
Type of Incident	JWPCP	SJC-E WRP	SJC-W WRP	LC WRP	LB WRP	WN WRP	POM WRP	VAL WRP	SAUG WRP	LAN WRP	PALM WRP	La Can WRP	Total
COD/Solids/ Ragging	3			1					2				6
Metals/ Cyanide													0
Toxicity									2				2
pH High		1		3			1						5
pH Low													0
Turbidity													0
Grease	1												1
LEL													0
NDMA													0
Color	1	1		3		1	1			1		1	9
Foam	1						1						2
Chloride													0
Odor				1				1					2
Ammonia	1												1
Temperature								1					1
Total	7	2	0	8	0	1	3	2	4	1	0	1	29

2020 PUMP PLANT INCIDENTS INVESTIGATED							
EXCESS FLOW	1						
PERSONAL WIPE RAGGING							
OTHER RAGGING							
FLAMMABILITY/LEL	1						
COLOR							
CORROSION							
EXCESS MAINTENANCE							
ODOR	2						
OILY SLUDGE/GREASE	1						
TOTAL	5						

*In 2009 Compton Yard installed improved pumps that chopped personal wipes

2020 SURFACE DISCHARGE INCIDENTS INVESTIGATED						
IU - SPILL	3					
RIVER SPILL/DUMP						
FUEL/SOLVENT	1					
CHEMICAL/PAINT SPILL	2					
SEPTIC WASTE DUMP						
GROUNDWATER CONTAMINATION						
NUISANCE DISCHARGE	2					
Total	8					

2020 SEWER INCIDENTS INVESTIGATED						
Elevated H2S reported by Sewer crew	1					
ODOR- Sulfide	2					
ODOR-Other	2					
FIRE INVESTIGATION: Non-refinery	4					
FOAM	1					
OIL/FUEL/SOLVENT	2					
RAGGING	1					
EXCESS SOLIDS	1					
SCALE						
Elevated LEL reported by sewer crew	3					
LOW pH						
CORROSION						
RAINWATER						
COLOR	2					
BLOCKAGE/SSO Due to Grease	3					
BLOCKAGE/SSO Not due to Grease	2					
ILLEGAL ACCESS TO MANHOLE	2					
EXCESS FLOW	3					
ILLEGAL DUMP						
Total	29					

2020 SUMMARY OF INCIDENT REFERRALS											
	Nature of Incident										
	Industrial pern	User off-sp nitted disch	ec or non- arge	IU Fauipment	IU iipment Odor lfunctio Reports n	Refinery Fire or impound of off spec waste reports	Sewer Excess Flow	Misc. Haz or Non- Haz Sewer Discharge	Non- Refinery Fire	Non- sewer related incidents	Total
Caller ID	Acid	Oil	Misc	Malfunctio n							
IU Release			1	24		7	1	3	1		37
IU SMR Call			20								20
Public Agency		2					1	4	2	5	14
IWMC or CSD	19		9				4	3	1	1	37
Citizen					2			1			3
Anonymous								2			2
News Report										1	1
Total	19	2	30	24	2	7	6	13	4	7	114

2020 LIQUID WASTE DISPOSAL STATION REFERRALS									
	EXCESS SOLIDS	EXCESS GREASE	IRREGULAR RECORDS	LOW/HIGH pH	EXCESS TDS	SUSPICIOUS ACTIVITY	INAPPROPRIATE SOURCE	MISC	TOTAL
Attendant calls for assistance or investigation				6	5		1	1	13

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF JANUARY 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

IW 15351

Los Coyotes WRP Elevated pH

On Friday, 1-3-2020 at 2010 hours, and then again on Wednesday, 1-15-2020 at 0705 hours, operators at the Los Coyotes WRP reported to Supervising IW Inspectors Steve Sealy and David Sanchez respectively, that the WRP was receiving high pH influent. The January 3rd incident had a peak pH of 9.0, while the incident on the 15th, had a peak pH of about 8.2. Neither incident ultimately effected the quality of the plant's final effluent.

IW Inspectors led by Seniors Jim Percy and Chris Mendoza immediately investigated both incidents. In each case the source of the elevated pH was determined to be the Shasta Beverages facility in La Mirada. This facility was also determined to the be the likely source of a similar high pH incident at the WRP on October 26, 2019. The facility makes and bottles Review of effluent pH meter data at Shasta Beverages by Night team beverages. IW Inspector Jose Ruiz on 1-3-2020 and Mendoza on 1-15-2020 revealed that in each case the company had been discharging industrial wastewater with a pH at or above 12.0 for a period of 2+ hours. The estimated wastewater travel time from the Shasta facility to the WRP aligned well with that expected for these discharges to have caused the WRP incidents. The source of these high pH discharges is their clean-in-place (CIP) equipment cleaning operation which includes the use of highly alkaline cleaning solutions and rinsate which are then discharged to the sewer. Historically this CIP flow was of a relatively limited volume, thus it did not impact the downstream WRP. However, due to recent large increases in their production due to the success of a new product, La Croix flavored waters, wastewater flows from their CIP operations have dramatically increased, resulting in their impacting the WRP.

Shasta Beverages Inc. 14405 E. Artesia Blvd. La Mirada, CA 90638

Shasta Beverages currently has no upper pH limit on their industrial wastewater discharge and thus the discharges of elevated pH wastewater on 1-3-2020 and 1-15-2020 were not a violation of any numerical permit limits. Additionally, as noted above, the Los Coyotes WRP was not impacted by the high pH influents, remaining stable during the incidents. No Notices of Violation (NOV) were issued to Shasta Beverages Inc. for these incidents; however, inspectors have recommended to Industrial Waste Section permit engineers that Shasta Beverages be given an upper pH limit of 10 on the pending permit revision application that is currently in-house for review at the Districts. This new limit will likely result in the installation of extra pH neutralization capability at Shasta Beverages, thus preventing future high pH influent incidents at the WRP.

50,000 GPD

Whittier Narrows WRP Blue Color

On Saturday, 1-4-2020 at 0809 hours, Whittier Narrows WRP TPO II Mike Dillon called Supervising IW Inspector John Boyd and reported that he'd noted blue color in the raw influent at about 0730 hours during his normal morning rounds. He said he took a sample of the influent for IW inspectors. He also said they in response to seeing the color they had reduced the plant influent flowrate from 9.5 MGD to 7.0 MGD.

Senior IW Inspector Greg Neunsinger investigated this report. The likely source of the blue color was determined to be United Site Services in El Monte. This facility routinely discharges blue-colored wastewater from portable toilets serviced at their facility. The color comes from odor control packets added to the toilet waste that contain a blue dye. In May 2018 this same facility was determined to be the source of previous blue color incidents at Whittier Narrows WRP. As a result of that finding the company switched to a packet containing a less

vibrant dye. Neunsinger verified that the company is still using the less vibrantly colored packets, but it appears that as a result of the Tournament of Roses Parade and football game in early January they were discharging a much larger number of toilets than usual and doing so in a period when overall flows into J.O.'B' were lower than usual, thus explaining why the color was noticed at the WRP. Neunsinger noted that the blue color influent to WNWRP did not cause any operational problems at the WRP and no color was noticeable in the secondary effluent, although a slight blue color was noticeable in the primary effluent samples (buckets 1&2) on 1-4-2020. Ultimately, there was no color noted in the final effluent on 1-4-2020 and no NPDES violation or other operational issues resulted from the color. United Site Services was not cited for the discharge.

United Site Services of California, Inc. IW 16820 23,700 GPD 4511 N Rowland Avenue El Monte, CA 91731



Figure 1: UnitedSiteServicesSatellitedye-deodorizer packet.

Marina Pacifica #2 Pumping Plant Petroleum Odor Complaints

On Friday, 1-17-2020 at 2247 hours, LBMPP Alarm Center Operator Walt Hodgson reported to his Supervisor, Pumping Plant Operations Supervisor Brian Pivovaroff, that he'd just received a call from SCAQMD Inspector Bullington Pham, who reported she'd just responded to ten citizen complaints of a strong oily odor in the general area of the Marina Pumping Plant #2 in Long Beach. Pham stated she had been on-site at 10:00 p.m. that evening and had noted pervasive oily/petroleum odors throughout the general area and "thought" there may have been some oily odors coming from the Districts' pumping plant as well. She further stated she was contemplating the possible issuance of another NOV to the Districts' for the odor. Ultimately, Pham decided not to issue an NOV to Districts in response to the complaints and her findings on 1-17-2020. Additionally, due to a misunderstanding of comments Pham made to Hodgson about both Supervising IW Inspector John Boyd and Air Quality Supervising Engineer David Rothbart already being aware of odor issues at the Marina Pacifica #2 Pumping Plant, IW inspectors were

not made aware of the 1-17-2020 call until Tuesday, 1-21-2020. For this reason, IW Inspectors did not respond to Pham's call on 1-17-2020.

IW Inspectors, under the direction of Supervising IW Inspectors David Sanchez and Steve Sealy, are closely monitoring the odor conditions at the pumping plant, as well as at the adjacent Synergy Oil & Gas facility, as odor mitigation efforts remain ongoing at both facilities.

Synergy Oil & Gas, LLC IW 21422 544,000 GPD 6433 E. 2nd Street Long Beach, CA 90803

Explosion/Fire at the Gill Corp in El Monte

On Tuesday, 1-21-2020 at 1816 hours, Supervising IW Inspector John Boyd received a call from Long Beach Main Pumping Plant Alarm Center Operator Armando Torres. Torres reported that he'd just received a call from Los Angeles County Fire Department Health and Hazardous Materials Specialist Gerhardt Trippel. Trippel reported that he was on-site at The Gill Corp in El Monte where at 1600 hours there had been an explosion and subsequent fire in a curing oven on-site. As a result of the fire, hydraulic oil had gotten into a wastewater clarifier on-site. Trippel said he was calling to alert the Sanitation Districts to this. Boyd called Trippel back for more information. Trippel then elaborated on the incident, stating the oven explosion/fire had caused the facility's automatic fire control system to trip, deluging the oven area with firewater which then flowed into an adjacent hydraulic press pit. The pit filled and overflowed causing 20-60 gallons of hydraulic fluid to go into a drain which then went into a downstream industrial wastewater clarifier. Trippel said he had ordered the company to immediately pump out the contents of the clarifier. There were no injuries or deaths from the incident. Boyd told Trippel a representative of the Sanitation Districts would respond to his call.

