2022 ANNUAL REPORT

INDUSTRIAL WASTE PRETREATMENT PROGRAM

LOS ANGELES COUNTY SANITATION DISTRICTS

ROBERT C. FERRANTE CHIEF ENGINEER AND GENERAL MANAGER

> SUBMITTED April 13, 2023

APPENDIX H INDUSTRIAL WASTE REPORTS ON INCIDENTS

| 2022 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 | 6 | | | | | | | | | 1 | | | 7 |
| Metals/ Cyanide | | | | | | | | | | | | | 0 |
| Toxicity | | | | 1 | | 8 | | 1 | | | | | 10 |
| pH High | | 1 | | 1 | | | | | | | | | 2 |
| pH Low | | | | 1 | | | | | | | | | 1 |
| Turbidity | | | | | | | | | | | | | 0 |
| Grease | 1 | | | | | | | | | | | | 1 |
| LEL | 2 | | | | | | | | | | | | 2 |
| NDMA | | | | | | | | | | | | | 0 |
| Color | | | 1 | 9 | | 1 | | | | | | 1 | 12 |
| Foam | | 1 | | 1 | | | | | | | | | 2 |
| Chloride | | | | | | | | | | | | | 0 |
| Odor | | | | 1 | | | | | | | | | 1 |
| Ammonia | | | | | | | | | | | | | 0 |
| Temperature | | | | | | | | | | | | | 0 |
| Total | 9 | 2 | 1 | 14 | 0 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 38 |

| 2022 PUMP PLANT INCIDENTS INVESTIGATED | | | | | | | | |
|--|---|--|--|--|--|--|--|--|
| EXCESS FLOW | 1 | | | | | | | |
| PERSONAL WIPE RAGGING | | | | | | | | |
| OTHER RAGGING | | | | | | | | |
| FLAMMABILITY/LEL | | | | | | | | |
| COLOR | | | | | | | | |
| CORROSION | | | | | | | | |
| EXCESS MAINTENANCE | | | | | | | | |
| ODOR | | | | | | | | |
| OILY SLUDGE/GREASE | | | | | | | | |
| TOTAL | 1 | | | | | | | |

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

| 2022 SURFACE DISCHARGE INCIDENTS INVESTIGATED | | | | | | | | |
|---|---|--|--|--|--|--|--|--|
| IU - SPILL | 3 | | | | | | | |
| RIVER SPILL/DUMP | | | | | | | | |
| FUEL/SOLVENT | | | | | | | | |
| CHEMICAL/PAINT SPILL | 1 | | | | | | | |
| SEPTIC WASTE DUMP | | | | | | | | |
| GROUNDWATER CONTAMINATION | | | | | | | | |
| NUISANCE DISCHARGE | 1 | | | | | | | |
| Total | 5 | | | | | | | |

| 2022 SEWER INCIDENTS INVESTIGATED | | | | | | | | |
|-------------------------------------|----|--|--|--|--|--|--|--|
| Elevated H2S reported by Sewer crew | 2 | | | | | | | |
| ODOR- Sulfide | | | | | | | | |
| ODOR-Other | 2 | | | | | | | |
| FIRE INVESTIGATION: Non-refinery | | | | | | | | |
| FOAM | | | | | | | | |
| OIL/FUEL/SOLVENT | | | | | | | | |
| RAGGING | | | | | | | | |
| EXCESS SOLIDS | 1 | | | | | | | |
| SCALE | | | | | | | | |
| Elevated LEL reported by sewer crew | 3 | | | | | | | |
| LOW pH | | | | | | | | |
| CORROSION | | | | | | | | |
| RAINWATER | | | | | | | | |
| COLOR | 2 | | | | | | | |
| BLOCKAGE/SSO Due to Grease | 2 | | | | | | | |
| BLOCKAGE/SSO Not due to Grease | | | | | | | | |
| ILLEGAL ACCESS TO MANHOLE | 1 | | | | | | | |
| EXCESS FLOW | | | | | | | | |
| ILLEGAL DUMP | 3 | | | | | | | |
| Total | 16 | | | | | | | |

| 2022 SUMMARY OF INCIDENT REFERRALS | | | | | | | | | | | | |
|------------------------------------|--------------------|-----------------------------|--------------------|-----------------|-----------------|---|-------------------------|---|--------------------------|---------------------------------------|-------|--|
| Nature of Incident | | | | | | | | | | | | |
| Caller ID | Industrial perm | User off-sp nitted disch | ec or non- arge | IU Equipment | Odor Reports | 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 | |
| | Acid | Oil | Misc | Malfunctio n | | | | | | | | |
| IU Release | 10 | | | 20 | | 13 | 3 | 7 | | 8 | 61 | |
| IU SMR Call | 2 | 1 | 25 | | | | | | | | 28 | |
| Public Agency | | | | 1 | | | | 2 | | | 3 | |
| IWMC or CSD | 19 | | 1 | | | | | 2 | 1 | 1 | 24 | |
| Citizen | | | | | | | 1 | | | | 1 | |
| Anonymous | | | | | | | | 2 | | 2 | 4 | |
| News Report | | | | | | | | | | | 0 | |
| Total | 31 | 1 | 26 | 21 | 0 | 13 | 4 | 13 | 1 | 11 | 121 | |

| 2022 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 | | | | 9 | 1 | | | | 10 | | | |

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF JANUARY 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Partial Grease blockage in the Puente Trunk Sewer in the City of Industry

On Tuesday, 1-11-2022, the San Gabriel Valley Field Office notified the IW Inspection staff that one of their sewer maintenance crews had encountered a partial grease blockage between Manholes (MH) 15 0057 and MH 15 0056 in the 10" diameter Puente Trunk in the City of Industry (see Figure 1 below) on Saturday, 1-8-2022, during routine cleaning activities. The crew jetted the line and it seemed to resolve the issue. However, once the line was cleared, the crew observed grease entering MH 15 0057 from a southern local line. A sample of the grease material was collected (see Figure 4). This section of the Puente Trunk is cleaned annually, and it was stated that this was the first time the crew had noted excessive grease at this location.



Figure 1: Annotated GIS diagram showing the location of the excessive grease observed in the Districts' Puente Trunk sewer at MH 15 0057 and the location of the source of the grease nearby, Evans Food Group, LTD.



Figure 2: Grease observed by IW Inspectors in the local line just upstream of MH 15 0057. Note that the grease is present on the manhole shelves, indicating surcharging has occurred.



Figures 3 and 4: Grease Samples taken from the local line sewer just downstream of Evans Foods and from MH 15 0057. Note the similarity, though the sample from MH 15 0057 is more weathered and contains mixed in grit from the sewers.

Both day and night shift Industrial Waste Inspectors investigated the report. It was determined that the source of the grease was Evans Food Group, Ltd., aka Gayton Foods, a large manufacturer of chicharrones (fried pork skins/rinds) that was discharging excessive amounts of grease, generally during after-hours clean-up operations. The Evans facility holds IW permit #22180 and has a permitted flowrate 16,000 gpd. The facility was found to have an inadequate pretreatment system to remove the grease from their industrial wastewater discharge.

A Notice of Violation (NOV) was issued to the facility on 1-26-2022 for causing excessive greasing in the downstream sewers and a requirement was issued to cease the discharge of the excessive grease immediately. Additionally, after contacting the local sewer agency (the Los Angeles County Department of Public Works Sewer Maintenance District, aka the LACDPW SMD), the local sewer line was hydrojetted by the SMD to remove residual grease. A compliance meeting with Sanitation Districts' enforcement managers and Evans Food Group facility representatives may be scheduled to address these issues.

Spill to Storm Drain in Vernon

On Friday, 1-21-2022 at 1925 hours, two night team members of the IW Inspection staff, while driving through the city of Vernon while conducting routine inspection activities, noticed clear/colorless water running off the property at L.A. Wash Rack, a tanker truck washing operation with a permitted (IW permit #10685) discharge flowrate of 43,000 gpd. The flow from the facility's wash rack area was going to the street gutter (see Figures 5-8 below). This facility is permitted to wash tanker interiors and exteriors for trucks that haul non-hazardous materials.

The subsequent investigation revealed that a transfer pump had failed causing xylene-based resin-laden wash water to spray into the wash rack area and outside the trench containment. L.A. Wash Rack workers treated the spill with sodium hydroxide and attempted to use potable water to wash it upgrade into the trench containment. However, an unknown amount left the property and collected in the street gutter and a downstream city storm water catch basin. The pH of the material in the street was between 10 and 11. Districts' IW Inspectors immediately contacted the City of Vernon's 24-hour Control Center and spoke with The Director of Health and Environmental Control, who sent a crew to respond to the spill. IW Inspectors remained on-site for several hours to coordinate with the city responders and to verify that none of the spilled material was discharged to the sanitary sewer. The incident resulted in a clean-up effort by a contractor hired by the city, Ocean Blue Environmental. Fortunately, it was determined that none of the spilled resin containing wastewater, or subsequent wastewaters generated from the initial response to the spill or cleanup, reached the nearby Los Angeles River. Ultimately, 250 gallons of waste generated from this incident were hauled off-site for proper disposal according to waste manifests, but the sanitary sewer and downstream Districts' facilities were not impacted.



Figures 5 and 6: Pictures taken at L.A. Wash Rack at 1930 hours on 1-21-2022. Note the spilled material running from the truck washing area, across the sidewalk and then into the street gutter.



Figures 7 and 8: Another picture of the spilled material in the street gutter at 1930 hours on 1-21-2022 hours and then a photo a couple hours later of personnel from contractor Ocean Blue Environmental cleaning up the spill on 1-21-2022.

Self-Report of Acidic Discharge in the City of Industry

On Tuesday, 1-25-2022 at 1050 hours, the IW Inspection staff received a telephone call from Tropicana Manufacturing Company in the City of Industry (IW permit #12292). This facility manufactures Naked brand smoothies and juices. This large facility has a permitted flowrate of 230,000 gpd, and a peak flowrate limit of 700 gpm. Permit discharge limits include both low and high limits such that the pH must 6-10 at all times in order to protect the Districts downstream WRPs at San Jose Creek (SJC). The caller reported an "accidental" discharge of 5,000 gallons of pH<3 acidic wastewater and requested approval to discharge an additional 10,000 gallons of low pH wastewater. The caller stated the acidic wastewater was discharged from 0700-0715 hours that morning and that this was due to a slug of acidic "material" that overwhelmed their pretreatment system. The caller further stated that currently all three of their pretreatment system pH neutralization tanks contained low pH wastewater and the only way for them to treat the wastewater was for them to discharge an additional 10,000 gallons of it to the sewer to provide mixing space in one of the tanks. This request was denied, and IW Inspectors immediately proceeded to the facility to follow-up on the notification. Additionally, managers at the downstream the SJC WRPs were notified by IW staff to be alert to the possibility of low pH influent.

An IW Inspector arrived on-site at Tropicana at 1135 hours on 1-25-2022. The company contact again requested permission to discharge low pH wastewater due to their inability to properly neutralize the wastewater in the treatment tanks without first emptying the tanks about halfway. The inspector reiterated that such a discharge was not allowable and that it would be in clear violation of their discharge limits and requirements, and that further, such a discharge would present a clear risk to operations at the Districts' downstream treatment plants. The contact acknowledged this and stated they would call a waste hauling company to pump out, and haul off for proper disposal, the wastewater. The inspector verified the earlier low pH discharge by checking onsite flow and pH monitoring data. He also verified that the low pH discharge had ceased. The facility contact stated that the source of the earlier low pH wastewater discharge was likely from Clean-in-Place (CIP) rinse waters generated inside the production facility and was not a result of excessive acid injection from their pretreatment system. The inspector left the facility at 1310 hours and requested Districts' night team inspectors perform a follow-up inspection later that day or evening.

Districts' night team inspectors arrived on-site at 1600 hours that same day to perform the requested follow-up inspection. Operations at the facility appeared normal but a review of the facility's discharge data (see Figure 9 below) indicated that the low pH discharge had resumed almost immediately following the earlier inspection. Record review indicated the facility discharged wastewater with a pH of between 0 and 3 between 1325 and 1420 hours at approximately 450 gpm. Inspectors estimated that approximately 36,000 gallons of low pH wastewater had been discharged in violation of both permit requirements and the explicit order from the IW Inspector earlier that day not to do so. When asked why they had ignored the instructions of the inspector, the contact simply stated, "I know it's not right, but management

said, "f#%* it, we will deal with the fine later." When queried as to why they felt the illicit discharge was needed, it was explained that the facility had recently changed ownership and that as part of this change facility managers had been required to switch to new chemical suppliers effective that day, including a new supplier for the sulfuric acid used in their CIP process. Thus, they needed to empty the previous CIP chemical supply tanks in order to receive a delivery later that day of new chemical from the new supplier, including the sulfuric acid used in the CIP system. Instead of either using the rest of the old, but still good, sulfuric acid properly or having it hauled off-site for proper disposal, due to the lack of time available to pursue either option, managers decided to just dump it to the sewer instead.



Figure 9: Industrial wastewater discharge pH and flow data at Tropicana Manufacturing Company on 1-25-2022 indicating that the facility discharged wastewater with a pH of between 0 and 3 between 1325 and 1420 hours at approximately 450 gpm.

Fortunately, the illicit discharge outlined above did not adversely impact operations at the SJC WRP treatment plants. In fact, review of influent pH data at the WRPs found no indication that any drop in pH had occurred. The Tropicana facility was subsequently issued a NOV on 1-28-2022 for the illicit low pH discharges, failure to abide by permit requirements, and failure to properly operate their pretreatment system. In addition to the issuance of the NOV, IW Inspectors have requested that the facility be brought in for a compliance meeting to discuss this incident further and to assist in the evaluation of whether or not to proceed with further enforcement actions by the Districts.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF FEBRURY 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Lancaster WRP Ragging

On Tuesday, February 1, 2022 at 0705 hours, Lancaster WRP operators notified the IW Section that WRP operations have recently been negatively impacted by excessive ground and shredded rag materials which have caused some clogging in the influent pumps.

Investigating IW inspectors determined that the ragging was most probably caused by the increased activity at the Lancaster liquid waste disposal station (LWDS) in which the loads contain plastic wipes that appear as rags. The increase in loads being received is due to the nearby Rosamond LWDS closing in March 2021.

Excessive Grease in the Florence Avenue Trunk in Santa Fe Springs

On Tuesday, February 8, 2022 at 1435 hours, the San Gabriel Valley Field Office notified the IW Section that a sewer maintenance crew had recently encountered large amounts of grease in the 21" diameter Florence Avenue Trunk in Santa Fe Springs in the 80' long siphon structure at manholes 18 0434A and 18 0434. It was stated that the siphon is usually cleaned annually, taking about 4 hours, whereas this last cleaning took 3 days. The sewer crew took a sample of the grease for IW inspectors. Additionally, it was stated that there has not been any grease present in the past at this location during cleanings.



Figure 1: Sample of grease from the siphon structure at manholes 18 0434A and 18 0434.

Investigation by IW inspectors did not locate a source for the grease despite inspecting 13 possible sources and looking for grease in upstream sewers. There is a lingering suspicion that grease may be accumulating at the siphon more that in the past due to the lack of any industrial wastewater discharge from 12345 Lakeland Road in Santa Fe Springs. This large site was

historically occupied by the Powerine oil refinery and flows from this facility went into MH 18 0445A on the Florence Avenue trunk about 0.65 miles upstream of the siphon. Successor industrial wastewater sources then operated there following the refinery's closure in 1995. The discharges from these sources may have served to effectively flush out and clean the siphon structure. The final industrial wastewater discharges of significant volume from this site ceased in 2016. IW inspectors continue to be vigilant to any source of grease that could have caused the February 2022 incident.

Los Coyotes WRP Red Color

On Monday, February 21, 2022 at 0900 hours, Los Coyotes WRP reported to the IW Section that operators had noted a light red color in the raw influent at the pH monitoring box, in the secondary tanks, and a light reddish tea color in the forebay. Operators collected a sample of the red-colored wastewater for IW inspectors. The color in the sample was not strong but the Secchi disk at the forebay was only visible to 2 feet and showed the red tint (see Figure 2). WRP operators increased the chlorine dosage rate and increased the chlorine residential time in plant to help remove the color.



Figure 2: Los Coyotes WRP Forebay on 2-21-22. Note the red color as shown against the white Secchi disc surface.

IW Inspectors determined that the source of the red color was Tri-Star Dyeing and Finishing Inc., a large textile washing and dyeing facility with a permitted flowrate of 450,000 gpd. A notice of violation for exceeding their effluent 50:1 color dilution limit and adversely impacting the downstream WRP was issued on February 22, 2022. This facility has been the source of many such color incidents and associated Districts' enforcement actions over the past 2 plus years. Efforts by company managers, as a result of the previous enforcement activity conducted by the Districts, does appear to be finally having a positive effect on reducing the number of these incidents though as evidenced by the fact that this is first color incident at Los Coyotes WRP since October 2021. IW inspectors and Section managers continue to monitor this situation very closely.



Figure 3: Picture taken at Tri-Star Dyeing & Finishing on February 22, 2022 showing an example of the red fabric being processed that likely caused the February 21, 2022 red color incident at the Los Coyotes WRP.

Whittier Narrows WRP Low Dissolved Oxygen levels and Green Color

On Wednesday, February 23, 2022 at 1102 hours, Whittier Narrows WRP operators notified the IW Section that earlier that day and for the past several days operators had been observing a light green/blue tint in the WRP. Additionally, and the main cause of the notification call, was the fact that at midnight and then again at 0440 hours on the day of the notification, they had observed dissolved oxygen levels in the secondary aeration tanks drop off. It was noted by IW staff that the call was very similar in nature to a similar series of incidents at WNWRP that occurred in late 2021.

IW inspectors determined that the most likely source of the color and dissolved oxygen drop-off incidents during early a.m. hours at the Whittier Narrow WRP are discharges from the United Site Services facility in El Monte. This facility discharges concentrated, high strength, portable toilet wastewater and has a permitted daily discharge rate of 22,700 gpd. Of note is the fact that they typically discharge after 2000 hours into the early morning hours to minimize the odor impacts of their discharge on their neighbors, who typically have gone home by that time. Inspectors also noted that the facility has recently switched to a new portable toilet dye packet that is added to the water used in the portable toilets, however it has the same color intensity as the dye previously used. Inspectors will continue to monitor the facility to ensure their permit requirements are being met.



Figure 4: United Site Services effluent sample taken at 2135 hours on February 24, 2022.

Spill of Concentrated Solution at American Fruits & Flavors in City Terrace

On Thursday, February 24, 2022 at 0935 hours, American Fruits & Flavors, LLC, a manufacturer of food grade flavorings and related products in Los Angeles (City Terrace area) called the Industrial Waste Section and reported that at about 1745 hours the previous evening the facility had spilled approximately 2800 pounds (335 gallons) of their "Ultra Rosa" beverage flavoring product to the sewer due to a broken tank valve. This facility has industrial wastewater discharge permit 21894 and is permitted to discharge of 2,120 gpd of wastewater from their production, clean-up, and quality control operations.

An IW Inspector responded to the call that same day, arriving onsite at 1115 hours. It was confirmed that a mixing tank valve failure caused about 350 gallons of "Ultra Rosa" concentrated soft drink beverage syrup to spill into a floor drain that went to the sewer. The discharge had no known negative impact(s) on the downstream collection system or treatment plant (JWPCP) despite it's having a mildly low pH of 4.5. No further actions by IW staff are planned.

JWPCP Oil in Headworks

On Friday, February 25, 2022 at 1215 hours, JWPCP operators notified the IW Section that at 1100 hours operators started observing an oily sheen in the plant headworks at the bar screens and compactors. There was no unusual odor or explosivity associated with the material. Operators did not specify which line the oily material appeared to be coming in on.

Investigating IW inspectors were able to determine that based on the oily sheen visible on specific bar screens, the oily material was coming in on the J.O. 'A' trunk line. Several large industrial users discharging to the line were inspected and it was determined that the Valero Refining Co. – California (IW Permit 015899), an oil refinery that converts heavy crude into asphalt, gas oil, naphtha, and kerosene, was the source of the oily sheen and excessively oily rags

noticed at the JWPCP. The facility has a permitted daily discharge rate of 32,000 gpd. The facility was issued a notice of violation for causing adverse impact to the JWPCP, failing to meet their permit limits, and failing to properly maintain their industrial wastewater monitoring equipment. The cause of the excessive oily discharge was a problem in the facility's pretreatment system, likely in the gas floatation unit. IW inspectors reminded refinery managers to make proper notifications when they become aware of a discharge limit exceedance. In this case refinery operators were aware their discharge was not meeting the 75 mg/l limit at 82 mg/l based on a 0930 hours sample, the results of which they were aware of by 1100 hours, and which caused them to cease discharging.



Figure 5: Explosivity "LEL" monitoring chart recorder at the Valero asphalt refinery in which the discharge of oily wastewater is indicated by the increase in the LEL reading (green trend line on the chart) from 0% to 16% on February 25, 2022 from 0800-1300 hours.

Fire at the Torrance Refining Company in Torrance

On Monday, February 28, 2022 at 1125 hours, the Torrance Refining Company LLC, a large oil refinery in Torrance with a permitted daily discharge rate of 3,587,700 gpd notified the IW Section that the facility had a "small" fire in their coker unit at 1045 hours that they put out using water only. This indicates that no aqueous film forming foam ("AFFF") that may contain PFAS or related compounds that are now of concern in wastewater and wastewater treatment

plant effluent was used. It was stated the fire was extinguished in only 5 minutes, though it was added that at the time of the call firefighters were still putting water on the location of the fire. It was noted that the runoff from fighting the fire will go to an impound tank (tank 87) and then later to the pretreatment system associated with the Van Ness outfall (IW permit 21899).

IW inspectors arrived onsite at the refinery at 1230 hours on February 28, 2022 in response to the notification. Refinery managers reiterated and confirmed the information above, namely that a fire started in the coker unit and that it was extinguished within 5 minutes of inception. Approximately 4100 barrels (172,200 gallons) of firewater was used and the firewater was diverted to Tank 87 for storage and evaluation prior to treatment and discharge. Refinery operators impounded wastewater at the Van Ness outfall from ~1130 to 1230 hours for a total of one hour prior to normal discharge resumption. The discharge at 1300 hours was compliant and representative of normal operations. There were no negative impacts on Districts' operations or facilities from this incident and no further action is anticipated by IW inspectors.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF MARCH 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Sanitary Sewer Overflow (SSO) in Paramount

On Tuesday, 3-1-22 at 1545 hours, operators at the Long Beach Main Pumping Plant Alarm Center received a report of an ongoing sanitary sewer overflow (SSO) in the City of Paramount near the intersection of Alondra Boulevard and Hunsaker Avenue. An immediate investigation by Districts' sewer maintenance personnel determined that the SSO did not involve Districts' facilities and that no further action was required on the Districts' part. The matter was then referred to the City of Paramount for resolution at 1600 hours. No IW staff was asked or tasked to respond to the SSO report.

After the above, LACSD IW inspectors were contacted on 3-2-22 by the Los Angeles County Department of Public Works (LADPW) Source Control Division and a joint LACSD-LADPW investigation of the sewer system configuration upstream of the 3-1-22 SSO was conducted. It was determined that the sewer lines upstream of the estimated 30,000-gallon SSO were part of relatively extensive private line system, owned and operated by a business park landlord. The business park includes about 20 tenants and the private sewer system joins directly to the downstream J.O. 'H' Unit 1B trunk sewer at manhole H1127 (see Figure 1). The landlord was ultimately held responsible for the SSO and required to properly maintain the lines moving forward. The exact cause of the overflow was not determined as City of Paramount crews successfully jetted the line on 3-1-22, clearing and washing away the blockage causing material. It is thought most likely that a buildup of sanitary debris caused the SSO.



Figure 1: Geographic Information System based annotated diagram of the private sewer line system (red lines) in the City of Paramount where an SSO occurred on 3-1-22.

JWPCP Excessive Solids in the E-3 South Skimmers

On Wednesday, 3-2-2022 at 2230 hours, JWPCP supervisors notified the IW Section that the plant had been experiencing excessive solids loading in the E-3 South primary sedimentation tank skimmers. It was stated that the primary tank level sensors began to register "zero" at 1836 hours, indicating something unusual had entered the tanks at that time, but by 2230 hours it was no longer entering the tanks. In addition, it was stated the solids appeared similar to recent incidents, black and gelatinous, and had a sewage sludge odor. Furthermore, it was suggested that there could be a connection with problems in the plant's solids processing unit earlier that day when centrifuges were stopped and restarted several times, possibly resulting in extra solids and polymer being discharged to the J.O. 'B' inlet works. A sample of the solids was collected and secured in the IW refrigerator.

The investigation of this incident found no evidence that this event was caused by an industrial source. In addition, there were no water reclamation plant or collection system maintenance activities which appeared to have caused the incident. An internal investigation at the JWPCP found a leaking dilute polymer line connection to the centrifuge building which had been leaking at a rate of 0.1 gpm for an unknown length of time. This leakage is collected in a pump sump that discharges into J.O. "B". It is possible, if not likely, that a slug of this dilute polymer solution caused the conditions detected in the E-3 primary tank battery after aeration in grit chambers 3 and 4, causing suspended solids to float in the sedimentation tanks and overwhelm skimmings troughs. The leaking polymer line was repaired on March 7. This event had no known negative impact(s) on secondary treatment, plant effluent quality or the MWD demonstration plant.

LCWRP High Turbidity and Tea Color

On Wednesday, 3-9-22 at 0828 hours, Los Coyotes WRP operations staff reported to the IW Section that operators had noted increasing turbidity in the plant effluent as well as a slight tea color in the effluent forebay. The turbidity reading on 3-8-22 at 1054 hours was 2.44 NTU with average turbidity readings normally around 0.8 NTU. Operators stated they were concerned not so much about the color, but more with the possibility that the color could be associated with whatever was causing the increase in turbidity due to interference with plant treatment processes. Operators collected a sample of the tea-colored wastewater for IW inspectors.

Investigating IW inspectors inspected the two most likely industrial color sources: textile dyehouse Tri-Star Dyeing and Finishing, and carpet manufacturer Shaw Diversified Services, Inc. Shaw was found to be operating at reduced shift capacity with second shift operations having no effluent discharge during the timeframe which could have caused the incident. The inspection at Tri-Star, which included reviewing the facility's previous 48 hours' worth of automatic sampler discrete hourly bottle samples, found no evidence of any wastewater having been discharged that caused the turbidity or tea color observed at the WRP.

Further examination of LCWRP OSI Pi data provided by LCWRP operators indicated that the high turbidity reading and slight tea color was likely attributable to the influent pump being cycled on and off several times on 3-8-22 at around 1000 hours just prior to the increase in turbidity being observed (see Figure 2). It is thought the action of cycling the pump may have caused material in the plant' secondary settling tanks to be stirred up. No NPDES violations were caused by the incident and no further follow-up on this incident is anticipated by IW

inspectors, though the discharges at Shaw and Tri-Star continued to be monitored closely by IW staff.