The Gill CorpIW 7018880 GPD4076 Easy StreetEl Monte, CA 91731

Night Team Supervising IW Inspector Steve Sealy arrived on-site at the Gill Corp at 1820 hours on 1-21-2020. His inspection and another conducted the following day by Area IW Inspector Ken Hanks determined that at 1530 hours on 1-21-2020, a fire was detected in the curing oven inside building 4. The cause of the fire is speculative at this time but may be caused by an accumulation of paper dust inside a furnace. The oven was curing a block of adhesive backed Nomex paper that had been pulled apart to create the multiple patterns of voids characteristic of the airplane floorboarding the company manufactures. The fire caused the oven to expand outwards. Smoke caused an adjacent fire sprinkler to spray water on the ground, the water eventually causing the hydraulic oil fluid to accumulate in the clarifier as described above by Trippel. The hydraulic press sump and the clarifier was pumped out by United Pumping while Sealy was on-site. The wastewater was hauled to World Oil in Compton that same evening as documented under Manifest Tracking Number 020049592 JJK. It is unlikely excessive amounts of oil entered the sewer system as it appears to have been all retained in the clarifier.



Figure 2: Clarifier at The Gill Corp being serviced on the evening of 1-21-2020 to remove accumulated hydraulic oil.

The Gill Corp has an inventory of reactive and flammable resins on-site. The likelihood of explosive events occurring is relatively high due to the presence of, and manufacturing processes using, these materials. On July 4th, 2019 there was an incident involving various waste resins that were improperly packaged together on-site in a steel drum. The resins reacted, causing an unsafe flammable condition. Fortunately, no fire or explosion resulted from that incident. The explosion and fire on 1-21-2020 did not adversely impact downstream sewers or Districts' facilities and operations. IW inspectors continue to monitor this site closely.

Elevated Explosivity in the Holmes-Willowbrook Trunk in Compton

On Thursday, 1-30-2020 at 0850 hours, Compton Field Office Supervisor of Sewer Maintenance Rick Pearce called Senior IW Inspector Bill Barnum and reported that his crew was at Districts' Manhole (MH) 01 1463 (30" Holmes-Willowbrook trunk sewer) located in the intersection of Alameda and Oaks Street in Compton attempting to perform preventive maintenance on a gas trap but were unable to open the manhole due to elevated combustible gases. According to Pearce his gas detector was pegged at the maximum reading of 100% LEL.

DeMenno/Kerdoon, dba World Oil Recycling IW 2703 175,000 GPD 2000 N. Alameda Street Compton, CA 90222

Team 3 IW Inspectors Nattapong Pengphol and Sophia Luu immediately responded to the location, arriving on-site and meeting with Pearce at 0930 hours. Senior IW Inspector Bill Barnum joined the group on-site 20 minutes later. The investigation, which included headspace gas sampling from both MH 01 1463 and a local manhole upstream, determined that about 80% of the detected explosivity was due to methane generated from raw sewage degradation, with the remaining 20% due to volatile organic compounds discharged into the sewer by DeMenno/Kerdoon, a large oil recycling facility located just upstream of this location. The situation is complicated by the fact that oily odor complaints coming from the sewers by residents in the area have caused the Districts to effectively seal the sewers here to prevent such odors escaping. Additionally, there is little flow in these lines as the upstream area is very limited and there is a stoplog in place at MH 01E0047A. Lastly, it is of note that on 12-11-2019 Pearce reported oily solids in the line at MH 01 0375 just downstream (see Figure 3). All these issues are related.

Currently, IW inspectors have no evidence, sample results or otherwise, indicating that DeMenno/Kerdoon violated any of the discharge limits imposed by the Districts on its industrial wastewater discharge to cause these incidents. Barnum has suggested that moving the DeMenno/Kerdoon connection point to the J.O. 'E' Unit 2 line or lifting the stop log at MH E47A could solve some or all of these issues, but currently these options are not considered viable due to sewer line condition and maintenance concerns. If the stop log were permanently or at least periodically removed this could serve to flush out the Holmes-Willowbrook trunk downstream. This flushing would cause solids, which accumulate in the line, generate methane, and entrain volatile organic residuals from DeMenno/Kerdoon, to also be removed. In the meantime, IW inspectors continue to monitor the situation closely. Compton Field Office Supervising Engineer Darrell Hatch was informed of the situation and that the headspace gas consists largely of methane.



Figure 3: GIS map showing the area around the Demenno/Kerdoon facility.

Anonymous Tip of Illicit Discharges at Chemtrans in Gardena

On Friday, 1-31-2020 at 2241 hours, Long Beach Main Pumping Plant Alarm Center Operator Michael "Rocky" Molina called Supervising IW Inspector John Boyd and notified him that he had just received a telephone call from an anonymous tipster reporting that the industrial facility located at 14700 Avalon Blvd in Gardena (Chemtrans-IW#12874) was at that moment illicitly discharging inappropriate wastewater into the sewer. The caller did not elaborate further. Boyd notified both Team 3 Senior IW Inspector Bill Barnum and Night Team Senior IW Inspector Jim Percy of the call. Previously, there had been suspicions that the company was bypassing their required flow meter. To determine if the allegation was true, the Districts installed a portable flow meter just downstream of Chemtrans without their knowledge. Barnum quickly checked the flow data from the manhole meter and determined that there was ongoing discharge from the facility. This information was provided to Percy. It was also noted that this is the second call from likely the same tipster, the other being made on 12-21-2019.

Chemtrans IW 12874 50,000 GPD 14700 S. Avalon Boulevard Gardena, CA 90248 Percy and fellow Night Team Inspector Jose Ruiz arrived on-site at Chemtrans at 2340 hours. Their inspection found that the company was discharging industrial wastewater and that it was being discharged properly through their monitoring equipment, including their flow and pH meters. The wastewater being discharged had a pH of 9.53 and had the odor of landfill leachate, which they <u>are</u> allowed to discharge under their industrial wastewater discharge permit as it falls under subcategory C waste (organic wastewater) as specified under the Centralized Waste Treatment Category (40 CFR Part 437). The wastewater met all field parameter limits. Samples were taken for lab analysis . Review of records indicated some required batch testing log sheets were lacking. The contact had no explanation for this. Ruiz also noted that a sodium hypochlorite solution addition line at the pretreatment system was not placed properly as well. The contact replaced the hypochlorite line into its proper position. These findings were referred to Team 3-day IW inspectors for further review and a determination if a written NOV is warranted. Ruiz issued verbal warnings to the contact for the violations he noted. No further actions were taken, and the inspection concluded at 0055 hours on 2-1-2020.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF FEBRUARY 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Los Coyotes WRP Solvent Odor

On Wednesday, 2-5-2020 at 1415 hours, Night Team Senior IW Inspector Jim Percy informed Team 2 inspectors that an operator at Los Coyotes WRP had reported a strong "solvent" odor presence in the plant.

Team 2 IW Inspectors Tingting Wei and Sanjay Patel, as well as Percy, immediately responded to investigate the incident. Their investigation revealed that the cause of the odor in the LCWRP was the release of 470,000 gallons of hot water from the upstream Districts' sewer relining/curing-in-place pipe (CIPP) project in the 63" diameter J.O. 'F'-Unit 3B trunk sewer about a quarter mile upstream form the WRP. The hot water, which is discharged into the sewer after its use to cure the resin, generally has the odor of the resin. That odor is what was noticed by operators at the WRP. The odorous material had no adverse impact of the plant's operational parameters. CIPP project managers said they would try to keep WRP operators better informed as to when to expect these odors.



Figure 1: GIS Map indicating the location of the J.O. 'F'- Unit 3B trunk sewer located upstream of Los Coyotes WRP where the CIPP relining project operations were being performed on 2-5-2020.

Elevated Explosivity in the Marina Relief Trunk in Long Beach

On Thursday, 2-6-2020 at 1256 hours, Coordinating Inspector James McCurdy received a telephone call from Supervising Engineering Technician Albert Steele of the Compton Field Office reporting 100% LEL at Manhole (MH) 03 0505 on the 18" Marina Relief Trunk Section 3 in Long Beach. Steele stated that the elevated reading was recorded at 1154 hours. This manhole is located downstream of Marina Pumping Plant #2.

Team 2 and Night Team IW inspectors investigated the notification. Elevated explosivity at this location is due to two factors:

1. Two oil field producers, Synergy and Termo, are located just upstream of the Marina Pacifica Pumping Plant #2. They each discharge large amounts of brine wastewater which contains small amounts of dissolved methane.

Wastewater explosivity at these facilities is continuously monitored. Records indicate these facilities routinely meet explosivity limits and the investigation of this report confirmed that was the case on 2-6-2020.

2. Due to previous citizen oily odor complaints in the area, the trunk sewers as well as the pumping plant itself, have been very tightly sealed by Districts' sewer maintenance staff to prevent oily odors escaping into the surrounding area and community. These efforts, while effective in reducing odors in the area, trap methane containing gases in the sewer headspaces. These are then liberated downstream at MH 03 0505 where flow from the pumping plant, after traveling a quarter mile in a double barrel 12" force main line, "breaks out." Monitoring by the inspection staff indicates that the explosive condition in the line quickly abates downstream of MH 03 0505, falling off to a typical reading of 0-15% only a few reaches downstream at MH 03 0501 (see Figure 2).

The Termo Company 6301 E. Pacific Coast Highway Long Beach, CA 90803 IW 12289 65,000 GPD

540,000 GPD



Figure 2: GIS map showing the manhole location of the elevated explosivity on 2-6-2020, MH 03 0505, along with the locations of the upstream pumping plant, and two large oil field production operations that discharge to the sewers in this area.

As the current priority is to control odor emissions in the area, the sewers will remain well sealed. However, the Districts' IW engineering staff has required Synergy Oil & Gas to provide a proposal to control the discharge of odor causing materials by April 30, 2020, and this may well have a side benefit of reducing the explosivity found in the downstream sewer line. IW Inspectors continue monitor this situation.

San Jose Creek East WRP High pH

On Thursday, 2-20-2020 at 1321 hours, San Jose Creek East Treatment Plant Operator II James Thompson called Supervising IW Inspector John Boyd and notified him that the WRP was seeing high pH influent that he suspected was from an industrial wastewater source. He said that the influent pH had begun rising at 1245 hours that afternoon, peaked at 9.5, and was now going

back down, being at 8.7 at 1322 hours. He said they believed it was due to industrial wastewater for two reasons:

- 1. They had checked the crown spray scheduled for 2-20-2020 and found nothing indicating that work was scheduled upstream of the San Jose Creek East WRP.
- 2. The WRP's dissolved oxygen concentrations in the secondary aeration tanks were also down. Though he did state that earlier that morning one of the WRP's process air control (PAC) units had gone down and that that might also explain the low D.O. condition.