Figure 2: LCWRP 3/7/22-3/9/22-8-22 total influent flow as determined by influent pump rate.

LCWRP Green Color

On Monday, 3-14-22 at 1020 hours, Los Coyotes operators reported to the IW Section that there was green color present in the LCWRP final effluent forebay sample collected at 1000 hours. Operations stated that the color intensity does not appear strong enough to cause an NPDES violation.



Figure 3: 3-15-22, 0800 hours LCWRP final effluent forebay. Note the green color.

Investigating IW inspectors inspected eight industrial facilities including the Tri-Star Dyeing and Finishing textile and garment dyehouse in Santa Fe Springs, as well as other facilities including an industrial laundry, a chemical formulator, a chemical supplier, and several beverage manufacturers. Ultimately though, the color source was again identified as the Tri-Star facility. The facility has a permitted industrial wastewater flowrate of 450,000 gpd. A green-colored discharge sample that corresponded with the color seen at the WRP, and in which the

hue of green was essentially identical to the WRP final effluent hue, failed the facility's 50:1 color dilution test limit. The facility was issued a notice of violation with two violations: failure to comply with the permit color limit and for discharge of colored wastewater negatively impacting WRP operations. IW inspectors continue to monitor the Tri-Star facility closely and encourage managers there to meet the color limit by controlling their wastewater generating operations and operating their color removal pretreatment system as required.

WNWRP Low Dissolved Oxygen Levels and Blue-Green Color

On Thursday, 3-17-22 at 0720 hours, Whittier Narrows WRP operators notified the IW Section that earlier that week for the previous 3-4 days WRP operators had been observing a light green/blue tint in the WRP. Additionally, and once again similar to several other reports from the WNWRP over the past several months (late in 2021, as well as last month on 2-23-22) the main cause of the notification call is the fact that they are observing dissolved oxygen (D.O.) levels in the secondary aeration tanks drop off periodically. It's unclear if the color observations and D.O. drops are related. Operators attribute the D.O. drops to industrial waste influent and requested IW inspectors investigate.

The light blue-green color at the WRP is almost certainly due to the color of portable toilet waste discharged during evening hours by the United Site Services facility in El Monte. Initially, IW inspectors were thinking that perhaps the highly variable strength flows from this same facility might also be causing the D.O. drop offs at the WRP, but recently uncovered information that the Thrifty Ice Cream plant in El Monte introduced new production operations making non-dairy based ice cream products indicate that may not be the case. Thrifty Ice Cream started this new production operation late in Fall 2021. Additionally, IW inspectors found that Thrifty Ice Cream is occasionally discharging high-strength concentrated waste from this new process to the sewer, and this may be the source of the WRP's D.O. issues. The investigation remains ongoing, but initial results of an FTIR scan analysis of a 3-21-22 sample of oily material from a scum layer in a WNWRP primary tank (see Figure 4) indicates a possible match to the vegetable oil used to make non-dairy ice cream products.



Figure 4: WNWRP primary tank skimmer. Note the brown oily material which was sampled and tested with FTIR scan analysis.

LCWRP Foam in the Effluent Forebay

On 3-17-22 at 1200 hours, LCWRP operators notified the IW Section that there was white foam in the primary effluent forebay (see Figure 5). It was stated operators had already increased defoamer addition to ensure no foam was being discharged to the river. Operators also calculated that the "soap" which caused the incident would have entered the plant around 0200 hours on 3-17-22 in order to have made it to the effluent forebay by 1100-1200 hours. Operators and IW responders went together to the receiving waters (the San Gabriel River) and verified no foam was present there.



Figure 5: LCWRP Final effluent forebay at 1230 hours on 3-17-22. Note the floating white foam.

A total of ten industrial users were inspected by investigating IW inspectors, but no likely source for the incident was identified. As the duration of the foam in the WRP forebay was limited it is likely that a small slug of foam causing material entered the WRP between 0000-0200 hours on 3-17-22. The material entered the plant and passed through the primary and secondary processes before the WRP was manned at 0700 hours and went unnoticed until it was in the forebay. The number of industrial users with the potential to discharge a slug of "soap" or foaming causing material at night is large. The industrial users with the highest risk to discharge such foam causing material were inspected. The IW inspection staff remains vigilant in looking for potential sources for this incident as they continue to investigate. No NPDES violation resulted from the incident.

JWPCP Black Sludge in the J.O. 'A' Headworks

On Friday, 3-18-22 at 1745 hours, JWPCP operators notified the IW Section that "black gelatinous goo" was coming into the JWPCP through the J.O. 'A' inlet and was collecting on the

bar screens and screenings compactor. There was no unusual odor associated with the material. A sample of the material was collected and saved for IW inspectors (see Figure 6).



Figure 6: Sample of the black sludge collected from the compacter skimmings by JWPCP operators on 3-17-22 at 1730 hours.

The IW inspection staff investigated two large upstream oil refineries as possible sources for the incident, the Phillips 66 Refinery Company, and the Valero Refining Company. Inspectors also spoke to JWPCP operators at the Secondary Treatment and Solids Processing units at JWPCP. On the day of the incident, a series of events took place at the JWPCP including a scheduled electrical shutdown, manual operation of the polymer feed pumps and flushing of the polymer system. The nature and time of these events corresponded to the incident. IW inspectors concluded that the incident was not caused by industrial dischargers and no further investigation is anticipated.

LCWRP Diesel Odor in the Influent Diversion Structure

On Thursday, 3-24-22 at 0800 hours, Los Coyotes WRP operators notified the IW Section that there was a diesel fuel odor detected in the influent diversion structure of the LCWRP on 3-22-22. The odor was detected by a construction crew that was opening the structure to prepare for the sewer bypass that is scheduled to begin in a few weeks. WRP operators thought that the diesel odor material was possibly entering the structure from a truck storage yard located approximately 2100 feet north of the WRP on the east side of Piuma Avenue near manhole F327. No samples of the wastewater with the odor, or of the headspace gas, were taken on 3-22-22, nor were any explosivity ("LEL") readings taken.

Investigating IW inspectors were unable to determine a source for this incident. Multiple inspections in the business park on Piuma Avenue just upstream of the influent diversion structure found no evidence that any industrial and commercial facilities there, including the truckyard mentioned by WRP operators, had discharged any diesel fuel or similar material into

the sewer. Additionally, IW inspectors monitored Districts' trunk sewer lines upstream of the WRP for explosivity or odors that could be associated with the report and then traced upstream if possible. However, no such evidence except for two LEL readings of 7 and 8% that quickly went to zero further upstream were noted. IW inspectors remain vigilant to this report.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF APRIL 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Fire at the Tesoro Oil Refinery in Wilmington

On Saturday, April 2, 2022 at 1540 hours, Long Beach Main Pumping Plant Alarm Center operators made the IW Section aware that at 1535 hours they had received a call from the Tesoro Wilmington Refinery (also known as the Marathon Wilmington Refinery) in which it was reported that the refinery had experienced a fire in one of their hydrogen units and had impounded the firewater from that event. The IW Section immediately called the refinery back for more information and it was further stated that a fire had broken out at 1300 hours in their Hydrogen Treatment Unit (HTU) #3. Firewater had been applied for about 90 minutes. Refinery managers were unsure how much firewater had been applied but said it had been impounded into tank 1000043. It was also reported that the firewater contained no foam or PFAS compounds, noting that the refinery no longer had any PFAS compounds onsite.

Senior IW Inspector Nat Pengphol arrived onsite at the refinery at 1705 hours on April 2, 2022 to follow-up. He confirmed that the facility had segregated and impounded all firewater generated from the incident as is required. All required wastewater monitoring equipment was observed to be functioning properly throughout the incident. No non-compliance issues were observed during the inspection and no operational issues were subsequently noted at JWPCP. No further actions were needed or conducted on this incident.

Whittier Narrows WRP Low Dissolved Oxygen Levels

On Wednesday, April 6, 2022 at 0730 hours, and again on Thursday, April 7, 2022 at 0715 hours, Whittier Narrows WRP treatment plant operators notified the IW Section that upon arrival at the plant on those mornings operators noted that the dissolved oxygen levels in the secondary aeration tanks had dropped off significantly for 3.5-4.0 hours beginning at 0100-0200 hours each day. These are the latest in a string of such observations that have occurred since late 2021. Operators are especially concerned because although the process air controllers run at maximum during these periods in response to the D.O. drop offs, secondary effluent ammonia spikes are occurring which are thought to be caused by the drop offs. Operators noted that the influent pH data indicated nothing unusual in the times leading up to the D.O. drop offs.



Figure 1: WNWRP trend data for 4/11/22-4/12/22. Note the dissolved oxygen drop offs in secondary aeration tanks.

Both day and night team IW inspectors have been working cooperatively to try to determine the cause of these incidents. Inspectors currently believe that high strength wastewater being discharged during the evening sanitation shift at the large Thrifty Ice Cream manufacturing facility in El Monte is the likely cause. The plant manufactures ice cream products which are sold at Rite-Aid pharmacies. They also co-pack ice cream products for other clients. The facility has an active IW discharge permit, #14576, to discharge 37,393 gpd of industrial wastewater, mostly from their cleaning and sanitation operations.

To try to prove conclusively that Thrifty is the cause of these incidents at WNWRP, operators and lab technicians at the WRP have, at the request of Supervising IW Inspector Andy Woods, set up a 24-hour sampler to collect hourly bottles of primary effluent which can be tested for chemical oxygen demand concentration upon request. Inspectors are attempting to correlate those results with COD sample results for samples taken immediately downstream of the Thrifty facility. Thrifty managers acknowledge that their wastewater is high strength but are skeptical that their facility is the source of the incidents at WNWRP. IW inspectors continue to investigate other possible sources for these incidents but have yet to identify any as being remotely likely. In addition, Thrifty managers are, at the suggestion of Senior IW Inspector Greg Neunsinger, now investigating the possibility of hauling the very high strength "high BOD" wastewater generated onsite to the JWPCP as part of the food waste recycling program in which high strength liquid food waste is put directly into the digesters at the JWPCP to increase methane gas production. Currently Thrifty hauls approximately 20,000-30,000 gallons of the waste per week, which is high in cream and fat content, to a facility in the Central Valley of California where it's sprayed onto animal feed as a high-calorie additive at cattle and hog feed lots. Thrifty has been experiencing problems with the waste being hauled on a timely basis and the cost of hauling it is also high, so having it hauled to the JWPCP for use there in the food recycling program could be a win-win in that the portion of this waste that is being periodically discharged to the sewer in El Monte will be stopped and thus no longer impacting WNWRP, and Thrifty will have a more reliable means of disposing of the waste.



Figure 2: The 10,000-gallon capacity high BOD waste tank at Thrifty Ice Cream which is referred to by company employees as the "pig tank".

JWPCP Elevated LEL in the J.O. 'D' Headworks

On Thursday, April 14, 2022 at 1645 hours, IW Night team inspectors were notified by JWPCP operators of an ongoing elevated LEL event at the J.O. 'D' inlet works. The LEL started trending upward at 1250 hours and spiked as high as 24%. In addition, a gasoline odor was reported to have been detected in the headworks. It was stated that plant operations were otherwise thus far unaffected. A sample of J.O. 'D' influent was collected by an operator.

Night team IW inspectors immediately responded to the report, arriving onsite at JWPCP at 1730 hours. Headspace gas readings taken at the J.O. 'D' inlet with a photoionization detector (PID) at the time of the incident indicated almost no volatile organic compounds (VOCs) were present, thus indicating the elevated LEL was from biogenic methane, not from an industrial source. Inspectors also investigated the gasoline odor that was reported in the J.O. "D" inlet and at the rag compactor area. Inspectors were unable to confirm the presence of the gasoline odor in the headworks and rag compactor areas. Furthermore, no gasoline odors were detected at the grit chambers and primary tanks. A WD-40 odor was detected in the southeast corner of the grit and screenings dewatering building where two bottles of the solvent were found. JWPCP managers later stated that the LEL level measured at the J.O. "D" inlet on the afternoon of April 14, 2022 fit within the normal diurnal trend and was unlikely to be caused by an industrial source. The

diurnal LEL pattern is typically caused by biogenic methane which is supported by the PID measurement noted above. Ultimately, although IW inspectors did inspect several possible industrial sources as part of their investigation, including a large petroleum refinery and a large natural gas storage facility, no industrial source was identified.

Tip of Illicit Discharges at Commercial Facility in Carson

On Monday, April 18, 2022 at 0847 hours, the Sanitation Districts received a citizen tip on the "fraud" telephone line alleging that illicit discharges of green-colored waste coolant, oil, and acetone were occurring at an industrial manufacturer of ceramic components for the aerospace and medical device industries that is located in Carson. The caller stated that the facility has been doing discharges of these waste materials into toilets for the past 40 years. He says most of the material being dumped is waste coolant. The information was forwarded to the IW Section for further investigation. The tipster was contacted later that day by IW inspection staff, and he confirmed his initial allegations.

IW inspectors arranged and conducted a joint inspection with Los Angeles County Fire Department Hazardous Material Specialists on Tuesday, April 26, 2022 at 0930 hours. The inspection did not reveal any evidence of illicit disposal of wastes as alleged. Facility managers claimed they were hauling the wastes offsite for legal disposal at hazardous waste roundup type facilities designed to collect such waste from residents; however, they were unable to provide any confirming written documentation. The Hazardous Materials Specialists have taken the lead on follow-up in this case and are requiring the facility managers to legally dispose of all hazardous wastes in the future. Although the facility does not require an IW permit, IW inspectors will conduct periodic inspections of the facility to ensure compliance with all such requirements.

JWPCP Excessive Black Solids at the J.O. 'A' Headworks

On Thursday, April 21, 2022 at 0352 hours, JWPCP operators contacted the IW Section and reported that starting at 0245 hours that morning black gelatinous solids had been coming in through the J.O. 'A' inlet and were collecting in the primary tanks' conveyance channel. The solids caused a level alarm to activate, but the material didn't have any particular odor and did not appear to be otherwise negatively impacting plant operations. A sample of the material was collected by operators.

IW inspectors responded to the call, arriving onsite at JWPCP at 0730 hours, at which time the gelatinous solids were still observable in the primary tanks. The material was very similar to solids observed on March 2, 2022 which were determined to be plant solids mixed with polymer used at the JWPCP in secondary operations. JWPCP secondary system operators noted that a scheduled maintenance activity late on April 20, 2022 at the waste activated sludge DAF station had included drainage of a DAF tank that contained polymer into the J.O.'A'/J.O.'C' inlet line. There is a strong correlation between the solids observed at the J.O.'A' inlet and the draining of DAF tank. This is the likely cause of the incident.

Investigating IW inspectors also inspected the large industrial users upstream of JWPCP on the J.O. 'A' and J.O. 'C' lines, including the Tesoro Wilmington, Phillips 66, and Valero Ultramar oil refineries. No issues were observed at the inspected industrial users and it appears unlikely an industrial user caused this incident given the information above.

Los Coyotes WRP Purple-Brown Color

On Thursday, April 21, 2022 at 1010 hours, the IW Section was notified by Los Coyotes operators that purple-brown colored wastewater was present at the influent pump station. At 1011 hours, a sample of the colored influent was taken at the pH monitoring box (see figure 5). Operators stated that no other plant parameters were affected although there was also a light brown color present in the secondary tanks. No discernible nuisance colors were reported in the final effluent forebay.



Figures 5 and 6: On the left is the LCWRP influent sample taken on 4-21-22 at 1011 hours. Note the deep purple-brown color. On the right is a sample of the wastewater being discharged that same morning by Tri-Star Dyeing and Finishing. Note the same color as was present at the WRP.

IW Inspectors responded to the report and went to upstream textile dyehouse Tri-Star Dyeing and Finishing. This facility dyes and washes textiles for the garment manufacturing industry. They operate under IW permit #17196 and are permitted to discharge 450,000 gpd of industrial wastewater to the sewer at a peak flowrate of 450 gpm. Tri-Star was quickly identified as the source of the color at the WRP and was issued a Notice of Violation for several violations including for causing the incident. Managers at Tri-Star did not dispute the violations, blaming a new pretreatment system technician for failing to properly treat the wastewater to remove the color. The facility was able to successfully reduce the amount of color in the discharge while the inspectors were onsite in order to come into compliance with the color limit. This facility has been the source of many such color incidents at the LCWRP over the past year and IW inspectors continue to monitor the facility closely. Fortunately, no NPDES effluent violations at the WRP resulted from this incident.

Possible Illicit Discharges Directly into a Trunk Sewer Manhole in Palmdale

On Thursday, April 21, 2022 at 1530 hours, The IW Section was made aware that City of Palmdale code enforcement officers had noticed what appeared to be illicit activities by a private company, Cal Stripe Inc., dumping wastewater directly into a Districts' trunk sewer manhole located at the intersection of 15th Street East and Blackbird Drive (MH 20 0100) near the U.S.

Air Force Plant 42 site in Palmdale. The City of Palmdale code enforcement officer who noticed the activity initially reported it to Districts' Palmdale WRP managers, who in turn notified the IW Section.



Figure 7: Photo provided by Palmdale Code Enforcement of a Cal Stripe Inc. worker discharging wastewater directly into MH 20 0100 at about 1500 hours on Thursday, 4-21-22.

An investigation of the reported activity by the IW Section revealed that Cal Stripe Inc. was discharging wastewater generated from washing the Plant 42 airport runways prior to the runways being repainted by Cal Stripe. This work is done every 2 years under contract to the Air Force and it results in an approximate month-long period where Cal Stripe Inc. has the need to discharge about 1500 gallons of wash water each day to the sewer. In order to accommodate this need, Cal Stripe Inc. applied for and was issued a 2-year Mobile Washer "discharge authorization" by the Districts' IW Section in August 2019, and then again in February 2021. Cal Stripe Inc. managers assumed the discharge authorization allowed them to access MH 20 0100 and discharge their wastewater there for an approximate 1-hour period each day. However, the Districts did not have the intent of approving this when the "mobile washer" discharge authorization was issued. Instead it was intended that Cal Stripe Inc would have to find a discharge location, a sewer manhole or other acceptable sewer structure, on the property of Plant 42 that could be used for the discharges. Ultimately it was decided by Districts' managers to allow Cal Stripe Inc. to finish the 2022 project and to continue to allow them to discharge into MH 20 0100 until the 2022 project was completed at the end of April 2022. This issue will then be revisited before the next 2-year discharge authorization is issued.

Los Coyotes WRP Blue-Green and Tea Color

On Thursday, April 28, 2022 at 1030 hours, the IW Section received a call from Los Coyotes WRP operators reporting that excessively blue-green colored wastewater was entering the WRP, as well as tea-colored water being present in the effluent forebay. Operators stated that the blue-green color was noticed in the pH influent box at around 1000 hours and the tea color at the forebay is just slightly darker colored than normal. A sample was collected at the pH influent box (see Figure 8).



Figure 8: LCWRP raw influent sample taken on 4-28-22 at 1005 hours. Note the blue-green color.

IW inspectors once again identified textile dyeing operation Tri-Star Dyeing and Finishing as the source of the highly colored influent at the WRP. In addition to identifying Tri-Star as the incident source, inspectors noted that someone at the facility had pre-dosed the required 24-hour sampler hourly bottles with small amounts of chlorine bleach in order to make the samples appear a much lighter color than the actual discharges the samples represent. This is technically "tampering" and is a very serious violation as it indicates the company is violating permit requirements and attempting to cover up those violations. The company was cited for 8 violations, including discharging excessively dark red/magenta-red colored effluent discharge, effluent discharge in excess of permitted peak flow limit, failure of qualitative color field color tests to determine excessive colored effluent, failure to maintain pretreatment and flow equalization systems, failure to maintain required effluent flow monitoring equipment, failure to maintain and collect representative samples in the permit required discrete hourly composite

sampler, failure to maintain the wastewater pretreatment logbook, and for being the source of the excessive color noticed at the WRP.

While Tri-Star managers continue to declare their intent to comply with all Districts' wastewater discharge limits and requirements, the actions observed on April 28, 2022 by the IW inspection staff run completely counter to those statements.

It is fortunate that there were no WRP NPDES effluent exceedances as a result of the incident on April 28, 2022, but the nature of the violations observed make it critical that further action be taken to do what is necessary to bring the Tri-Star facility into compliance.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF MAY 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Pumice Stone in the Main Street Relief Trunk Sewer in Gardena

On Monday, May 9, 2022 at 1448 hours, Districts' Sewer Maintenance reported to the IW inspection staff that they were encountering large amounts of pumice stone (see Figure 1) in the 24" diameter Main Street Relief Trunk in Carson at two siphon structures (MH 08 0122-0121 and MH 08 0105-0104) located about 6 miles north of the JWPCP. Although the crew reported they thought the material looked like it was from a concrete yard, it was immediately evident to the IW inspection staff that the material was almost certainly coming from one of the denim garment stonewashing facilities located in that area.



Figure 1: Pumice stone removed by Districts' sewer maintenance crews from two siphon structures in Carson on the Main Street relief trunk sewer on May 9, 2022.

Investigating IW inspectors quickly determined that the stones found at the two siphon structures were coming from Caitac Garment Processing Inc. in Gardena. This facility is permitted under IW permit 014860 and discharges 191,000 GPD of industrial wastewater. A facility inspection found that the facility's pretreatment system was not being adequately operated and maintained to keep pumice stones out of their discharge. The facility was issued a Notice of Violation for four violations of the *Wastewater Ordinance*. Facility managers noted that one source of the stones getting to the sewer was a broken valve they discovered in the stone removal pit. That valve has since been repaired. The managers stated they would increase the frequency of maintaining their pretreatment system and will also be installing additional screens in their collection system trenches to improve the efficiency of their pretreatment system. IW inspectors will monitor these efforts closely.

Whittier Narrows WRP Low Dissolved Oxygen Levels

On Friday, May 13, 2022 at 0713 hours, Whittier Narrows WRP operators notified the IW Section that the WRP had experienced another low dissolved oxygen (D.O.) concentration incident in the secondary aeration tanks. The event began at 1400 hours the previous afternoon on May 12, 2022. The D.O. concentration began dropping at 1400 hours, reaching 0.6 mg/l at 1800 hours, and then 0.48 mg/l at 2300 hours, before finally reaching 0.0 mg/l at 0130 hours despite the process air controllers (PAC units) running at their maximum rate (see Figure 2). The D.O. concentration remained at zero until 0400 hours at which time it started to recover. In addition to the low D.O. concentrations, WRP operators are observing ammonia "bleed through" in the secondary effluent ostensibly due to the low D.O. events. Note that this report is very similar in nature to a series of incidents at the WNWRP that have occurred since late 2021, with the most recent report prior to this being on April 7, 2022.



Figure 2: WNWRP control system screen shot showing dissolved oxygen levels in the secondary aeration tanks on May 12-13, 2022.

Investigating IW inspectors did not identify any likely sources for this incident after inspecting several upstream industrial wastewater dischargers. It was found that WRP operators had discarded the primary effluent samples for the overnight hours of May 12-13, 2022 and the samples were thus unavailable for chemical oxygen demand (COD) analysis as had been planned should these incidents occur. Inspectors are hoping to confirm that high COD wastewater is indeed entering the WRP during these incidents. IW Inspectors continue to monitor this situation closely.

Wastewater Spill at Tri-Star Dyeing and Finishing in Santa Fe Springs

On Tuesday, May 17, 2022 at 1918 hours, as night team IW inspectors were finishing an inspection at Tri-Star Dyeing and Finishing in Santa Fe Springs, a textile dyeing and washing

operation, they observed an ongoing spill of untreated plum-colored wastewater in the facility's parking lot and street gutter on Marquardt Avenue. The wastewater was observed to be flowing at a rate of about 5gpm for approximately 450 feet in the gutter.



Figures 3 and 4: Spilled plum-colored wastewater in the Marquardt Avenue street gutter in Santa Fe Springs on May 17, 2022 and a sample of that water.

The inspectors immediately notified both Tri-Star managers and the Los Angeles County Department of Public Works (LADPW) of the spill. Facility managers were able to promptly stop the spill and coordinate a containment and clean-up effort on the property and the public street. At 2033 hours an LADPW construction superintendent arrived at the scene and determined there was no impact to the county storm drain which connects further downstream to Coyote Creek. The spilled wastewater was determined to have originated from a malfunctioning filler valve on one of the jet dyeing machines. After shutting off and draining the malfunctioning dyeing machine, employees were able to contain and recover the spilled wastewater by using unfinished woven fabric and squeegees. The wet fabric and recovered wastewater were stored in two 55-gallon drums which were later manifested and properly disposed off-site. In addition, IW inspectors sent a referral to the City of Santa Fe Springs Environmental Protection Division to make them aware of the event.

Milky Wastewater in the Florence Interceptor Trunk Sewer in Norwalk

On Wednesday, May 25, 2022 at 1050 hours, Districts' sewer maintenance reported to the IW Section the presence of milky-colored wastewater with a "chemical" odor in the Florence Avenue Interceptor Trunk at manhole 18 A 0885 in Norwalk.



Figure 5: Annotated GIS map indicating the location of the observed milky-white colored wastewater with a chemical odor at MH 18 A 0885 and the location where calcium hydroxide solution is added at MH 18 A 0893 on a weekly basis to treat the J.O. 'F' trunk sewer line.

A review of the daily caustic dosing schedule by IW inspectors found that every Wednesday 3,450 gallons of 45% calcium hydroxide solution is dumped into manhole 18 A 0893 to treat the J.O. 'F' Trunk sewer via the Florence Avenue Interceptor Trunk. This is about a half mile directly upstream of manhole 18 A 0885 and was determined to be the source of the milky-white wastewater with a chemical odor that sewer maintenance crew reported. This information was conveyed to the Supervisor of the sewer maintenance crew and no further action was taken.

Saugus WRP Ragging

On Wednesday, May 25, 2022 at 1315 hours, Saugus WRP operators reported to the IW Section that the WRP was being impacted on a near daily basis by rags which cause influent pump failure, typically between the hours of 9:00 p.m. and midnight each evening. Operators stated that the rags appear similar to "mop heads" when removed from the pumps. Operators said that they would keep a sample of the rags for responding IW inspectors to examine.



Figure 6: May 26, 2022 Rags removed from Saugus WRP influent pumps.

The investigating IW inspector met with Saugus WRP operators the next day on May 26, 2022. Operators added to their initial report, stating that the rags have been an issue for the last few years, but more so for the past two weeks. Operators must physically remove the rags to get the influent pumps working again. Aside from the muffin monster, the back-up comminutor has been turned on to mitigate the rags and to prevent any overflows. See Figure 6 above for a photo of the rags after removal from the pumps. This "mop head" appearance is typical of the plastic "flushable wipes" that are now used by many people in both private residences and commercial operations such as nursing homes. Essentially, what is seen in the photo are partially shredded and intertwined wipes. There is no evidence that the wipes are coming into the plant through the Saugus Liquid Waste Disposal Station. IW inspectors are aware issues with these types of wipes at Districts' WRPs and pumping plant facilities but have little ability to prevent their use and sewer disposal by the community.