Boyd asked Thompson if operators had also verified that there was no caustic addition scheduled upstream of the WRP that day. Thompson responded that they had not checked that. Boyd said he would follow-up on that issue. Boyd and Coordinating IW Inspector (CI) James McCurdy quickly reviewed the 2-20-2020 caustic addition schedule following the call from TPO II Thompson. It was immediately noted that of the 5 manholes scheduled for caustic addition that day, 4 were located upstream of the SJC-East WRP. Boyd then called caustic addition coordinator Albert Steele at the Compton Field Office. Steele confirmed that the caustic addition had taken place as scheduled and it was agreed that this was almost certainly the source of the high pH incident reported by SJC-East WRP operators. Boyd then called the SCJ-East operators back, speaking with TPO I Jennifer Hoskin at 1339 hours. He told Hoskin that the almost certain cause of the high pH influent was the caustic addition activity scheduled upstream of the WRP that day and that it was likely they would see at least a couple more rises in pH as the high pH influent slugs caused by the activity came into the WRP. No further action was taken in response to this incident by the IW inspection staff.

Los Coyotes WRP Blue/Green Color

On Tuesday, 2-25-2020 at 0740 hours, Los Coyotes WRP TPO II Mike Nelson notified Supervising IW Inspector David Sanchez that plant operators had just observed a green color in the plant's secondary & final effluents. Nelson stated TPOs would collect samples of secondary and final effluent. Three days later, on Friday, 2-28-2020 at 0130 hours, TPO II Tom Jauregui came to the LCWRP IW inspector's trailer and reported to Night Team inspectors that he had just noted blue color in the secondary effluent as he was investigating an issue with the turbidity meter. Both incidents resulted in NPDES effluent color violations. A third and final color incident in this series of incidents at the LCWRP was reported later on 2-28-2020 when observation of primary effluent samples indicated olive-green colored wastewater came into the treatment plant sometime around noon that day.



Figures 3 & 4: On the left: Los Coyotes WRP forebay at 0800 hours on 2-25-2020. On the right: Sample of LC WRP secondary effluent on 2-28-2020 at 0130 hours Note the distinct blue-green color present in each.

IW Inspectors from both Team 2 and the Night Team intensively investigated these color incidents. Approximately 21 different possible industrial sources for the color were inspected, several of these multiple times. Additionally, many samples of colored wastewater from the WRP and suspect sources were taken for laboratory scan analysis of dyes present. The investigation initially focused on the two primary industrial dischargers known from previous LCWRP color incidents to be the primary sources for color at the treatment plant, Tri-Star Dyeing and Finishing and Shaw Diversified Services, Inc. Tri-Star is a large textile dyeing operation, while Shaw is a large carpet manufacturer. Both are located such that their wastewater discharge takes about 3-4 hours to travel to the WRP. Each has the potential to discharge significant quantities of highly colored wastewater and have color dilution limits in place as part of their discharge so that inspectors can determine compliance with their color limits and compare samples of their discharge to any colored wastewater received at the WRP. Both also have pretreatment capability to remove color from their wastewater in order to prevent color impacts on the WRP.

Shaw Diversified Services, Inc.	IW 15869	600,000 GPD
15305 Valley View Ave.		
Santa Fe Springs, CA 90670		
Tri-Star Dyeing and Finishing	IW 17196	450,000 GPD
15125 Marquardt Ave.		
Santa Fe Springs, CA 90670		

Inspections and immediate downstream surveillance sampling indicated that Shaw was very unlikely as the source of the WRP incidents. The downstream surveillance sampling of Shaw and Tri-Star was initiated at 1000 hours on 2-28-2020 at 1100 hours at the request of IW Section Head Linda Shadler following the early morning WRP incident that day. Unfortunately, the surveillance sampling likely commenced slightly too late to have captured any discharge(s) from either Tri-Star or Shaw that could have caused the third and final color incident in this series of incidents. However, as regards Tri-Star, despite company managers claiming during daytime inspections that no blue/green textile dyeing jobs had been done for at

least a week prior to 2-25-2020, Night Team IW Inspector Jose Ruiz was later told when speaking on the evening of 2-26-2020 to a Spanish-speaking night shift operator at the company, that the company had been doing such dyeing jobs that week. Ruiz and Supervising IW Inspector Steve Sealy observed bins of green colored textiles and swatches of teal-colored fabric job production sheets (see figures 5 and 6 below). Required retained hourly wastewater discharge samples on-site at Tri-Star did not contain the green/teal color. IW Inspectors suspect that Tri-Star operators may have tampered with these samples, as was found to the case in 2008 during similar WRP incidents. The surveillance monitoring of the facility that commenced on Friday, 2-28-2020 at 1100 hours failed to capture any highly colored discharges and inspectors were unable to obtain any samples of blue-green colored wastewater from Tri-Star's sampling location. Ruiz did issue Tri-Star a Notice of Violation on 2-26-2020 for violation of their color dilution limit for an hourly bottle sample corresponding to discharge at 1400 hours on 2-26-2020. But although the sample was in violation, it was of a color, violet, that did not match that of the color seen at the WRP.



Figure 5: Teal colored dyed fabric swatches from Tri-Star Dyeing & Finishing. Note the time/date stamp on the swatch sample production log sheet is 1102 hours on 2-25-2020.



Figure 6: Bins of green colored dyed fabric seen at Tri-Star Dyeing & Finishing on 2-26-2020 at 2100 hours by Jose Ruiz and Supervising IW Inspector Steve Sealy.

IW inspectors also inspected many other possible, but less likely sources for the color. One of these inspections was conducted at L.A. Supply Company at 1720 hours on 3-6-2020 by Inspector Ruiz and Senior IW Inspector Jim Percy. This company supplies chemicals and dyes used by the textile manufacturing industry. The facility had previously been determined by IW inspectors to be permit exempt as they did not compound chemicals on-site or discharge industrial wastewater containing these chemicals and dyes. Managers claimed they were simply a "box in, box out" operation. However, the inspection on 3-6-2020 revealed the company discharged some highly colored dye residual as part of operations previously unknown to IW Inspectors, namely the cleaning of totes and drums returned from their customers. According to UV-vis absorption spectra analysis, samples of the dye present in wastewater found puddled on-site at one location (see Figure 7) matched that the dye present in the samples from the LCWRP a week earlier. However, while admitting they had washed some totes and drums, company managers insisted the amount of wastewater and dye discharged was "very small." Inspectors lacked corroborating evidence to support the issuance of a notice of violation for causing the incidents at the LCWRP.



Figure 7: Puddled blue-green dye containing wastewater found adjacent to a drain at L.A. Supply Company during an inspection on 3-6-2020.

As of mid-March 2020, no further color incidents following the two incidents of 2-28-2020 had occurred at the Los Coyotes WRP. The surveillance samplers downstream of Shaw and Tri-Star which had been placed on 2-28-2020 were removed on 3-13-2020. IW Inspectors continue to be extremely vigilant for the cause of the color incidents. In addition to the field inspection staff, IW Section Managers assigned Environmental Scientist Kristopher McGinnis to revisit the issue of color dilution limits, treatment, and required sampling protocols at known color dischargers upstream of LCWRP. Finally, the previously unpermitted discharger L.A. Supply Company was issued a temporary IW discharge permit on 3-13-2020 by area IW Inspector James McCurdy to help insure this facility does not cause color incidents at the WRP.

L.A. Supply Company IW 22558 300 GPD 13700 E. Rosecrans Ave. Santa Fe Springs, CA 90670

Fire at the Tesoro Oil Refinery in Carson

On Tuesday, 2-25-2020 at 2310 hours, Tesoro Carson oil refinery Environmental Engineer Traci Hong called the Long Beach Main Pumping Plant (LBMPP) Alarm Center and reported that a few minutes prior, at approximately 2300 hours, the Tesoro Carson oil refinery had experienced a series of 2-3 large explosions and then a subsequent fire that firefighters were now battling. Operator Martin Ramirez took the call and immediately forwarded the information to Supervising IW Inspector John Boyd. Boyd immediately turned on his television at home. Several news channels had live helicopter coverage of the fire. Boyd observed firefighters actively deluging the fire with water. The fire was in an area located in a northern corner of the

facility between the Dominguez Channel and S. Wilmington Avenue (see Figures 8 and 9). Boyd was able to observe that the fire appeared contained with no ongoing explosive events and slowly diminishing levels of fire. Boyd spoke directly with Ms. Hong at 2342 hours and she stated that all firewater was being contained on-site. It was agreed that the situation was essentially under control and that none of the firewater would be discharged to the sewer until the next day at the earliest after having been collected, evaluated and treated prior to discharge.



Figure 8: Local television news coverage helicopter photo of the Tesoro Carson oil refinery fire taken at about 2300 hours on 2-25-2020.



Figure 9: GIS map showing the location of the fire on 2-25-2020 inside the Tesoro Carson oil refinery.

Tesoro Refining & Marketing Company LLCIW 212995,250,000 GPD1801 E. Sepulveda BoulevardCarson, CA 907455,250,000 GPD

At 0005 hours on 2-26-2020 hours Boyd called LBMPP Operator Martin Ramirez back to apprise him of the situation. At 0009 hours Boyd called the control room at JWPCP and spoke with TPO II Porfy Ochoa, apprising him of the fire situation at the Tesoro Refinery as well. Boyd asked Ochoa to be vigilant to any signs of unusual wastewater entering the plant through the J.O. 'B' headworks, especially in terms of elevated LEL (explosivity). Wastewater from the Tesoro Carson refinery facility comes into JWPCP through the J.O. 'B' line. Ochoa said he would do so and call Boyd if anything unusual was observed. Ochoa said he'd also appraise his supervisor of the situation.

The next morning at 0740 hours, Area IW Inspector Nattapong Pengphol arrived on-site at the refinery in response to the fire. He found the facility was not discharging anything to the sewer and had ceased all such flow at 2256 hours the previous evening immediately after the fire broke out. The fire itself was completely out at the time of his inspection. A sample taken from the spigot at the view box indicated compliance with all field parameter limits. All required monitoring equipment was observed to be functioning properly with records and required hourly discharge sample bottles indicating no divergence from normal wastewater quality. Refinery personnel were observed to be in the process of sampling from the main post-treatment wastewater holding tank, Tank 95, to determine water quality in the tank. The wastewater samples were to be analyzed by the refinery's laboratory for compliance with applicable limits and suitability for discharge to the sewer.

Per Pengphol's company contact, the fire broke out at 2250 hours on 2-25-2020 at a compressor at the hydrocracker unit located at the north side of the facility. The cause of the fire remains under investigation. Firefighting foam was used to control and extinguish the fire. The contact estimated 1,834,000 gallons of firewater was generated from fighting the fire. This firewater is being held in Tank 20 on-site.

Another follow-up inspection was conducted at 1800 hours on 2-26-2020 by Night IW Inspection Team Supervisor Steve Sealy and member Jose Ruiz. They found that industrial wastewater discharge had resumed at the company's outfall earlier that day at 1145 hours with data and records indicating that all limits and requirements were met. Samples of the discharge were taken at that time for lab analysis. There were no known effects or impacts from this fire event at the JWPCP.