JWPCP Excessive Black Solids at the E3 Primary South Skimmings Unit

On Friday, May 27, 2022, at 0953 hours, JWPCP operators notified the IW Section that excessive black-colored solids were coming into the E3 South Primary Sedimentation Tanks. The incoming solids began affecting the E3 South Skimmings well around 0500 hours earlier that morning and were grayer colored than previous incidents.

IW inspectors from both day and night shift teams investigated this incident jointly but did not identify a likely industrial source. When shown a sample of the material Districts' sewer maintenance supervisors at the Compton Field Office stated that it looked like the sludge found at the bottom of the sewer line, not the hard grease that typically accumulates at siphon structures. That said, there were no known sewer or siphon cleaning events prior to the incident that appear likely to have caused it. Possible industrial sources inspected as part of this investigation included numerous large food product manufacturers upstream on the J.O. 'B' influent system in Vernon and Compton, however no likely sources were identified.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF JUNE 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Crude Oil Pipeline Leak in Montebello

On Friday, June 12, 2022, at 0815 hours, IW Inspectors noted a spill incident report entry on the California State Office of Emergency Services (Cal OES) hazardous materials spill website that an underground crude oil leak had been reported the previous afternoon at 1600 hours in Montebello. The incident report indicated that a pool of crude oil about 30' in diameter had resulted from crude bubbling up in Montebello Boulevard near the intersection with Roosevelt Avenue. Subsequently, it was learned that the incident was also reported by various local news sources including the Whittier Daily News and CBS Los Angeles.



Figure 1: CBS Channel 2 Skycam June 16, 2022, picture of the pooled crude oil.

IW Inspectors followed up by visiting the location of the spill at 0900 hours on June 16, 2022. Although the cleanup of the spill was essentially complete at that time, there were still representatives of the Los Angeles County Fire Department's Health/Hazmat Unit onsite observing as a crew was excavating and repairing a privately operated 8" diameter crude oil conveyance line located about 6' below the surface that was the source of the crude oil that bubbled up. Ultimately it was determined that the crude oil shown in Figures 1 and 2 did not reach a local sewer line manhole located close to the leak. Thus, there was no impact to the sewer system or Districts' operations from this event.



Figure 2: 6-16-22 photo taken by L.A. County Fire Department Health/Hazmat responders to the spill report. Note the local sewer line manhole and the fact that the spill did not reach the manhole.

JWPCP Excessive Solids at the E3 Primary North Skimmings Unit

On Monday, June 20, 2022, at 0625 hours, JWPCP graveyard shift operators reported to the IW Section that they had noticed excessive solids at the E3 Primary North Skimmings Unit. Operators sampled the floating material and gave that sample to IW inspectors for possible testing.

IW inspectors inspected all large upstream dischargers considered possible likely industrial sources for excessive solids at the JWPCP, but none were found likely to have caused the heavy solids loading at the JWPCP E3 skimmers. Additionally, the Long Beach WRP was inspected, and it was determined that there was no correlation between the dome cleaning activities being conducted there and the heavy solids loading at the JWPCP.

This incident is the latest in a string of reports of high solids and polymer-like material in JWPCP skimmings tanks reported over the past six months. An average of about one such incident has been occurring each month. IW inspectors have investigated each incident but have yet to identify any industrial sources as being a likely source(s). However, past investigations have revealed that one possible explanation for at least some of these incidents are times when solids binding polymer solution is discharged by the JWPCP solids processing unit into the JWPCP headworks due to unusual circumstances and/or failed valves and equipment. Any leak from the polymer blending station there may introduce the solids binding polymer into the JWPCP J.O. 'B' inlet. However, in this case no polymer leak was confirmed by JWPCP operators at any time near the time of the incident. IW inspectors continue to investigate these incidents.

Marina #3 Pumping Plant Sanitary Sewer Overflow

On Wednesday, June 22, 2022, at 2150 hours, Operators at the Districts' Long Beach Main Pumping Plant Alarm Center notified the IW Section that they were attempting to remotely shut off the industrial wastewater discharge from the Synergy Oil & Gas, LLC facility in Long Beach that discharges treated oil production field brine at a permitted rate of 493,000 gallons per day and an allowed peak flow rate of 429 gpm. The action was needed to help control a sanitary sewer overflow (SSO) at the Marina #3 Pumping Plant located downstream of the Synergy facility. According to the Alarm Center operator, the SSO occurred at approximately 2100 hours when he received an alarm indicating the wet well there had exceeded the maximum level. A pumping plant operator was immediately dispatched to the Marina #3 PP. He verified the ongoing SSO and determined the cause was from a pump air lock caused by pump cavitation. The pump was quickly returned to normal operation and the SSO stopped, resolving the SSO with minimal impact to local storm drains. However, there was concern expressed by the operators at the Alarm Center that the attempt to shut off the flow remotely at Synergy as is stated in their procedures as being accomplished by simply activating a switch at the Alarm Center, had failed. Alarm Center operators were able to contact the Synergy facility directly on the phone resulting in the facility beginning their procedures for the needed flow shut down. The need to complete the shutdown was cancelled shortly thereafter once normal operations resumed at the pumping plant and this was communicated to Synergy. However, again there was concern that the ability to remotely shut down the flow at Synergy was in fact not available to Alarm Center operators and follow-up on this issue was requested.

IW inspectors are aware of this issue and are working to ensure all parties have an understanding that the ability to shut down the Synergy flow remotely simply by activating a switch at the Alarm Center has never existed. What has existed is that activating the switch at the Alarm Center results in an indicator light at Synergy's control room lighting, indicating to Synergy operators that they need to cease discharge to the sewer as quickly as possible. This procedure to cease flow can take 30 minutes or more, as it requires oil production wells onsite to be shut down manually in advance of the flow to the sewer ceasing so that wastewater overflows at the Synergy site don't occur. It was also noted that the indicator light in the Synergy control room is poorly located such that it is easy for operators there to miss it. IW inspectors are now working closely with IW permit engineers, Synergy managers, and Districts' operations staff to ensure that all are aware of how to properly address the need to shut down flows from the Synergy facility in the future without the incorrect expectation that immediate flow cessation is possible simply by activating the switch at the Alarm Center as was stated in written procedures. New accurate instructions and procedures will be prepared and distributed as quickly as possible to all parties.

Los Coyotes WRP Red Color

On Sunday, June 26, 2022, at 0900 hours, The IW Section was notified by Los Coyotes WRP operators of a cinnamon red color entering the WRP around 0730 hours, operators noted the color was present throughout the plant with red color noted in the raw influent, secondary aeration tanks, and the final effluent forebay. Operators also reported that although the WRP was on reduced flows, there had been no indication that the red-colored influent had a high or low pH and that other than the color being noted, there were no adverse interferences with treatment plant operations. Operators noted that they had increased the chlorine dosing amount into the chlorine contact tanks to help remove the color.



Figure 3: LCWRP secondary effluent grab sample taken on June 26, 2022, at 0830 hours. Note the light pink color.

IW Inspectors responded to the report immediately, arriving at Los Coyotes WRP by about 0930 hours on June 26, 2022, to observe the color (see Figure 3 above) and then proceeding to the known main suspect for these types of incidents, textile dyehouse Tri-Star Dyeing and Finishing in Santa Fe Springs. The inspector arrived onsite at Tri-Star at 1035 hours and quickly determined that the facility was the source of the color incident at the WRP. This facility dyes and washes textiles for the garment manufacturing industry. They operate under IW permit #17196 and are permitted to discharge 450,000 gpd of industrial wastewater to the sewer at a peak flowrate of 450 gpm. The facility was issued a Notice of Violation for multiple violations including causing the incident. Managers at Tri-Star did not dispute the violations, which also included failure to operate the color removal system that is intended to allow compliance with the color limit imposed by the Districts. A reason for not properly operating the color removal system was not provided by Tri-Star managers. The facility was able to successfully reduce the amount of color in the discharge while the inspectors were onsite to meet their color limit. This facility has been the source of many such color incidents at the LCWRP over the past year and IW inspectors continue to monitor the facility closely. Fortunately, no NPDES effluent violations at the WRP resulted from this incident.



Figure 4: Photo taken on June 26, 2022, at about 1130 hours at Tri-Star Dyeing and Finishing. This is a bin of recently dyed deeply colored, red fabric that is representative of the kind of work that

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF JULY 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Spill at Frito-Lay, Inc. in Rancho Cucamonga

On Thursday, July 7, 2022, at 0130 hours, a representative of Frito-Lay, Inc. in Rancho Cucamonga called the Long Beach Main Pumping Plant Alarm Center and reported that his facility had a spill of an unknown material that went to the storm drain. The representative said he was calling the Sanitation Districts as part of their notification protocols. The information was forwarded to the IW Section at 0700 hours for further follow-up.

An IW inspector arrived onsite at the Frito-Lay facility at 0900 hours on July 7, 2022, to follow-up. Frito-Lay makes corn chips at this large facility. The facility operates under IW permit #14139 and is permitted to discharge 225,000 gpd of industrial wastewater to the sewer. Note that the wastewater from this facility is discharged to the collection system operated by the Inland Empire Utilities Agency (IEUA) which then conveys it to the L.A. County Sanitation Districts' collection system at the East End monitoring location in Pomona. The LACSD receives this wastewater under contract, along with other wastewater from other sources within the IEUA service area. This wastewater is ultimately conveyed to the JWPCP for treatment. Upon her arrival at Frito-Lay the inspector noted that the facility had shut down their industrial wastewater producing operations and was not discharging to the sewer. The contact stated that the previous evening an operator had noticed industrial wastewater flowing out of a clean-out upstream of the industrial wastewater collection pit. An unknown amount of this wastewater flowed off the property and out to the local storm drain system. The contact stated that an investigation found that a blockage was present in the line causing the overflow. The line was subsequently cleared, and normal production operations resumed later on July 7, 2022. The IEUA was made aware of the incident and required proper clean-up of the spilled material in the storm drain, which was conducted by T & R Environmental Services. T&R ultimately hauled offsite for disposal, approximately 60,000 gallons of nonhazardous wastewater contaminated with cooking oil from this incident. The incident did not result in any untreated industrial wastewater being discharged to the sewer system. No further action on this incident is anticipated.

Unknown Connections to MH B0005 In Carson

On Thursday July 7, 2022, the IW Section was notified by the Districts' Sewer Design Section of three possible illicit connections into MH B0005 in Carson just under a mile upstream of JWPCP. The connections consisted of a corrugated HDPE pipe entering from the northwest and a pair of 4" diameter PVC pipes entering from the southwest (See Figure 1). Sewer Design stated that they had already confirmed with the LACSD Engineering Counter that there was no record of any approved connections to the trunk line at that location. Additionally, it was stated that neither Compton Field Office Engineers nor representatives of adjacent industrial facilities Royal Truck Body and E&B Resources claimed to be aware of the connections. The IW inspection staff was requested to investigate the nature and origin of these connection lines.



Figure 1: May 3, 2022, photo of MH B0005.



Figure 2: GIS map showing the location of MH B0005 and nearby permitted industrial wastewater dischargers.

IW inspectors investigated the lines but were unable to determine the origin of the lines or any history of their purpose. Dye testing of nearby buildings and facilities indicated no flows from those facilities went into any of the 3 lines in question. All three lines will be cut and capped by the Districts' construction crews as part of the ongoing rehabilitation project of the J.O. 'B' trunk line.

Whitter Narrows WRP Low Dissolved Oxygen

On Tuesday, July 12, 2022, at 0724 hours, Whittier Narrows WRP operators again reported to the IW Section that there had occurred another low dissolved oxygen (D.O.) concentration event in the aeration tanks. There have been at least 6 similar incidents at the WRP since October 2021. It was stated that in this latest incident the D.O. concentration bottomed out at 0 mg/l at approximately 0030 hours earlier that morning (see Figure 3). The D.O. concentration remained at zero until 0145 hours at which time it started to recover. WRP operators noted that the plant D.O. concentrations were normal (uneventful) during the past 2 months but began to drop again overnight recently. The most recent similar incident at WNWRP prior to this one occurred on May 13, 2022. Operators also noted low dissolved oxygen concentrations on the night of July 8-9 but had not notified the IW Section. In addition to the low D.O. concentrations, WRP operators are observing some ammonia "bleed through" in the secondary effluent that is likely caused by the low D.O. condition.



Figure 3: OSI-PI graph of Whittier Narrows WRP operational data for the 24-hour period from approximately 1045 hours on 7-11-22 to 1045 hours on 7-12-22.

Investigating day and night shift IW Inspectors didn't identify any industrial source(s) as having evidence that they caused this incident. Nothing unusual was noted at upstream industrial wastewater dischargers that were inspected including the Thrifty Ice Cream manufacturing facility, the United Site Services portable toilet dumping facility, the Ted Levine drum reconditioning company, and the Dy-Dee Service diaper washing facility. IW Inspectors continue to monitor this situation very closely and are working closely with WNWRP operators and plant lab personnel.

La Cañada WRP White Color

On Monday, July 18, 2022, at 1320 hours, the IW Section received a call from the La Cañada WRP operator. He reported he'd observed white-colored wastewater in the raw channel entering the WRP for approximately 5 minutes earlier that morning at 1115-1120 hours. He stated he took a sample of the influent and diverted flow so that the unusual material would not impact plant operations. He also stated that field testing indicated the pH of the white-colored wastewater was "normal" and had no unusual odor.

He took the sample to San Jose Creek and left it in the sample refrigerator there for IW inspectors to see and possibly submit for analysis.



Figure 4: Photo showing a color comparison of "normal" plant influent at the La Cañada WRP vs. that seen when the white color was entering the WRP on 7-18-22.

Investigating IW inspectors were unable to determine a source for this very short duration incident. The lone non-residential source for wastewater entering the WRP, the La Cañada Country Club facility which includes a large kitchen, was found to have no evidence of having caused the incident. It is likely the incident was likely caused by a resident, though a drive through of the residential neighborhood upstream of the La Cañada WRP did not identify any obvious evidence of such activity. There were no negative impacts to the WRP, it's effluent, or districts facilities as a result of this incident.

Los Coyotes WRP Red/Tea Color and Elevated pH

On Sunday, July 24, 2022, at 0920 hours Los Coyotes WRP operators notified the IW Section that the WRP was seeing red/tea color and an elevated pH of 7.99 in the secondary treatment tanks. The pH had risen from just below the normal of pH=7.0 to 7.99 but there were no other treatment plant effects such as low D.O. in the aeration tanks. A sample of the colored wastewater at the WRP was collected for IW inspectors to see and possibly submit for analysis.



Figure 5: Secchi disk indicating the light red/tea tint in the secondary effluent at Los Coyotes WRP at 1015 hours on July 24,2022.

IW Inspectors responded to the report immediately, arriving at Los Coyotes WRP at 1000 hours on July 24, 2022. The source of the incident was once again the Tri-Star Dyeing and Finishing facility in Santa Fe Springs. This facility operates under IW permit #17196 and is permitted to discharge 450,000 gpd of industrial wastewater to the sewer at a peak flowrate of 450 gpm. The facility was issued a Notice of Violation for causing the incident. The contact at Tri-Star did not dispute the violation but did state that they are "trying hard" to meet the color limit. This facility has been the source of many such color incidents at the LCWRP over the past two years and IW inspectors continue to monitor the facility closely. No NPDES effluent violations resulted from this incident.

Polypropylene Glycol Spill at Gilead Sciences in La Verne

On Tuesday, July 26, 2022, at 1108 hours, a representative of Gilead Sciences, Inc. in La Verne notified the IW Section and that their facility had lost approximately 500 gallons of 30% propylene glycol solution used in a heat exchanger directly to the sanitary sewer. He stated a head-gasket seal in the exchanger failed, causing the material to flow into a floor drain on the second floor of building L10. It was stated the release occurred at about midnight earlier that same day before operators noticed it and stopped the leak. The material has a light green "lime" color and is mildly alkaline (pH=9-10) but is otherwise non-toxic.



Figure 6: 7-26-22 photo of the heat exchanger and adjacent floor drain at Gilead Sciences.

IW inspectors arrived onsite to follow-up on the spill report at 1450 hours on July 26, 2022. The facility manufacturers pharmaceutical products, operates under IW permit #21805 and is permitted to discharge 46,500 gpd of industrial wastewater to the sewer at a peak flowrate of 177 gpm. The initial details of the report were confirmed. An estimated 1 gallon of residual spilled ethylene glycol was absorbed with clean-up towels by operators and the towels, along with about 10 gallons of clean-up water, were disposed of as hazardous waste. There were no negative impacts to any downstream sewers or treatment facilities from this spill. The issue of spill containing the heat exchanger was examined but rejected due to concerns expressed by Gilead managers that this could result in spills penetrating the floor and leaking down to the first floor. Given the non-toxic nature of the material no spill containment was required, and no further action is anticipated.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF AUGUST 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Whitter Narrows WRP Low Dissolved Oxygen

On Monday, August 1, 2022, at 1032 hours, Whittier Narrows WRP operators notified the IW Section that the dissolved oxygen (D.O.) concentration levels in the secondary aeration tanks had dropped to 0.12 mg/L. No unusual material was noticed in the raw influent by operators other than an increased amount of floating solids in the primary effluent tank. A grab sample of some of this floating material was taken by operators for possible testing.



Figure 1: WNWRP aeration tank dissolved oxygen levels and process air addition rates on August 1, 2022, for the 8-hours period between 0448 hours and 1248 hours. Note the steep drop in D.O. concentration that started just before 0900 hours.

This is at least the seventh such low D.O. incident at the WNWRP in the last 10 months. Despite an extensive effort by IW inspectors to determine a source for these incidents, no definitive source has been identified. While IW inspectors initially identified high strength dischargers Thrifty Ice Cream and United Site Services in El Monte as possible sources, no data correlating discharges from those facilities that could have caused these incidents has been found or developed despite extensive effort to do so. IW inspectors remain extremely vigilant to try to locate and identify the source(s) of these incidents and the investigation remains ongoing.

Red Color in J.O. 'F" Manhole in Cerritos

On Tuesday, August 2, 2022, at 1452 hours, Los Coyotes WRP operators notified the IW Section that Districts' Construction Management Section personnel working on a sewer relining project just north of Los Coyotes WRP had noticed burgundy, red-colored wastewater in manhole F 0255 on the J.O. 'F'- Unit 4 Relief trunk sewer in Cerritos (See Figure 2). The construction management workers were concerned the color could present an issue at the WRP. There were no odors or sheen associated with the colored wastewater.



Figure 2: Burgundy-colored wastewater in MH F 0255 on August 2, 2022.

IW inspectors responded immediately, observing the colored wastewater in the manhole and noting that the flow in this line bypasses Los Coyotes WRP, so there was no concern about the color impacting the WRP. The colored wastewater was found to have originated from normal textile dyeing operations at Super Dyeing LLC in Santa Fe Springs (see Figure 3), but the color does not currently present an issue at JWPCP.



Figure 3: Burgundy colored wastewater being discharged By Super Dyeing LLC on August 2, 2022.

Los Coyotes WRP Low pH

On Friday, August 5, 2022, at 1505 hours, Los Coyotes WRP operators notified the IW Section that at 1448 hours the influent pH dropped below the alarm set point of 6.5 for approximately 5 minutes, dropping to a pH of 6.39. A sample collected by operators was measured at pH=6.48 by the plant lab. Operators reported that the raw influent looked normal during the pH drop and that the WRP was operating normally at 20 MGD.

IW inspectors investigated the most likely sources for this short duration incident but did not identify a source. They remain vigilant to identifying the source as part of their normal inspection activities.

Possible Illicit Discharge Directly into a Districts' Manhole in Carson

On Tuesday, August 9, 2022, at 1354 hours, the IW Section was notified by the Districts' Construction Inspection Section that earlier that day at about 1030 hours a contractor working for the Districts near the intersection of Figueroa Street and Sepulveda Boulevard in Carson had noticed someone opening what appeared to be a sewer manhole located near the southwest corner of the intersection, possibly MH D 0146. It was stated the person observed, possibly a plumber, had used a portable pump to discharge unknown liquid material into the manhole. The line feeding into the pump

appeared to be coming from a business located nearby. The Districts' construction inspectors who received the initial report from the contractor arrived onsite at approximately 1050 hours but did not observe the discharge occurring. However, they did close the manhole cover where the dumping was observed. The construction inspectors first reported what had been observed to the Compton Field Office (CFO), who advised them to call the Industrial Waste Section for follow-up.

On August 9, 2022, investigating IW inspectors determined that the manhole where the possibly illicit discharge was occurring is not owned by the Districts, but instead is a private small sewage lift station that feeds into the adjacent Districts J.O. 'D' Unit 1E Relief Trunk sewer line about 75' upstream of MH D 0225 (See Figure 4). The lift station belongs to the plaza/strip mall property owner on the southwest corner of Figueroa Street and Sepulveda Boulevard. The lift station pump failed causing a back-up of sanitary sewage into the night club's restroom, which the plumber was hired to address. There was no evidence found of an illicit discharge; visual observation of wastewater in the lift station access manhole did not show that the wastewater there had any suspicious characteristics. The plaza, of which the nightclub is part, suffers from frequent plumbing back-ups due to failures of the lift-station pump. Further investigation by the IW inspection staff on August 10, 2022, determined that the lift station was again not operating properly, resulting in a small sanitary sewer overflow (SSO) from the lift station which was cleaned by a Districts' sewer maintenance crew. The plaza owner was notified of the lift station failure and repairs were made the following weekend. The lift station pump failed again on August 15, 2022, and another small SSO occurred. City of Carson Code Enforcement is now the lead agency on this situation, and they have been utilizing the Los Angeles County Department of Public Works as the primary responder for these further SSOs. The plaza owner is now aware that it is his responsibility to clean up the overflows on his property and to properly maintain the lift station.



Figure 4: Diagram showing the private lateral sewer line that flows from the strip mall/plaza to J.O. 'D' Unit 1E via a private sewer lift station.

Los Coyotes WRP Low Dissolved Oxygen

On Tuesday, August 9, 2022, at 2330 hours, Los Coyotes WRP operators notified the IW Section that a low dissolved oxygen concentration event was occurring in the secondary aeration tanks. Operators stated that the dissolved oxygen concentration started to trend downward earlier that afternoon at about 1625 hours. An initial downward trend at that time is normal, however it never climbed back up and had bottomed out at 0.66 mg/l in the first pass of Unit 3 and 1.0 mg/l in Unit 2 at 2330 hours. In addition, ammonia concentrations in the secondary effluent were elevated, measuring 7.0 mg/l and climbing at 2330 hours.

Investigating IW inspectors responded immediately that evening and determined that the primary cause of the of the incident was an unpermitted discharge of highstrength wastewater at the Shasta Beverages, Inc. facility in La Mirada. This facility primarily bottles carbonated soda beverages and is permitted to discharge 163,151 gpd of industrial wastewater under IW permit #15351. Shasta managers reported that earlier that day on August 9, 2022, a 10,000-gallon tank that usually holds off-spec beverages had accidently overflowed directly to the sewer via their industrial wastewater clarifier for at least several hours. Normally this high strength material is hauled offsite for use as an animal feed additive. Shasta Beverages was issued a Notice of Violation for the improper discharge which caused the incident at the WRP and has taken steps to prevent its recurrence. The WRP's dissolved oxygen and ammonia levels eventually recovered by the early a.m. hours of August 10, 2022, and normal operations resumed. No NPDES violations resulted from the incident.

JWPCP Gritty Solids at the Headworks

On Friday, August 26, 2022, at 0940 hours, JWPCP Primary Control operators reported to the IW Section that gritty material was coming into the plant headworks through the J.O. "A" and J.O. "D" influent line. The material was noticed at 0930 hours and described as "gritty and sand-like, almost like fertilizer". A sample was collected by operators and saved for IW inspectors in sample receiving (see Figure 5).



Figure 5: JWPCP North Screw Compacter 2 on August 26, 2022. Note the unusual gritty consistency of the material.

Investigating IW inspectors examined the solids sample and noticed that in addition to its being brown and gritty, it was also greasy. Due to the gritty texture inspections were conducted at two denim stonewashing facilities that generate large amounts of sand in their industrial wastewater flow. Typically, this sand is easily removed from the wastewater prior to discharge. However, one of these facilities did discharge enough sand to cause sewer maintenance crews to find it built up in a J.O. 'D' trunk line sewer siphon structure in May 2022. Inspections on August 26, 2022, found no evidence that either of the denim stonewashing facilities had lost the material that had appeared at the JWPCP headworks. Additionally, inspectors inspected the Districts' Liquid Waste Disposal Station (LWDS) at the JWPCP. The station discharges into the J.O. 'A' trunk line. It was found that at 0903 hours that day the station had received a 5,500-gallon load of food waste slurry generated by the Puente Hills Materials Recovery Facility (MRF). This load of food waste slurry matched the unusual material that was reported in the headworks, being brown colored and greasy, with many small, gritty food crumbs present. There was a strong correlation between the time of the load being dumped at 0903 hours and the JWPCP operators observing the brown gritty material entering the headworks at 0930 hours. IW inspectors concluded that this waste food load was the source of the incident, and no further action is anticipated. The unusual load did not cause operational issues at the JWPCP.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF SEPTEMBER 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Fire at the Tesoro Wilmington Oil Refinery

On Friday, September 9, 2022, at 1444 hours, the Tesoro Wilmington Refinery reported to the Sanitation Districts that they had experienced a small fire in their coker unit and had used an unknown amount of firewater to put out the fire. The facility is a large petroleum refinery located in Wilmington upstream of the JWPCP. It is one of the largest industrial wastewater dischargers in the Districts' service area and is permitted to discharge 3.1 MGD at a peak flowrate of 10,000 gpm. Refinery environmental compliance representatives stated that the fire had occurred at 1355 hours earlier that afternoon and that the firewater had not been impounded, but instead, due to its relatively limited volume and limited contamination levels, sent to the pretreatment system for treatment and discharge with their normal flow. In a follow-up call from the refinery at 1548 hours it was reported that the amount of firewater generated from the incident was 8100 barrels (340,000 gallons) and that no foam had been used to extinguish the fire.