Sulfide Odor Complaint in Palmdale

On Wednesday, 2-26-2020 at 1123 hours, Industrial Waste Section Head Linda Shadler received an email from Districts' Senior Civil Engineer Rich Caulkins at the Palmdale WRP. He said that he had taken a call earlier that morning from Mr. Bret Banks, an inspector with the Antelope Valley Air Quality Management District (AVAQMD). Banks reported that he received an anonymous citizen complaint of hydrogen sulfide odors emanating from what appears to be a grease interceptor located in the parking lot of a Smart & Final Supermarket in Palmdale. Shadler forwarded the email to Supervising IW Inspector John Boyd and requested follow-up.

Smart & Final ExtraFID 9256055300 GPD5038 W. Avenue NPalmdale, CA 93551500 GPD

Area and Senior IW Inspector Anie Kellzi investigated the complaint. On 2-27-2020 she inspected the Smart and Final store in question, as well as the two fast restaurants, Del Taco and Carl's Jr, that share the parking lot with the Smart & Final store. All 3 facilities have standard grease interceptors that are serviced quarterly according to the managers and both restaurants had "FOG" (fats, oils, and grease) maintenance log binders required by the City of Palmdale. The logs included recent pumping records and employee training records. At no time did Kellzi notice anything unusual in terms of odors in the area. The interceptors appeared well maintained, and all records appeared well kept. Her inspections found nothing amiss.

On 3-9-2020 Kellzi contacted Bret Banks to obtain more information about the complaint. Banks recommended that Kellzi speak to the resident who made the initial complaint. Kellzi then spoke with the resident, who resides just east of the shopping complex. She said that prior to Smart & Final moving into the shopping center in 2016 there were no odors, but now the entire neighborhood smells "all the time." A final inspection of the shopping center parking lot area on 3-18-2020 by Kellzi again revealed nothing out of the ordinary. Kellzi ended her investigation by making City of Palmdale code enforcement officers aware of the complaint.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF MARCH 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Excessive Ragging in the Garfield Avenue Diversion Trunk in East Los Angeles

On Monday, 3-9-2020 at 1000 hours, Enrique Martinez, Districts 'Supervisor of Sewer Maintenance, notified South teams' Supervising IW Inspector David Sanchez of excess rags in the Garfield Avenue trunk sewer at Manhole (MH) 02 1178. Martinez stated that an excessive amount of rags have been removed from this location during the last two cleanings.

Team 4 Senior IW Inspector Greg Neunsinger and IW Inspector Ken Hanks met with San Gabriel Valley Sewer Maintenance Crew members Frank Peralez and Louis Olvera, at MH 02 2128 and observed the accumulation or rags/wipes. Neunsinger and Hanks identified the rags as sanitary wipes and <u>not</u> shredded cloth, clothing, or shop rags (see Figure 1). This manhole is located where the Garfield Avenue trunk and the Garfield Avenue Relief trunk sewers split.



Figure 1: Photos of the "rags" identified as non-woven wipes removed from the sewer at MH 2 2128 on 3-9-2020.



Figure 2: GIS map indicating the area influent to MH 02 2128.

Geographic Information System (GIS) upstream tracing identified the tributary sewer lines and relatively limited influent area that included only two industrial-waste permitted facilities: Ross Name Plate Company and a Southern California Edison facility (See Figure 2). Inspections at both facilities found no evidence that either was a source for this incident. A subsequent survey of the upstream area identified three unpermitted users that were potential sources of the wipes; Two healthcare facilities (a Blue Shield medical office, a HealthCare Partners Urgent Care Clinic), and a 74-unit senior assisted-living facility (Via Campo Senior Villas). Contacts at both the Blue Shield and HealthCare Partners facilities mentioned having historical problems with clogged plumbing due to patients and staff flushing wipes. Both contacts claimed to have applied practices and training to discourage flushing wipes. The senior-housing manager said he would communicate and discourage tenants and staff from flushing wipes. The medical clinics and senior housing are the likely sources of sanitary wipes to the sewer, it is hoped that speaking with the contacts at these facilities and making them aware of the Districts' problems with wipes in the downstream trunk sewer will encourage them help to mitigate the issue.

Street Flooding in Carson

On Thursday 3-19-2020 at 0930 hours, Area IW Inspector Sophia Luu telephoned Team 3 Senior IW Inspector Bill Barnum and reported flooding in the intersection of Sepulveda Blvd. and Figueroa Street in Carson just upstream of the JWPCP. The flooding appeared to be originating from the Carson Stormwater and Runoff Capture Project that is currently under construction at Carriage Crest Park. Inspectors from Team 3 immediately responded to the site to assess any impacts to the Districts' systems.



Figure 3: Street flooding on Figueroa Street at 0930 hours on 3-19-2020.



Figure 4: Annotated 3-19-2020 photo of the area where the flooding is coming from due to a broken water main.



Figure 5: 3-19-2020 flooding in the intersection of Figueroa Street and Sepulveda Blvd.



Figure 6: Annotated site diagram of the Carriage Crest Park project.

On Thursday, 3-19-2020 at approximately 0915 hours, a contractor performing work on the Carson Stormwater and Runoff Capture Project adjacent to the City of Carson's Carriage Crest Park ruptured a 12" water main operated by California Water Service while operating an excavator near the pipeline. The water inundated a construction pit associated with the ongoing project located in the middle of Figueroa Street as well as the intersection of Figueroa and Sepulveda Blvd. (see Figures 3-6 above). This water main serves the JWPCP, as well as several businesses along Sepulveda Blvd. including the Target and Home Depot stores. Water service was restored to the JWPCP within an hour and a half by isolating the break at a valve located at a loop in the water main. It was expected that some of the local businesses would be disrupted for at least 12 hours thereafter since they were connected within the area serviced by isolation valve. To keep the water from further inundating the Carriage Crest construction site an earthen containment dike was built between the construction site and the broken water main. It appeared the containment was effective, and the other Carriage Crest construction pits were dry. Barnum required Project Manager Andres Acosta to notify Supervising Inspector John Boyd if anything changed and/or they needed to dewater the construction pit using their permitted industrial wastewater connection (IW Permit#22326). By 1050 hours flow from the leaking main was greatly reduced but still present at a significant rate. Superintendent of California Water Service Renzo Ayala did not know when the leak would be fully isolated.

In addition to concerns about the water supply to the JWPCP, IW inspectors were also concerned about the hydraulic impact to the J.O. "D" sewer. Inspectors verified the affected construction pit in the middle of Figueroa was tied to the flood control channel connection and <u>not</u> to the J.O. "D" sewer. The sewer connection for the Carson Stormwater and Runoff Capture Project has not been made yet and ultimately there was no hydraulic or other negative impacts to the JWPCP from the water main break.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF APRIL 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Saugus WRP Elevated Effluent Suspended Solids and Toxicity

On Wednesday, 4-1-2020 at 1500 hours, Supervising Engineer Naoko Munakata of the Districts' Reuse & Compliance Section called Supervising IW Inspector John Boyd and reported that over the past year or so weekly sampling data from the Saugus WRP indicated unusual variability and a significant overall increase in the total suspended solids (TSS) loading entering the treatment plant. Along with this, testing recently also indicates some final effluent toxicity was present. It is unknown if these two are related. Munakata stated that she was calling to see if IW inspection staff had any idea as to the source of the increased TSS concentrations. TSS concentrations at the Saugus WRP typically range from 200-400 mg/l, but data over the last year have indicated readings of 500 mg/l with occasional spikes to as high as 800-1,800 mg/l. The overall annual average has increased from 300 mg/l to 450 mg/l. She noted that the TSS influent concentrations at the nearby Valencia WRP have also increased over this same period from 400 mg/l to 750 mg/l. But again, it's unclear if these two things are related. She said Valencia WRP is not experiencing any final effluent toxicity. Boyd said that he was unaware of any new or different IW dischargers or discharges upstream of Saugus WRP and/or Valencia WRP that were likely sources for the increased TSS levels, but that IW inspectors would open an investigation into this report immediately.



Figure 1: Saugus WRP raw influent total suspended solids concentration (January 2015-December 2019).

Area IW Inspector Steven Lajkowicz investigated this report. His knowledge and inspections of known industrial wastewater dischargers upstream of the Saugus and Valencia WRPs revealed no likely sources. He also closely examined recent operations at the new Vista Canyon Water factory, operated by the City of Santa Clarita, and found no indications that start-up operations at the facility were responsible for the observed increases in TSS concentrations at the Saugus WRP. Additionally, discussions with the Saugus WRP Liquid Waste Disposal Station attendants and review of load manifests failed to reveal anything unusual which would indicate loads dumped there were the source. Inspectors remain vigilant to any evidence that might explain these incidences.

JWPCP Excessive and Unusual Black Solids in the Primary Skimmers

On Friday, 4-3-2020 at 0958 hours, TPO II Nick Atilano of the JWPCP contacted Team 3 IW Inspector Jowyn Villanueva-Tu and informed him that graveyard treatment plant operators had noted an unusual buildup of thick black floating solids in the E-3 primary skimmers that receive flow from the J.O. 'B' collection system. Operators reported the E-3 battery skimmings system had a pump get plugged and the trough conveyance system had filled with gelatinous black solids. This condition persisted for more than a day, resulting in another similar report being made to Supervising IW Inspector John Boyd at 2210 hours the next evening by Supervising TPO II Mark McKnight. It is unclear when the material ceased coming into the JWPCP, but by Monday, 4-6-2020 conditions had returned to normal at the skimmers.

In response to the initial notification, Team 3 IW Inspectors led by Supervising IW Inspector David Sanchez, attempted to see if the material in the skimmers could be traced to a source by following it upstream in the sewers. Ultimately, this attempt was unsuccessful, as the material proved to be essentially invisible to the eye in the sewers and samples taken from the sewers were inconclusive as to its presence. At the same time inspectors were attempting to trace the material upstream in the sewer, others were already investigating possible sources by going directly to industrial facilities. This effort included looking at industrial facilities from areas far upstream of the JWPCP including examination of the wastewater received under contract by the Districts from the Inland Empire Utilities Agency (IEUA) where the flow comes into the Districts' lines in Pomona.



Figure 2: Samples submitted for GCMS and FTIR analysis as part of the JWPCP black solids investigation.

Sample analyses of the floating material taken from the JWPCP skimmers indicated it contained hexadecenoic acid and oleic acid methyl ester. Both compounds are food grade greases commonly found in animal and vegetable food products and waste commonly generated by dairy plants, animal fat rendering facilities, and food manufactures. Additionally, a hair in one sample was identified as a horse hair. Inspectors suspected the source could be a grease rendering operation or possibly a biodiesel manufacturing operation. Inspections at these types of facilities, as well as at large food manufacturing operations, oil refineries, tanker truck washing operations, and examination of Liquid Waste Disposal Station load manifests failed reveal a likely source for this incident. Inspectors continue to be vigilant to a source for this incident.