Districts' night team IW inspectors arrived onsite at the refinery to follow-up the report at 1740 hours on September 9, 2022. The information regarding the fire as reported earlier by refinery personnel was confirmed, i.e., that a fire had occurred in the "DCU" or delayed coker unit. Also confirmed were the facts that no foam had been used and that although typically such firefighting water is diverted into a slop holding tank, in this instance the firefighting team initially sent it to the facility's pretreatment system since they deemed it as "clean" enough for treatment. However, the contact stated during the inspection that in an abundance of caution he had shortly after notification decided to intercept the firewater flow and impound it into a storm water tank so that it could be tested to confirm it was acceptable for treatment and discharge to the sewer. It was also stated that the volume of firewater generated was about 200,000 gallons (900 gpm x 3.5-4 hours). At the time of the inspection the refinery was not discharging wastewater, with the flow chart indicating that the most recent discharge had occurred prior to 0800 hours that day due to unrelated routine line cleaning operations. A subsequent inspection conducted on September 16, 2022, found no evidence that the incident resulted in any exceedance(s) of discharge limits or caused any issues in downstream Districts' facilities.

San Jose Creek West WRP Red Color

On Wednesday, September 14, 2022, at 0955 hours, operators at the San Jose Creek West WRP reported to the Industrial Waste Section that there was red color in the primary channel at the SJC West WRP and that the colored wastewater was still coming in. IW staff requested that the operators collect samples of the red-colored wastewater if possible. The incident lasted about 15 minutes and operators stated that this kind of incident typically occurs about once a quarter at the WRP.



Figures 1 and 2: Sample on the left is that taken from the primary channel at SJC West WRP at 1000 hours on September 14, 2022, and that on the right is a sample of wastewater taken from the batch treatment tank at Danco Anodizing on September 14, 2022, at 1030 hours. Note the light red tint in the WRP sample and the similar, but much darker color in the Danco sample.

Investigating IW inspectors responded immediately and quickly determined that the source of the incident was Danco Anodizing, a medium-sized metal finishing company in Arcadia that does aluminum anodizing on a wide variety of parts. The facility is permitted to discharge 34,820 GPD of industrial wastewater. Anodizing operations at Danco can include dyeing parts utilizing dyes similar to those used in the textile processing industry. The Danco facility's required batch discharge log indicated that they had recently treated and discharged wastewater containing spent red dye. It was noted that the batch treatment process didn't include trying to remove the color. A follow-up inspection was conducted on September 21, 2022, and a verbal warning was issued for causing the color at the WRP. Danco managers stated that until September 14, 2022, they were unaware that such colored discharges could present an issue to the Districts and that moving forward they would use a bleach addition during the batch treatment process when the wastewater appeared highly colored to prevent any recurrence of this kind of incident at the downstream WRP due to their discharge. Ultimately the incident did not result in any noticeable color in the WRP's final effluent and no NPDES violation occurred.

Whitter Narrows WRP Low Dissolved Oxygen

On Friday, September 16, 2022, at 0708 hours, and then again on Thursday September 22, 2022, at 0930 hours, Whittier Narrows WRP operators notified the IW Section that the dissolved oxygen (D.O.) concentration levels in the secondary aeration tanks had dropped off significantly. The first report indicated that the drop had occurred for a 14-hour period beginning at 1500 hours the previous afternoon, reaching zero by about 1700 hours and then not recovering fully until 0500 hours the next morning on September 16, 2022 (see Figure 3 below). The second D.O. drop was much shorter in duration and started at 0800 hours on the 22nd with D.O.'s reaching a low of 0.5 mg/L at approximately 0915 hours that morning. In both incidents WRP operators stated that the plant's blowers had been running at 100% throughout that time periods and that it was believed a large amount of high-strength wastewater had entered the plant causing the incidents, though nothing unusual was noted visually in the primary effluent other than a slight green color in some of the buckets on the 16th. IW staff requested on September 22, 2022, that primary effluent grab samples be taken while the incident was still ongoing, hoping to confirm the presence of high strength wastewater that could help lead to source determination. It is noted that these reports are very similar in nature to a similar series of incidents at the WNWRP that started occurring in late 2021 and now throughout 2022, with the most recent incident occurring on August 1, 2022.



Figure 3: WNWRP aeration tank dissolved oxygen levels and process air addition rates for the 24-hour period between 1145 hours on September 15, and September 16.

Despite an extensive effort by IW inspectors to determine a source for these incidents, no definitive source has yet been identified. While IW inspectors initially identified high strength dischargers, Thrifty Ice Cream and United Site Services in El Monte as possible sources, no data correlating discharges from those facilities that could have caused these incidents has been found or developed despite extensive effort to do so. Though the light green color noted is almost certainly came from the wastewater being discharged by United Site Services, a portable toilet dumping operation. Inspectors believe the color and the high strength appear to be unrelated. The C.O.D. sample results for two grab samples of primary effluent taken during the September 22,2022, incident tested at essentially normal concentrations of 331 mg/L and 358 mg/L. Inspectors remain extremely vigilant to try to locate and identify the source(s) of these incidents and the investigation remains ongoing.

IW inspectors are working closely with both WRP operators and laboratory personnel. IW inspectors have requested that a 24-hour composite sampler, which will collect twelve 2-hour buck samples, be installed in October so that if another similar incident occurs a profile of the C.O.D. concentrations of all 12 samples can be obtained to verify that the wastewater causing these incidents is in fact high-strength.

San Jose Creek East WRP White Foam

On Friday, September 30, 2022, at 0820 hours, San Jose Creek East WRP operators reported to IW Section staff that excessive white foam was rising out of raw influent channel 1 at the WRP. The foam was noticed during routine morning rounds and was rising out from the cover plates at the far east end of raw influent channel 1. The foam spilled onto adjacent galleries, walkways, and paved areas (see Figures 4 and 5 below).



Figures 4 and 5: White foam at the San Jose Creek East WRP at 0830 hours on September 30, 2022.

It was determined by IW inspectors and WRP operators that the foam was the result of a cationic polymer spill at the WRP that occurred during a routine transfer operation at 0400 hours on September 28, 2022. The spill was washed from the floor of gallery 3 into drains that flow to a sump in gallery 1 that is then pumped to influent channel 1. Since primary tanks 1 and 2 were out of service at the time of the spill the polymer likely settled in the stagnant influent tank and turned to foam when air was later introduced. IW inspectors concluded their investigation once this determination of the incident cause was made.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF OCTOBER 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Fire at the Torrance Refining Company

On Tuesday, October 11, 2022, at 1600 hours, the Torrance Refinery Company LLC reported an ongoing fire at the refinery to the Long Beach Main Pumping Plant Alarm Center (LBMPP AC). This information was immediately forwarded to IW inspectors. The IW inspectors Night Team called the refinery back for more information and were informed that contractors at the refinery had been in the process of rehabbing an old empty petroleum storage tank located in the northwest section of the refinery that had been out of service for 7 years. Shortly after commencing torch cutting on the top of the tank at 1500 hours that afternoon, white smoke was observed emitting from the open manways at the bottom of the tank. Refinery firefighters responded by dowsing the tank with firewater and were still dowsing the tank at 1600 hours when the Districts were notified. Refinery contacts stated that no hydrocarbons were detected in the tank prior to the cutting and that hydrocarbons were not expected to be present in the firewater. It was stated the firewater did not contain any firefighting foam (AFFF), It would be held for the time-being in the tank where the fire occurred and was likely suitable for eventual treatment in the refinery's API pretreatment system. The contacts stated that there had been no interruption of discharge at the Van Ness outfall (IW #21899) and that all effluent monitoring systems were in operation. Note that the Torrance Refining Company LLC is a large oil refinery in Torrance upstream of the JWPCP that is permitted to discharge a total of approximately 6 MGD of industrial wastewater at two permitted industrial wastewater outfalls, of which the Van Ness outfall is the larger at about 5 MGD.

Two inspections were performed by IW inspectors in response to this incident: one immediately following the report at 1755 hours on October 11, 2022, and the other at 0910 hours the next morning. The inspections determined that the small "smoldering" fire in the storage tank that was being rehabilitated was put out with a relatively limited amount of firewater (<5000 gallons) which contained no firefighting foam, i.e., AFFF which may contain PFAS compounds. The firewater was contained and later sent to the refinery's pretreatment system, where it was treated and discharged with no adverse impacts to discharge quality or exceedance of any limits. The Districts were not adversely impacted by this incident.

Anonymous Tip Regarding Cacique Inc. in the City of Industry

On Tuesday, October 11, 2022, at 1500 hours, an IW Section staff member received a voicemail message from an anonymous tipster stating that Cacique Inc. had turned off their pH adjustment system pumps for the previous 2 weeks and were no longer properly treating the wastewater and was violating their effluent discharge limits. The message was received at 0915 hours on Thursday, October 13, 2022. The information was then forwarded to the IW inspection staff.

An IW inspector arrived onsite at 1200 hours on October 13, 2022, to follow-up on the tip. Cacique Inc is a manufacturer of soft cheese products and is permitted under IW permit #10898 to discharge 232,000 GPD of industrial wastewater. During the inspection it was found that the recirculating pump that feeds the pH probe wastewater was out of service. The effluent pH probe was thus sitting in stagnant water, which explained why the inspector noted that recorder had been reading 6.6 constantly for the previous week. The facility had been annotating the pH recorder chart daily, but the technician doing so was simply reading the display and recording that number. When the inspector checked the pH at the legal sample point, it measured a compliant 9.04 while at the same time the facility's recorder was still reading 6.6. A Notice of Violation (NOV) was issued for failure to maintain the pH meter/recorder. The facility was required to keep an hourly log of pH until the system was functioning properly. Also, at the time of inspection it was noted that the chemical addition control for the automatic wastewater pH neutralization system had been switched off, confirming the tipster's statement. The contact claimed he was unsure why the system had been switched off. He was reminded that although the wastewater pH was in compliance with the pH limit at the time of the inspection, it was recommended that the neutralization system be operated as designed, i.e., switched on. Follow-up inspections will be conducted to help ensure the facility meets all permit requirements in the future.

Fire at the Torrance Refining Company

On Tuesday, October 18, 2022, at 2100 hours, the Torrance Refining Company LLC called the LBMPP AC and reported that the refinery was impounding fire suppression water. No further details were provided. Alarm Center operators notified the IW Section of the call and Night team inspectors attempted to call the refinery back for more information but were unable to immediately reach anyone.

IW inspectors responded to the refinery immediately, arriving onsite at 2146 hours on October 18, 2022. It was determined that at 2000 hours earlier that evening the facility had experienced a leak in the alkylation unit which caused the use of a large amount of firewater to suppress the vapor/fume leak to minimize the chances of a large fire breaking out and/or the release of toxic hydrofluoric acid (HF) fumes. Refinery managers ceased discharging to the sewer during the event to facilitate impounding the firewater into a large 250,000-barrel (10.5 MG) holding tank onsite. Review of records confirmed the refinery began impounding flow at 2030 hours. Review of monitoring equipment records, and observation of the samples of wastewater being discharged leading up to the impounding, indicated the refinery was meeting all discharge requirements and limits with no evidence of gross abnormalities noted. Ultimately the refinery impounded approximately 1.7 MG of contaminated firewater mixed with normal production wastewaters from this incident. Of that amount, operators estimated 690,000 gallons was from suppressing the vapor leak. The impounded water was later treated and discharged beginning at 0930 hours the next day (October 19, 2022). Records indicate the wastewater when discharged was in compliance with all limits and requirements at the Van Ness outfall. There is no evidence this incident caused or contributed to the elevated explosivity incident at the JWPCP that occurred in the early a.m. hours on October 19,2022, (see notes below).

JWPCP Elevated Explosivity in the Secondary Reactors

On Wednesday, October 19, 2022, at 0550 hours, JWPCP operators notified the IW Section that secondary reactors were experiencing elevated explosivity concentrations and had both alarmed and purged. The reactors alarm at 20% LEL and then automatically purge headspace gases to the atmosphere when the LEL reaches 25%. Operators were concerned that the cause was industrial waste entering the plant. IW inspectors requested that JWPCP operators collect inlet works samples in the hope of identifying the material/compounds that caused the elevated explosivity levels. Additionally, JWPCP operators reported the following day at 0800 hours that a hydrocarbon odor and unusual clarifier skimmings were persisting in the plant (See Figure 1).



Figure 1: Unusual clarifier skimmings at JWPCP secondary tanks on October 20, at 0800 hours that appear to contain a petroleum sheen.

IW inspectors responded to the incident report immediately at 0630 hours on October 19,2022. It was noted that wastewater entering the inlet works and effluent grit chambers prior to the report had caused no elevated explosivity in headspace gases according to JWPCP instrumentation, i.e., LEL monitors. Wastewater samples collected at primary operations locations and secondary reactor headspace samples appeared normal with no indication of petroleum related materials or oily characteristics. No petroleum odors were noted at the inlet works or secondary reactors by responding inspectors until the next day when inspectors agreed with operators that there was a light petroleum odor in the reactor headspaces, though photo ion detector (PID) testing and mixed liquor sample testing found no evidence of elevated levels of petroleum related compounds there. That said, inspectors do believe something with petroleum range organics did enter the plant, causing the incident, it was just not picked up by the methods outlined above.