JWPCP Secondary Effluent Excessive Ammonia

On Monday, 4-13-2020 at 1057 hours, Industrial Waste Section Supervising Engineer John Kilgore received an email from Districts' Wastewater Research Section Supervising Engineer Michael Liu. Liu reported that a consultant for the Metropolitan Water Districts' (MWD) demonstration facility at the JWPCP reported observing a moderate ammonia spike in the JWPCP secondary effluent from Friday, 4-3-2020 through Monday, 4-6-2020. The peak was as high as 60 mgN/L and appeared to last through the weekend. The typical level has been between 40 and 45 mgN/L. Kilgore forwarded the information to IW Section Head Linda Shadler, who, through Kilgore, requested that the IW Inspection staff open an investigation into the report. Kilgore also contacted Engineer Jessica Lau, who is the IW Section's ammonia expert. Lau had recently developed a list of the largest ammonia sources influent to the JWPCP. Lau provided that list to the IW Inspectors for the investigation. Kilgore and Shadler were aware of the excessive black solids/skimmings issue at the JWPCP that occurred at the same time as the reported high ammonia readings (see above). It is unknown if these two incidents were related, but it would seem logical they were.

Both the North and South Teams' Supervising IW Inspectors, Andy Woods and David Sanchez, as well as Night Team Supervising IW Inspector Steve Sealy, were made aware of the report. The investigation was conducted concurrently with the black solids investigation but did not identify a likely source. Potential sources examined included all the potential sources inspected as part of the black solid investigations and also included examination of the JWPCP liquid waste disposal station logs, hauled food waste loads, large oil refineries, and the flow coming from the IEUA which joins the Districts collection system at the East End outfall in Pomona. Senior IW Inspector Bill Barnum also spoke to Supervising Engineer Matt Bao in the Districts' Reuse and Compliance Section. According to Bao the Tulare Lake Compost facility had <u>not</u> yet hauled any of the compost leachate to the Carson LWDS under their new hauled waste permit. The compost leachate typically has concentrations of 400 to 600 mg/l of ammonia-N.

JWPCP Red Color

On Wednesday, 4-8-2020 at 0657 hours, JWPCP TPO II Porfy Ochoa reported to Team 3 Senior IW Inspector Bill Barnum that the plant was seeing a pink color in the final effluent. These observations of color at the JWPCP, in some cases pink, in others more purple, continued to occur periodically for the next week.



Figures 3 and 4: Pictures of a JWPCP filtered grit chamber grab sample taken at 2000 hours on 4-8-2020 and JWPCP clarifier "D" earlier that same afternoon.

The investigation of this incident, which was an "all hands-on deck" effort led by South Team's Supervising IW Inspector David Sanchez, involved about a week of effort by all available members of IW Inspection Teams 2 and 3. Thirty-one (31) industrial wastewater dischargers were inspected, many multiple times during the investigation. On Tuesday, 4-14-2020, inspectors were able to successfully trace the color upstream in the J.O. "D" trunk system to its source. Two fabric/textile dyeing operations, Swisstex California and LA Dye & Print, both of which are located in the Athens area of Los Angeles about 7 miles north of

JWPCP, were identified as the sources. Sample results for samples taken from both industrial facilities, along with a sample collected at Manhole (MH) D 151 upstream of the J. O. "D" inlet had similar color spectrum signatures and the spectrum analysis for D151 and the secondary effluent were a close match as well. Swisstex California was one of the few dye houses in production during the COVID-19 pandemic emergency, dyeing fabric for use in making masks, in compliance with the exemption for essential businesses under the State COVID-19 Stay at Home Order.

No NPDES violations resulted from these incidences and no Notices of Violation were issued to Swisstex or LA Dye & Print. However, managers at both dye houses were informed that the color in their discharges were periodically being noted at the JWPCP. IW Section managers may evaluate the need to impose color limits at these facilities in the future if the color observations at the JWPCP continue. JWPCP managers were informed of the investigation findings.

Swisstex California, Inc.	IW14397	232, 600 GPD
13660 S Figueroa Street		
Los Angeles, CA 90061		
LA Dye & Print	IW 14625	36,700 GPD
13416 Estrella Avenue		
Los Angeles, CA 90248		



Figure 5: Map-diagram indicating the color/dye tracing effort conducted by IW inspectors upstream of the JWPCP on 4-14-2020 to the pink color sources.

Pomona WRP White Foam

On Tuesday, 4-14-2020 at 0920 hours, Assistant Superintendent of Wastewater Treatment Plant Operations Michael Barker called Supervising IW Inspector John Boyd and reported that at 0900 hours that morning operators at the Pomona WRP observed large amounts of white foam in primary influent channel #1. The foam was at least a foot deep and coming up above the channel 1 cover plates (see fFgure 6 below). The foam causing material appears to be coming from the south line (Humane Way) that feeds the WRP. In addition to the foam, operators are observing a mild rise in influent pH as well. At the time of the call the influent pH was 7.9 versus a normal of 7.4. The foam has no unusual odor. WRP secondary dissolved oxygen levels were normal at the time of Barker's call.



Figure 6: Picture of heavy white foam in primary channel #1 at the Pomona WRP at 0900 hours on 4-14-2020.

North Teams' Supervising IW Inspector Andy Woods coordinated the investigation. Unfortunately, the investigation did not result in identifying a source of the foam. Inspectors found no foam in the sewers upstream of the WRP and were thus unable to trace it to a source. Inspections were conducted at all known permitted industrial wastewater sources for foaming material in the south line's upstream area, but nothing unusual was noted except for the fact that the flows from one large industrial laundry, 9W Halo Western, had increased by about 50% due to the ongoing COVID-19 pandemic. However, this facility's wastewater was observed to be low-foaming and the facility is not suspected of being the source for the WRP incident. Note that the historical source for previous foam incidents at the Pomona WRP, Master Recycling Center, is no longer in business in Pomona, having left the site in September 2019 and moved to Rancho Cucamonga. Inspectors checked the local sewer line manhole downstream of this facility, and went to the site, but saw no evidence of any foam or ongoing/recent discharge or activity at the site. No NPDES violation resulted from this incident.

Saugus WRP Receiving Waters Toxicity

On Wednesday, 4-22-2020 at 1502 hours, Senior Environmental Scientist Phil Markle of the Districts' Reuse & Compliance Section emailed IW Section Head Linda Shadler and Supervising IW Inspector John Boyd and reported that a 24-hour grab sample taken at the receiving waters sampling location of the Saugus WRP on April 13th at 1135 hours had tested as highly toxic. The test results indicated 89.5% mortality for the water fleas (*Ceriodaphnia dubia*) used in the testing protocol. The report did not give any more specific information as to the exact nature of any parameters or constituents that caused the toxicity but did state that was being investigated.

IW inspectors were unable to identify any likely industrial waste causes for this incident. On 4-30-2020 Shadler informed the inspection staff that the Saugus WRP receiving water toxicity reported on 4-22-2020 was likely caused by WRP bisulfite addition after the WRP effluent compliance location. IW staff was advised to cease their investigation of the incident.

Green Lane Pumping Plant Excessive Grease

On Thursday, 4-23-2020 at 1050 hours, Districts' Supervisor of Pumping Plant Operations and Maintenance Brian Pivovaroff of the Compton Field Office called Supervising IW Inspector John Boyd. Pivovaroff reported his operators have been observing excessive amounts of grease in the wet well of the small Green Lane Pumping Plant in Redondo Beach. He said they'd been observing the increased grease amounts for the last few months. He requested IW inspectors investigate possible sources, adding that he suspects it may be due to a new Chick-fil-A restaurant that is located nearby at the corner of Aviation Way and Artesia Blvd. Boyd noted that the GIS map of the area indicates the area influent to the pumping plant PP is quite limited (see Figure 7 below).



Figure 7: GIS diagram indicating the area influent to the Green Lane PP.

Area IW Inspector Sophia Luu investigated the report and confirmed that the Chick-fil-A restaurant in question was the likely source of the excessive greasing being observed at the pumping plant. The restaurant opened in September 2019. Although the inspection of the restaurant indicated they do have a grease management program which includes regularly scheduled grease removal, this appears to be insufficient to the task of keeping grease out the sewer. The local agency which administers the fats, oils, and grease (FOG) control program in this area, the City of Redondo Beach, was notified of the excessive grease report and indicated their FOG inspector would look further into the issue. The situation will be monitored, and increased measures will be taken if necessary.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF MAY 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

JWPCP Elevated Digester Sulfide Gas Concentrations

In May, the Industrial Waste (IW) Inspection Group initiated investigations on potential industrial waste sources that could have contributed to elevated sulfide levels in the JWPCP digester gas. On Monday, May 11, 2020, JWPCP reported elevated sulfide levels in the JWPCP digester gas. Both JWPCP and Wastewater Collection System staff reported that operation of the digester gas treatment systems at JWPCP and dosing of ferric chloride in the collection systems were normal.

On Monday, 5-11-2020 the IW Inspection Group conducted an inspection at the Quemetco facility, located in the City of Industry. The company is a secondary lead smelting facility that recovers lead from the recycling of automotive and industrial batteries. The inspection findings included that their business has been reduced by 50% during ongoing the COVID-19 pandemic. The facility also had conducted a maintenance shut down from April 22, 2020 – May 6, 2020. However, there was no evidence observed or found from reviewing on-site and wastewater treatment and sampling records, as well as speaking with the facility contact, that this work resulted in excessive discharges of sulfur-related compounds to the sewer. Flow discharge totalizer data indicated the flows over the past week averaged about 130,000 gpd. Quemetco (IW#15708) has a permitted annual average discharge of 213,000 gpd.

IW Inspectors also inspected the Molson Coors USA brewery in Irwindale (formerly Miller Coors) and visited the Inland Empire Utilities Agency East End outfall in Pomona looking for any evidence indicating they could be sources of the excessive sulfide gas observed in the digesters at the JWPCP, but no such evidence was observed. IW Inspectors continue to be alert to any possible IW sources for this incident.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF JUNE 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Sewer Line Surcharging at AST Textile Group in Hawthorne

On Monday, 6-8-2020 at 1400 hours, Carson IW Inspectors received a phone call from the Vice-President of Operations at AST Textile Group, Inc. in Hawthorne, which has a permitted annual average discharge of 520,000 GPD. He reported wastewater was backing into the company's industrial connection and submerging their flume. He was very concerned that the wastewater would overflow their connection and stated the surcharging had already caused them to reduce discharge from their fabric dyeing operation.