The IW investigation included reactor headspace sampling and return sludge sampling noted above, as well as performing inspections at all major oil refineries and several other IW dischargers with the potential to discharge wastewater with high explosivity that could have caused or contributed to the incident. All inspected dischargers appeared to be operating normally with exception of the Ultramar Inc. dba Valero Wilmington Refinery, a large oil refinery in Wilmington permitted to discharge 1.4 MGD under IW permit #16421. The inspection there found that the refinery stopped discharge at 1625 hours on October 18, 2022, due to an internal finding that their discharge to the sewer was out of compliance with their oil and grease limit of 75 mg/L. By permit requirement, the refinery is to collect wastewater discharge samples every hour and make these samples available to IW inspectors upon request for a period of 24 hours. However, when inspectors arrived onsite and requested those samples from the previous 24 hours, refinery operators said they were unavailable, claiming that all of them had already been "composited" together into a single sample, which was found to be effectively useless in determining whether or not the refinery had met with 75 mg/L oil and grease limit or contained anything else unusual which could have caused the incident at the JWPCP. IW inspectors issued an NOV to the refinery for failing to meet permit requirements, including that their required explosivity monitoring device at the IW outfall was also found non-functional on October 19,2022. Ultimately, IW inspectors concluded that it was very likely the Ultramar refinery caused the incident at the JWPCP, though they lacked the hard evidence to support the issuance of an NOV for that. The Ultramar facility's environmental compliance managers were informed that the Districts believed a slug of off-spec discharge occurred at the facility and that it likely caused the JWPCP incident. The managers did not contest this. They were advised to ensure all permit requirements are met moving forward, and to review internal procedures to prevent another off-spec discharge and inappropriate handling of the required hourly samples discussed above. IW inspection staff will follow up to help ensure the company meets these requirements.

Los Coyotes WRP Red Color

On Tuesday, October 25, 2022, at 1015 hours, Los Coyotes WRP operators reported to the IW Section that red color had just been noticed in the primary effluent. Operators reported that plant influent pH was normal, dissolved oxygen levels in the secondary aeration tanks were normal, and that there were no other plant conditions at the time of the report, but that operations would monitor the plant and inform IW if there were any NPDES violations due to the incident.



Figure 2: Red color in the primary effluent channel at LCWRP at 1010 hours on October 25, 2022.

IW inspectors responded immediately to the report and were able to quickly determine that the source was again the Tri-Star Dyeing and Finishing textile processing facility in Santa Fe Springs that is permitted to discharge 450,000 GPD under permit #17196. Inspection of the facility found red colored fabric, as well as red colored wastewater on the ground. Examination of production logs indicated the timing of the red colored dyeing operations put the red colored discharges from those operations within the travel time window to LCWRP such that they caused the plant incident. The investigation also found Tri-Star's permit required automatic sampler to be non-functional and effluent flowmeter not recording a legible flow reading. An NOV was issued for four violations that included causing the red color incident at the treatment plant, as well as failure to meet permit requirements, including properly operating and maintaining effluent monitoring and sampling equipment. Tri-Star representatives were reminded of their responsibility to comply with permit requirements and a copy of the NOV was emailed to the plant manager. This facility has been the source of many such color incidents at the LCWRP over the past two years and IW inspectors continue to monitor the facility closely as they attempt to try to ensure the facility meets its permit requirements. No NPDES effluent violations resulted from this incident.



Figure 3: Photo taken on October 25, 2022, at Tri-Star Dyeing and Finishing showing some of the red fabric being dyed/processed that day.

High Explosivity in the Signal Hill Outfall Trunk Sewer

On Thursday, October 27, 2022, at 1220 hours, IW inspectors detected 40% LEL in the headspace of MH 29 0025 on the 12" diameter Signal Hill Outfall Trunk. Inspectors noted this manhole receives wastewater from a large oil well field operated by Oil Operators located 2 blocks north from MH 29 0025. The Oil Operators facility is permitted to discharge 304,000 GPD of waste brine under IW permit #14694.

The investigation determined that the elevated explosivity in headspace of MH 29 0025 was due to an increased flow at the Oil Operators facility. The facility had temporarily increased their industrial wastewater discharge rate. However, the air sparging unit used to remove petroleum compounds from the wastewater prior to discharge was unable to completely pretreat the wastewater to the degree required to remove all the explosivity causing compounds, causing the elevated explosivity levels measured at MH 29 0025. An NOV was issued to Oil Operators. IW inspectors will follow up at both Oil Operators and MH 29 0025 to monitor combustible gas levels.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF NOVEMBER 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Owens-Brockway Glass 1-Time Rainwater Discharge Request

On Tuesday, November 8, 2022, at 1028 hours, during an ongoing rainstorm in Southern California, the Owens-Brockway glass plant in Vernon called the IW Section and requested that the facility be allowed to immediately start discharging approximately 174,000 gallons of impounded rainwater at a flowrate up to 800 GPM. The rainwater was impounded onsite over the previous 10 hours. It was stated that the water impounded from the storm had filled six 25,000-gallon capacity portable "frac" tanks as well as three smaller 8000-gallon capacity tanks. The facility stated they were now out of capacity to impound any further rainwater and needed relief from the permit requirement to wait 24 hours after rainfall cessation to discharge the rainwater during off peak-hours. This facility manufactures glass bottles and is permitted under IW permit #1029 to discharge 140,000 GPD of industrial wastewater.

Due to concerns of causing or contributing to possible sanitary sewer overflows (SSOs) and causing excessive influent flow at the JWPCP downstream during the rainstorm, the request was denied.

The area IW inspector followed up on the call with a site inspection at the Owens-Brockway facility at 1200 hours that same day. The facility was found to be in compliance with all permit requirements at that time. Facility managers decided that the rainwater that fell after their denied request would be allowed to flow into the storm drain system. Note that IW staff recommended to facility managers that the facility install more rainwater impound capacity. Review of the permit indicates that the facility's exposed area is 8.28 acres and thus only about 0.75" of rainwater will fill all the impound tanks. Rainfall records for nearby downtown Los Angeles indicated that on November 8,2022 a total of 1.28" fell between midnight and 1147 hours. Noting that "moderate rainfall is defined as 0.11-0.30" of rainfall per hour, essentially this moderate rainstorm filled the impound tanks, leading to the discharge request. Given this, more impound capacity would seem necessary, though when told this, managers responded that there was no room to install more such tanks onsite. It is likely that in the future more such requests to discharge impounded rainwater during ongoing rainstorms are inevitable, though likely to be again denied.

Whittier Narrows WRP Low Dissolved Oxygen

On Monday, November 28, 2022, at 1043 hours, Whittier Narrows WRP operators notified the IW Section that the dissolved oxygen (D.O.) concentrations in the aeration tanks had fallen below 1.0 mg/L. It was stated that the D.O. levels began to drop at approximately 0930 hours that morning and reached a low point of 0.8 mg/L at 1040 hours. WRP operators responded by lowering the incoming flow from 10.5 MGD to 9.0 MGD and increasing the amount of process air supply to the aeration tank system. The steps taken to increase the D.O. concentration had a positive effect, and the system was already recovering when IW inspectors responded to the WRP at 1105 hours. It is noted that this report is very similar in nature to a series of low-to-zero concentration D.O.

incidents at the WNWRP that started occurring in late 2021 and then throughout 2022, with the most recent incident occurring on September 16, 2022.

Responding IW inspectors requested that WRP operators and laboratory personnel immediately take grab samples from various locations within the WRP for chemical oxygen demand (C.O.D.) analysis. These locations included raw influent, primary effluent, aeration tank/pass 2, and aeration tank/pass 3. The purpose of this sampling is to determine if high C.O.D. material was received into the WRP causing the incident, or that perhaps the drop in D.O. was caused by something else. It was noted that the aeration tank samples would be filtered to remove the solids from the mixed liquor to allow for usable data results.

Despite extensive efforts by IW inspectors to determine a source for these incidents, no definitive source has yet been identified and the investigation for these incidents remains ongoing. In this latest incident, inspections at upstream industrial dischargers found no evidence of any unusual discharges which might have caused the D.O. drop at the WRP. Analytical results for the samples taken from the WRP on November 28, 2022, remain unavailable at the time of this report being written on December 2, 2022, but IW inspectors are awaiting those results to see if they shed light on the nature of these incidents. IW inspectors continue to conduct investigatory inspections at industrial facilities located upstream of the WNWRP and work closely with WRP operators and lab personnel on these investigations.

INDUSTRIAL WASTE SECTION SUMMARY OF ACTIVITIES FOR THE MONTH OF DECEMBER 2022

TREATMENT PLANT/SEWER/OTHER INCIDENT INVESTIGATIONS

Northrup Grumman Corp. Water Line Rupture

On Tuesday, December 20, 2022, at 1150 hours, Northrop Grumman Systems Corporation - Aerospace Systems (Site 3) at Air Force Plant 42 in Palmdale called Supervising IW Inspector John Boyd and left a message stating that the facility had lost approximately 700,000 gallons of firewater from Firewater System #1 onsite. An underground rupture caused a subgrade release of the unused firewater. The release occurred the previous early evening at about 1800 hours resulting in all the system's water, including that from a large holding tank, draining into the soil underlaying buildings, runways, and other areas at the site. Workers became aware of the issue when pressure sensors on the firewater system alarmed on December 19, 2022, and they shut off a valve to cease resupply into the system from the city water system. However, the magnitude of the rupture loss wasn't immediately apparent. Eventually the volume of loss was realized when at 1800 hours on December 21, 2022, water was noted percolating up through cracks on a runway taxiway. At 1000 hours on December 20, 2022, Northrup workers checked a local sanitary sewer manhole at Site 3 and noted active infiltration of slightly foamy water through cracks in the grout lines. The rate was estimated to be 10-20 gpm (See Figure 1). It is unclear how much of the 700,000 gallons made its way to the sewer system and the downstream Districts' Lancaster WRP in this way, but initial estimates were perhaps as much as half or more did so. This information was referred immediately to the IW inspection staff for follow-up at both the Northrup Grumman facility and the Lancaster WRP. Of note is that the firewater may contain small concentrations of PFAS, though the Northrup Grumman contact stated that the firewater system water that leaked was composed of city water that contains essentially no PFAS compounds, versus the firewater in Firewater System #2 onsite that has a much higher PFAS concentration as it is drawn from local groundwater wells onsite known to contain PFAS from historic AFFF contamination.



Figure 1: Photo taken on December 20, 2022, at 0900 hours showing the active infiltration of the firewater from the ruptured underground firewater line into a sewer system manhole on the Plant 42 property.



Figure 2: December 20,2022 0900 hours photo showing the location of the of the local line manhole shown in Figure 1. Note the adjacent taxiway as well the sand and soil blown to the surface by the erupting water coming up coming up through cracks and joints in the concrete surfaces.

Districts IW Inspectors arrived onsite to follow-up on the report at 1045 hours on. It was confirmed that the leak was due to a rupture break in the 18" main firewater water supply line. The rupture was eventually exposed through excavation and isolated. An unknown amount of the water infiltrated the sewer through the nearby sanitary manhole located about 25 ft away from the underground rupture (See Figure 2). The water infiltration into the sanitary manhole was mostly through the cracks in between the manhole riser bricks. The contact stated that he is trying to calculate the approximate discharge amount that went to the sewer by comparing normal discharge rates shown on their sewerage flow meter to that during the rupture event. Flow data initially indicates the meter to the sewer (10" Palmer-Bowlus flume) that monitored the discharge as part of the monitoring activity for IW permit #14934 indicated that the rate of discharge was 500 gpm over a period of 7 hours from 8:00 p.m. on December 19,2022 to 3:00 a.m. the next morning. This indicates about 210,000 gallons went to the sewer. IW inspectors suspect it may have been even more than that given that the flow meter's maximum reading is 500 gpm and the true flowrate could have been even higher. The concentration of PFAS compounds in the water was likely low but samples were taken and are being tested. As noted above, the water spilled was essentially city water free of PFAS, but the system pipes may have had some residual PFAS present, and a small amount of foam was observed in the manhole on December 20,2022, (see Figure 1). The contact expressed concern that areas on the taxiway that were damaged by the incident may need to be replaced. At the time of the inspection on December 22, 2022, the flow rate at the IW outfall flume was back to the normal average 66 gpm.

IW inspectors also visited the Lancaster WRP on December 22, 2022, and spoke with operators. They stated that no unusual foaming had been observed at the plant over the previous several days and that there was no evidence the firewater spill at the Northrup Grumman site had any effect on WRP operations.

Vander Lans Low pH Wastewater Discharge

On Thursday, December 29, 2022, at 1730 hours, Senior Pumping Plant Operator Randy Bones of the Long Beach Main Alarm Center called Supervising IW Inspector Bill Barnum reporting that he had just received a call from Area Operations Manager Craig Justice (562-619-1832), A contractor for the Water Replenishment District of Southern California – Leo J. Vander Lans Water Treatment Facility (FID 2054123, IW 15546) reported that they had inadvertently discharged 750-900 gallons of acidic (pH=4) wastewater to the sewer due to an electrical issue in which proper restart procedures had not been followed.

IW inspectors arrived onsite at the Vander Lans facility at 1850 hours on December 29, 2022. This facility reclaims treated effluent from the adjacent Districts' Long Beach WRP and further treats the water for eventual injection into the subsurface Alamitos Barrier. The injected water acts as a hydraulic barrier to prevent seawater intrusion into the freshwater aquifer. Although the inspector was able to gain access to the facility, he was unable to verify the earlier report because there were no contacts onsite at that time and the inspector was unsuccessful in being able to recover recorded effluent pH and flow data on the facility's monitoring equipment. He was, however, able to determine that there was no ongoing discharge of low pH or off-spec wastewater. Another follow-up inspection the next morning was conducted at 1045 hours at which time the previous day's report details were verified. Ultimately the Vander Lans facility was issued a verbal warning for failing to maintain their effluent pH meter, which was found reading 1.56 units high on December 29, 2022. Inspectors will now work with facility managers to ensure that effluent pH and flow data can be easily and quickly accessed during off-hours by Districts' inspectors. The acidic discharge had no effect on Districts' operations and equipment. The relatively minor discharge flowed to the JWPCP where it went unnoticed.