The IW Inspection Group responded to the call, arriving on-site at 1300 hours on 6-8-2020. The inspection of the facility, as well as of Districts' Manhole 05 0948 on the Manchester Avenue trunk immediately downstream of the facility, found no evidence of any problems in the trunk line that could have caused the reported surcharging. The inspection determined the surcharging was caused by flow backing up behind AST Textile's monitoring 10" Palmer-Bowlus flume, which functions as a constriction point in their industrial wastewater discharge line. The company has two gate valves to limit flows through the flume. The contact was advised to ensure his operations staff is familiar with, and able to properly operate, the gate valve system. This incident did not impact Districts' operations and no sewer overflow occurred.

Sanitary Sewer Overflow in Pomona

On Tuesday, 6-16-2020 at 0749 hours, an "Spill Notify" e-mail message was sent by the Districts' Long Beach Main Pumping Plant Alarm Center reporting a 0740 hours sewer spill at 2501 North Garey Avenue in the City of Pomona. This location corresponds to the location of a private sewer line connection from the City of Pomona's water treatment facility (IW 017094) to the Districts' JOA-1A Etiwanda-Edison Wastewater Line. This facility has a permitted annual average discharge of 7,800 GPD.

The follow-up investigation determined that a small (200 gallons estimated) sewer overflow had occurred at a City of Pomona sewer line manhole/vault structure located just upstream of the trunk line connection. City of Pomona sewer maintenance crews cleaned the spill, which consisted exclusively of brine water. The cause of the spill was determined to be a broken 2" diameter line that fed brine to the vault structure.

JWPCP Excessive Black Solids in the Primary Skimmers

On Thursday, 6-25-2020 at 0743 hours, the JWPCP operations group contacted the IW Inspection group and reported the plant had been experiencing excessive solids loading in the skimmers in the south end of the E-3 sedimentation tank battery of primary treatment. The skimmings trough began to plug early on the graveyard shift and were still fouled at the time of the call. No unusual odors or other unusual characteristics were associated with the skimmings.



Figure 3: Laboratory chromatogram (GCMS) analysis of the skimmer sludge. Peaks on the graph indicate fatty acids common in food products.

The incident was essentially identical to one that occurred on 4-20-2020 for which no likely source was identified. Sample analysis of the skimmings again indicated that the material is composed of fatty acids common in food products and wastes. A wide variety of possible industrial sources for these compounds that discharge into the upstream J.O. 'B' influent trunk sewer was inspected with no likely source being identified. Such sources include food manufacturing facilities, facilities that specialize in cleaning tanker trunks that haul food grade products and materials, or related waste materials generated from producing such products. Manifests from the Carson and Pomona liquid waste disposal stations (LWDS) were examined and the LWDS attendants were interviewed as well, with no evidence found that any unusual loads were accepted that could have caused the incident. Close examination of the skimmings' GCMS analysis (See Figure 3) indicated some minor peaks for compounds used in cosmetic and pharmaceutical products. The IW Inspection group will conduct inspections at facilities that produce those kinds of products. Investigators are also very aware that the source of these incidents could well be a rogue waste generator or hauler illicitly dumping material into the Districts' collection system. The IW Inspection group remains vigilant in looking for the source of these incidents.

Lancaster WRP Pink Color

On Tuesday, 6-30-2020 at 0932 hours, the Lancaster WRP notified the IW Section that at 0900 hours they had noted pink colored influent (See Figure 4). A sample of the influent with the color was taken at 0930 hours. There was no unusual odor or other conditions associated with the color. The influent pH was noted to be a normal 7.45 at 0930 hours. Operators also stated they had checked the Lancaster WRP LWDS and found that no loads had been received there on 6-30-2020 that could be attributed to a dump station load.



Figure 4: Primary grit chamber tank at Lancaster WRP on 6-30-2020. Note the pink color.

The IW Inspection group immediately inspected the two (2) companies that were the most likely contributors of color at the Lancaster WRP and by 1215 hours had determined that the source of the color was Mission Linen Supply, an industrial laundry that also regularly conducts fabric dyeing of "bar mop" towels used by food service establishments (i.e., restaurants), (See Figures 5 and 6). The facility contact admitted that an employee mistakenly added a double pack of the red powder dye to the load of small towels being dyed that day to make bar mops. A Notice of Violation was issued to Mission Linen Supply in Lancaster (IW 4045) for causing the colored influent at the WRP. This facility has a permitted annual average discharge of 80,000 GPD. The facility contact informed they could be required to install a color removal system if they continue to cause color problems in District's downstream WRP. Fortunately, this incident did not result in a violation of the Waste Discharge Requirements at the Lancaster WRP.



Figures 5 and 6: Pink colored wastewater in the flume at Mission Linen Supply and the company personnel manually adding bleach into the facility's above-ground flow equalization tank to remove the color prior to discharge.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF JULY 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

San Jose Creek East WRP Red Color

On Monday, July 20, 2020 at 1408 hours, operators at the San Jose Creek East WRP reported to Industrial Waste (IW) inspection staff that during normal rounds at 1400 hours operators had noticed red color in primary tanks 2 and 3. Operators collected samples of the colored primary effluent wastewater (See Figures 1 and 2). Influent pH and odors were normal. At the time of the notification call, there had been no impact on secondary treatment operations as the color had not yet reached secondary tanks.



Figures 1 and 2: 7-20-2020 1410 hours SJC-East WRP Primary Tank #2 and a grab sample taken from the tank.

The IW inspection staff's investigation did not identify a source for this incident. Inspections were conducted at 17 upstream industrial facilities including both permitted and unpermitted sources. Pink/red color was not seen at any of the investigated sources nor was any evidence found that any of those sources had discharged the large amounts of color needed to account for the incident. Color-scan sample analysis of the primary effluent sample and red dyes taken from upstream industries were inconclusive. According to SJC chemists, the lab was unable to extract the pink color from the liquid portion of the SJC primary effluent sample, but pink solids filtered out of solution. An FT-IR analysis indicated the closest match in its library was dried egg yolk, but IW inspectors do not believe that this was material that came into the WRP as there were no impacts to the dissolved oxygen levels in the secondary aeration tanks that such high strength material would generally cause.

According to SJC-East WRP operators the pink color in the primary tanks was observed between 1400 and 1530 hours, but the time the color was entering the plant was only 15-30 minutes. There were no adverse impacts on plant operations. IW inspectors will continue to investigate possible sources for this incident and are expanding their investigation into more types of industries that could be the source. Specifically, they are looking closely at pharmaceutical manufacturing facilities located upstream of the SJC East WRP which may use dyes. While the short duration of this incident precluded any effort to trace the colored material upstream in the sewers, IW inspectors are developing a plan which could be quickly implemented in future similar incidents to at least narrow the area where the source may be located. Note that this incident of red/pink color at the SJC-East WRP was very similar to incidents that occurred on of June 7, 2016, October 7, 2015, and April 12, 2012. All were short duration incidents, where no source was identified.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF AUGUST 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Slug Discharge at Evonik Corporation in Vernon

On Thursday, 8-6-2020 at 0715 hours, the IW inspection staff became aware of a California State Office of Emergency Services (CalOES) online Hazardous Materials Spill Report concerning Evonik Corporation in Vernon (IW Permit#21998). This facility has a permitted annual average discharge of 20,000 GPD. The spill report documented 1,500 gallons of Ancamine 2074 Curing Agent released at 1740 hours on 8-5-2020. Evonik Corporation discharges to a local (City of Vernon) sewer which flows into the J.O.'H' Unit 2H trunk sewer which feeds to the JWPCP.

A follow-up investigation by the area IW inspector found that an actuator valve malfunction caused the release of a small volume of the Ancamine product to the industrial wastewater pH neutralization tank. The malfunction went unnoticed for 45 minutes resulting in the discharge to the neutralization tank and 20 minutes of discharge to the clarifier of mixed wastewater and product. The company ceased the discharge as soon as they realized what had occurred and pumped out the contents of the clarifier and neutralization tank (approximately 16,000 gallons) for disposal off-site as hazardous waste. It is unknown how much product was discharged, but it appears to have been minimal and it had no known impact on the downstream collection system sewers or the treatment plant (JWPCP). Research into the cycloaliphatic amine compound that comprises the Ancamine 2074 product indicates it has non-toxic characteristics. The company was cited for failure to notify the Sanitation Districts of the event and discharge of unpermitted material.



Figure 1: Industrial wastewater pretreatment system control system panel at Evonik Corp indicating the pretreatment process.



Figure 2: Totes of wastewater removed from the clarifier and pH neutralization tank following the 10-6-2020 spill.

Fire at Trojan Battery Company in Santa Fe Springs

On Tuesday, 8-11-2020 at 0800 hours the IW inspection staff became aware of a CalOES report concerning a fire that had occurred on 8-9-2020 at Trojan Battery Company (IW#22322) in Santa Fe Springs. This facility has a permitted annual average discharge of 5,500 GPD.

A follow-up investigation by the area IW inspector found that the 8-9-2020 fire had been relatively small, damaging only about 20 of the approximately 400 charging stations used to charge newly manufactured automotive batteries. The damaged charging racks appeared scorched and some of the metal framework was distorted and twisted. A company contact stated that all the fire water used to extinguish the flames had flowed into a blind sump where it was captured and subsequently pumped into four 330-gallon totes. On 8-28-2020 the four totes containing about 1,100 gallons of fire water were picked up by HTS Environmental and disposed of properly as verified by review of waste manifests. The incident had no effect on the company's wastewater discharge or Sanitation Districts' operations.

Industrial Wastewater Spill at American Bottling Company in Vernon

On Wednesday, 8-12-2020 at 0702 hours, the IW inspection staff became aware of a CalOES report concerning a spill that occurred on 8-9-2020 at 2300 hours at the American Bottling Company (IW#22289) in Vernon. This facility has a permitted annual average discharge of 120,000 GPD. The report detailed that 1,000 gallons of industrial wastewater was released to the storm drain due to a blockage in their industrial wastewater pretreatment system.

A follow-up investigation by the area IW inspectors confirmed that a blockage caused by bottle caps in the company's wastewater pH pretreatment system had caused 500-1,000 gallons of process wastewater to back up and overflow into the local storm drain system. The spilled wastewater was successfully captured, and the impacted storm drain cleaned with soap and water. Ultimately, several thousand gallons of non-hazardous wastewater generated by the incident was collected and hauled off-site for disposal. The incident did not result in any negative sewer impacts downstream to either the local city sewers or Sanitation Districts' facilities. The blockage was quickly cleared, and the system returned to proper operating order. The company is installing extra screens over drains in order to prevent bottle caps from getting into their wastewater collection lines.

Blue-Colored Solids in Lancaster City Sewers

On Thursday, 8-20-2020 at 1510 hours, the Stormdrain Maintenance Supervisor with the City of Lancaster notified IW Section staff that over the past year his crews had been noticing unusual blue solids material that had built up in 6-7 unconnected sections of city sewers that they had to remove. He said it accumulated to a depth of 1" to a "half pipe" in their 8'-10" diameter city lines. He said although it's a relatively hard material his crews can break it apart with their hands and the jetter they use has no problem clearing it. He says it looks like "pool plaster" but doesn't think that's what it is. He identified a specific location, the "corner of 62nd Street West and Nova Drive, as a location where they found these solids. He stated his crew have buckets of the material and that the IW inspection staff were welcome to get some for sample analysis.



Figure 3: Sample of the blue solids removed from the sewer by City of Lancaster sewer maintenance crews.

A follow-up investigation by the area IW inspector, which included sample analysis of the solids, indicated the material <u>is</u> likely to be solids generated from plastering local residential swimming pools. It's suspected that a local pool construction contractor may be dumping these solids into the sewer as part of their clean-up operations. These findings were forwarded to City of Lancaster Code Enforcement for further investigation at their discretion. Note that inquiries to Sanitation Districts' sewer maintenance managers resulted in their indicating these blue solids have not been seen in Sanitation Districts' sewers in Lancaster.

JWPCP Excessive Black Solids/Foam in the Primary Skimmers

On Wednesday, 8-26-2020 at 2340 hours, JWPCP operators reported to the IW inspection staff that at 1500 hours earlier that day the E3 South Primary Skimmers began

fouling with excessive amounts of black foamy solids. They also stated that at around the same time the sludge level sensor went into error mode. No other unusual odors or other characteristics were associated with the foamy material. Operators collected samples of the material from the skimmers for IW inspectors to examine and submit for lab analysis.

IW Night Team inspectors responded immediately to the report, collecting samples from the J.O. 'B' influent line and the front end of Tank 37. It was noted that it did not appear that the foaming material was still entering the plant when the influent sample was collected.

Both Day and Night Team IW inspectors investigated this report, which is very similar to incidents that occurred earlier this year on 4-2-2020 and 6-25-2020. Examination of the way the material entered the JWPCP has left IW inspectors confident the material in all three incidents entered the plant from the J.O. 'B' system. Unfortunately, the J.O. 'B' lines extend far upstream, up to and including the discharges from the Inland Empire Utilities Agency service area east of Pomona. Thus, the search area for an industrial source is exceptionally large. FTIR and GC/MS sample analysis again indicated that the material removed by the skimmers is a combination of fatty acids (animal and vegetable oils and greases), materials used in many food making processes, as well as other consumer product manufacturing processes including those for pharmaceuticals, cosmetics, and biofuels. Despite the large number of industries investigated as possible sources for this material, a definitive source for these incidents has yet to be identified. The IW inspection staff remains vigilant to possible sources given the unusually large volume of the material an industry would have to discharge into the sewer system in order to cause this type of incident at the JWPCP.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF SEPTEMBER 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Industrial Wastewater Spill at Q & B Foods in Irwindale

On Tuesday, 9-15-2020 at 1020 hours, the plant manager of Q & B Foods in Irwindale (IW Permit#11123) notified the Districts that the company had a sewer overflow of industrial wastewater to the street that had occurred sometime prior to 0600 hours early in the a.m. hours that day. The facility manufactures food condiments such as mayonnaise and has a permitted annual average discharge of 23,717 GPD.

The IW inspection staff investigated the spill report and determined that about 300 gallons of industrial wastewater overflowed the facility's pH neutralization vault, flowing into the downstream storm drain system, see Figure 1. The overflow occurred as a result of a blockage in the line immediately downstream of the vault. A sewer cleaning contractor hydrojetted the line, clearing the blockage. The 1,500 gallons of spilled wastewater and wastewater generated from cleaning up the spill was hauled off-site for proper disposal. The incident had no adverse impact on the downstream sewer system or Districts' treatment plant, the San Jose Creek East WRP.



Figure 1: Spill location and the route the spilled wastewater took to the storm drain system.

Pomona WRP High pH and Red Color

On Wednesday, 9-30-2020 at 0652 hours, the Pomona WRP TPO II notified the IW Section that at 0530 hours there had been a high pH influent alarm at the WRP (alarm level is pH=8.5). When operators responded to the alarm, they also observed red color in the WRP influent. The pH trend began rising above the normal background level of 7.0 at 0516 hours, peaked at 9.0 at 0535 hours, and then returned to normal by 0600 hours. Two samples were taken of the red colored, high pH, influent at 0536 hours and 0537 hours for analysis.

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Figure 2: Pomona WRP influent samples taken on 9-30-2020.

IW inspectors investigated five upstream industrial facilities in an effort to identify the source of red color and high pH that was observed in Pomona WRP raw influent on 9-30-2020. It was determined that Juicy Whip Inc. in La Verne (IW Permit#16648), a beverage manufacturer, had both red colored and high pH wastewater at the legal sample point and was the source of the incident. The facility has a permitted annual average discharge of 8,100 GPD. The inspection at Juicy Whip noted that company had processed Jamaica, a red beverage, which uses Hibiscus flowers for color and flavor, at 0300 hours on 9-30-2020. The inspector also identified a malfunctioning controller/monitoring probe that was overdosing caustic into the pH neutralization system, thus accounting for both the high pH and highly colored nature of the wastewater discharged. Sample analyses and comparison of the WRP samples and a sample taken from Juicy Whip indicated a match (see Figure 5). Notices of Violation were issued to Juicy Whip for the malfunctioning and out-of--calibration pH neutralization and monitoring system, as well as for causing the elevated influent pH and excessive color at the WRP. Juicy Whip will modify their production schedule to reduce the discharge of highly colored wastewater during early morning hours when the WRP is most susceptible being impacted by highly colored influent. No NPDES violations or adverse effects on treatment plant operations occurred as a result of this incident.



Figures 3 and 4: Sample of the wastewater discharge at Juicy Whip on 9-30-2020 (on the left) and Hibiscus flower waste.



Figure 5: FT-IR spectra results comparing the colored solid extracts from the WRP (red) sample and sample from Juicy Whip (purple).

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF OCTOBER 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Valencia WRP Minty Odor

On Thursday, 10-15-2020 at 1033 hours the IW Section received a call from the Valencia WRP. The WRP reported that at 1000 hours that morning operators noticed a strong "minty" odor in the plant. It was also noted that a month prior there was a strong citrus odor. A sample of the influent was taken when the odor was noticed in the plant, but it had no discernable unusual odor.

The area IW inspector did not identify a source for the odor. His investigation included examination of five permitted industrial facilities representing the most likely sources. Two of these possible sources were the leading candidates; a food flavoring manufacturing facility and a relatively new, in operation since July 2020, lemon processing facility. However, no definitive evidence of either facility being the source was found. Inspectors will continue to use their regular inspection activities to search for the source.

Black Oil in a Trunk Sewer Siphon in Whitter

On Thursday, 10-15-2020 at 1510 hours, the San Gabriel Valley Field Office (SGVFO) called the IW Section and reported that a sewer maintenance crew had encountered black oily material in a siphon structure on the 30" diameter North Plant Outfall Relief trunk in Whittier earlier that afternoon. The location of the siphon structure is essentially the intersection of Mulberry Drive and Painter Avenue (Manhole (MH) 18 0640-MH 18 0639). The SGVFO also stated that just prior to seeing the oil at that siphon, the crew had cleaned another siphon only two reaches upstream (MH 18 0643-MH 18 0642) and found no oil there.



Figure 1: Oily material recovered from the siphon structure on 10-15-2020.

Due to the fact that the siphon structure located just upstream of the impacted siphon did not contain any oily material when cleaned, investigating IW inspectors were able to limit the possible influent sources to a very small area. The only viable industrial source for the oily material was identified as an unpermitted school bus maintenance yard operated by the Whittier Union High School District. Because there was no direct evidence found indicating an illicit discharge from the bus yard, a Notice of Violation was not issued. However, the facility had a large uncovered 2,500 ft² wash pad which will require an industrial wastewater discharge permit with an automatic rainwater diversion system device unless they can reduce the effective uncovered area to 400 ft² or less by roofing or regrading the area. IW inspectors will follow-up on this issue. Additionally, IW Inspectors requested that the SGVFO inform them if the oily material is found in the siphon during the next scheduled quarterly cleaning.

Elevated Sulfides in the Long Beach Interceptor Trunk Sewer

On Thursday, 10-29-2020 at 0859 hours, the Compton Field Office (CFO) emailed the IW Section and reported that sewer maintenance personnel had monitored unusually high headspace sulfide readings over the previous two weeks at the Long Beach WRP Interceptor Pumping Plant odor control station. It was further reported that the high readings had only occurred in the late afternoon and evenings. Sewer maintenance personnel conducted two evening investigations on 10-27-2020 and 10-28-2020, measuring sulfide concentrations greater than 100 ppm at MH A230, which is located adjacent to the pumping plant on the influent side. CFO stated that an "odalog" sulfide monitoring meter would be installed on 10-29-2020 at MH A230 in order to continuously monitor the headspace sulfide concentration. CFO asked if IW Section staff were aware of any industrial wastewater dischargers that could be a likely source for these findings. IW staff replied that they were unaware of any likely industrial sources for these findings but that IW inspectors would begin investigating immediately.



Figure 2: Annotated GIS map indicating the trunk sewer lines upstream Of MH A230 and the manholes checked by IW inspectors on 10-30-2020 for headspace sulfide concentration.

October 30, 2020 H2S readings							
Manhole	Time	Reading (PPM)					
C 0480	10:45 AM	0.8					
C 0472	11:00 AM	Carbon					
C 0258	11:10 AM	0.0					
C 0244	11:12 AM	<mark>69.8</mark>					
C 0231	11:30 AM	166.5					
C 0623	11:40 AM	79.8					
A 0231	11:55 AM	40.0					
A 0230	12:00 PM	57.8					
A 1053	12:10 PM	0.8					
C 0638	12:30 PM	96.3					

Figure 3: 10-30-2020 manhole headspace concentrations measured by IW inspectors.

On 10-30-2020 IW inspectors traced the high sulfide levels in the sewer headspaces into two separate lines upstream of MH C 0619 upstream (see Figures 2 and 3 above). Multiple potential industrial sources upstream of the Long Beach WRP pumping plant were also inspected. The investigation found no evidence that any of the industrial sources inspected caused the high sulfide headspace concentrations reported by the CFO. Additionally, the manhole headspace readings taken by the inspectors indicated high sulfides in both lines upstream of MH C 0619, leading the inspectors to conclude that the high sulfide concentrations are likely being caused by degradation of wastewater in the sewer system and not by industrial dischargers discharging anything unusual or illicit.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF NOVEMBER 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Petroleum Odor and Black Gritty Wastewater Reported in a Trunk Sewer in Lancaster

On Monday, 11-23-20 at 0930 hours, the IW Section received a call from Districts' Sewer Maintenance personnel in the Antelope Valley reporting that during quarterly maintenance activities a "motor-oil" odor and black gritty wastewater was noticed in the 15" diameter District 14 Outfall Trunk in the City of Lancaster at Manhole (MH) 14 0130. It was reported that on Saturday, 11-21-2020 at approximately 0800 hours, a District's sewer maintenance crew jetting the line between MHs 14 130 and 14 120 noticed the odor and unusual black wastewater. The crew noticed the odor upon opening the manholes and then saw the black wastewater during line jetting operations. No elevated combustible gas concentrations were noted in the sewer headspaces. The crew took no wastewater or headspace samples.

The investigation conducted by IW inspection staff did not find a source for the unusual oily odor or black gritty wastewater. Sewer maintenance crews were asked to take a sample of the material if it were to be encountered again, as the lack of the sample for the incident made identification of the material difficult and hindered the investigation. The incident did not result in a known negative impact on the downstream Lancaster WRP.

Petroleum Oil in the Primary Treatment Tanks at JWPCP

On Tuesday, 11-24-2020 at 1338 hours, Treatment Plant Operators at the JWPCP notified IW Inspectors of a gasoline/kerosene odor present in primary treatment gallery. Operators also reported that the primary treatment skimmings appeared oily. Operators were advised by IW inspectors to grab a sample of the oily material if possible. Operators took a sample from Inlet Works 1 & 2.



Figures 1 and 2: IW Inspectors taking petroleum oil samples from the influent screenings compactor at JWPCP on 11-24-2020.

IW inspectors traced the petroleum oil present in inlet works number 1, influent screenings, and E-1 sedimentation tanks to the Phillips 66 Carson oil refinery (IW#21079). This large facility has a permitted annual average discharge of 2,823,000 GPD. An inspection at the refinery and examination of the day's required hourly wastewater samples conducted that evening found that the facility had discharged very oily effluent from approximately 0100 hours to 0330 hours. These samples were analyzed and determined to contain 24,700 mg/l of oil and grease (O&G), compared to their permitted discharge limit of 75 mg/l. In addition, gas chromatography - mass spectrometry analysis of the sample matched samples collected from the oil recovered from the E-1 skimmers at JWPCP. Based on the company's flow records it is estimated that 63,000 pounds of O&G was discharged to the sewer. Preliminary findings indicate the large discharge of oil was caused by a malfunction at the refinery's dissolved gas flotation unit by a combination of a faulty polymer metering pump and a skimmer failure. Refinery personnel were able to divert the wastewater heavily laden with oil when they became aware of the problem at 0330 hours. However, by that time the problem had gone undetected for about $2\frac{1}{2}$ hours, the facility failed to notify the Districts of the off-spec discharge as is required in their permit. As a result of these findings the refinery was cited for four violations of the Wastewater Ordinance: Section 402 for failing to immediately notify the Districts of any circumstance affecting facility operations that may potentially result if the discharge of prohibited or restricted waste, Section 406 for discharging material which caused an adverse impact to the JWPCP, Section 406H for discharging excessive quantities or concentrations of nonbiodegradable oil, petroleum oil, or refined petroleum products, and Section 424 for failing to comply with the guidelines for operating their combustible gas monitoring system since the wastewater flow to the system was shut off and unable monitor combustible gases in the discharge.



Figure 3: Sample collected from the discrete ISCO sampler at the Phillips 66 oil refinery's legal sample point on 11-24-2020. The sample characteristics were consistent with the oil found at JWPCP and subsequent GCMS analysis confirmed the match.

Refinery managers accepted the Notice of Violation, taking responsibility for all aspects of the violations. Ultimately, there were no known negative impacts to JWPCP operations as it appears the oil was effectively removed at the headworks and skimmers.

La Cañada WRP White colored Influent

At approximately 1145 hours on Wednesday, 11-25-2020, IW inspection staff received a call from a La Cañada WRP Operator who reported white-colored wastewater in the raw channel. The operator took grab sample of the influent and then diverted the incoming white wastewater to the sewer to avoid it negatively impacting the WRP. The white-colored influent lasted approximately 10 minutes and ultimately had no adverse effect on the WRP. After the color dissipated, the treatment plant resumed processing normal flow.

Investigating IW inspectors responded to the WRP immediately, meeting with the operator and obtaining the white-colored influent sample. The sample had a slightly alkaline pH of 8.25 and no unusual odor. The sample appeared to be wash water from washing latex paint brushes and rollers. The operator mentioned there had been another short duration white-colored influent the previous day. IW inspectors inspected the only known industrial wastewater source upstream of the 0.1 MGD WRP, the La Cañada Country Club, which has a restaurant/kitchen operation. No evidence of any unusual activity or operations that could be the source of the incident were seen at the facility. Inspectors also canvassed the residential area that discharges into WRP, but no evidence of commercial painting crews or other activities that could have caused the white-colored influent were noted. Although no source was identified for this incident, the area IW Inspector will continue to keep an eye out for possible sources.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF DECEMBER 2020

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Los Coyotes WRP Tea Color

On Tuesday, 12-1-20 at 0845 hours. Los Coyotes WRP operators contacted the IW inspection staff and reported a tea color was present in the WRP's final effluent forebay.

Investigating IW inspectors immediately responded. Their investigation determined that a large textile dyehouse, Tri-Star Dyeing & Finishing in Santa Fe Springs (IW Permit#17196) was a likely contributor, and possibly the primary source of the color. This facility has a permitted annual average discharge of 450,000 GPD. Inspection of the facility determined that operators at the company had failed to properly manually treat their effluent to remove the color sufficiently enough to meet the 50:1 color dilution limit imposed by the Districts. A Notice of Violation was issued to the Tri-Star facility for violating the limit and for causing the color incident at the WRP.

Inspectors also found some inconclusive evidence that another facility in Santa Fe Springs, L.A. Supply Company (IW Permit#22558), which supplies textile dyes and other textile processing chemicals to the textile manufacturing industry, may have also contributed to the incident by dumping one or more drums of concentrated dye into a drain. This facility has a permitted annual average discharge of 300 GPD. However, samples of the colored wastewater from the WRP were tested and compared to samples taken from both Tri-Star and L.A. Supply using an ultraviolet scan test method and only the sample from Tri-Star matched the WRP sample (see Figures 1 and 2 below). As such, L.A. Supply was not cited for causing the incident. Fortunately, no NDPES violation resulted from this incident.



Figures 1 and 2: UV scan color analysis showing how samples from Tri-Star Dyeing & Finishing and L.A. Supply Co. compared to the sample from the Los Coyotes WRP.

Chemical Release at Gilead Sciences in San Dimas

On Thursday, 12-3-2020 at 1700 hours, Senior Environmental, Health and Safety Specialist Adam VonSydow of Gilead Sciences in San Dimas (IW Permit#15295) notified Industrial Waste Section staff that he had just discovered that over the last few days his facility had lost approximately 20 gallons of a refrigerant solution, Lexsol 542, used in their freeze dryer unit to a sewer drain on-site. The loss occurred as a result of small pinhole leaks in a feed line. According to the Lexsol 542 Safety Data Sheet, it is a flammable petroleum distillate. This facility is a biopharmaceutical company that researches, develops, and manufactures therapeutic drugs. It has a permitted annual average discharge of 56,274 GPD. VonSydow stated he had contracted a contractor to pump out his industrial sewer, underground tanks, and sample point the next day. Inspections conducted on 12-4-2020 by the Districts' IW Night team inspectors and on 12-7-2020 by the area IW Inspector found no evidence of any adverse or explosive conditions in either the downstream sewer or at the downstream Districts' treatment plant (SJC-East WRP) from the small amount of the Lexsol solution that escaped to the sewer. On 12-4-2020 Gilead Sciences had 5,000 gallons of wastewater slightly contaminated with Lexsol 542 solution hauled off-site for disposal as non-hazardous waste to centralized waste treatment facility Southwest Processors in Vernon. The waste manifests were reviewed by the IW Inspector and all was found to be in proper order. No further action is anticipated in response to this incident.

Fire and Release of Vegetable Oil at Signature Fresh in the City of Industry

On Thursday, 12-17-2020 at 0037 hours, IW Inspection staff were notified, via a call from the Long Beach Main Pumping Plant Alarm Center Operator, that they had just been notified by the Los Angeles County Fire Department (Fire Department) of a fire at Signature Fresh, a food manufacturing facility in the City of Industry (IW Permit#21637. This facility is also known as Whittier Enterprises, LLC DBA Popkoff's Frozen Food, and has a permitted average discharge of 1,400 GPD. The Fire Department caller reported that firefighters were concerned that a large amount of vegetable oil may have spilled into the local sewer as a result of the putting out the fire. The caller further stated that it is unclear how much, if any, of the vegetable oil actually made it off-site, as an industrial wastewater clarifier on-site may have served to trap the spilled oil before it reached the local sewer system.

IW inspectors initially thought the wastewater from the Signature Fresh facility flowed to San Jose Creek (SJC)-East WRP and notified SJC-East WRP operators of the situation. However, it was determined shortly thereafter that the industrial wastewater from Signature Fresh does <u>not</u> go the SJC-East WRP, instead it flows to the JWPCP via the Districts 21 interceptor. JWPCP operators were notified at 0123 hours of the possibility that the vegetable oil could potentially also be received there via the J.O. 'B' line.



Figures 3 and 4: 12-17-2020 photos showing the stuffed chicken fryer that caught fire and oil residual floating on the top of the wastewater in the industrial wastewater sampling box at Signature Fresh. Note also the oil on the floor next to the fryer.

The area IW inspector inspected the Signature Fresh facility on 12-17-2020, finding evidence that there was likely a minor amount of vegetable oil, probably a few gallons at most,

that was discharged to the sewer as a result of the small fire that the Fire Department extinguished in a 800-gallon capacity fryer unit the night before (see Figure 3 above). The fire was caused by a faulty level sensor and water used to put out the fire caused some oil to overflow the fryer unit and flow into a downstream trench drain. Most of the spilled oil was then trapped in the facility's industrial wastewater clarifier. Inspection did find some floating oil in the sample box, indicting a small amount made it to the sewer (see Figure 4 above). Checks of the downstream sewer and at the JWPCP, which would have ultimately received the oil, found no evidence of the vegetable oil being present. Signature Fresh managers said they would service the clarifier and collect and haul off-site for disposal the fryer oil remaining in the unit. No notices of violation were issued, and the investigation was called complete.