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ATTORNEYS AT LAW

July 23, 2018

Via Courier and E-Mail

Cassandra D. Owens, Chief
Industrial Permitting Unit
Los Angeles Regional Water Quality Control Board
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Re: Comment Letter – Order No. R4-218-XXXX
NPDES No. CA0064203
Waste Discharge Requirements for Los Angeles Turf Club, Inc.
Santa Anita Park

Dear Ms. Owens and Members of the Board:

Our office represents the discharger Los Angeles Turf Club, Inc. regarding the facility located at Santa Anita Park, 285 West Huntington Drive, Arcadia, California 91007 (hereinafter referenced to as “SAP”). This letter provides comments on the draft tentative permit (NPDES No. CA0064203) and the Time Schedule Order (“TSO”) that were published on April 2, 2018 (hereinafter referenced to as “Draft Permit”).

Timothy Simpson, Vice President and Principal Engineer at GSI Environmental, and Ian Adam, Principal at Fuscoe Engineering, Inc. will be addressing some of the technical issues set forth in this letter at the hearing set for September 13, 2018. I am prepared to and plan on addressing the remaining issues at the hearing as set forth in this letter.

SUMMARY

Santa Anita Park has a long and extensive history of operations. In May 2018, SAP retained a new team of experts consisting of both engineers and legal counsel. Subsequently, the Los Angeles Regional Water Quality Control Board (“Water Board” or “LARWQCB”) conducted a site visit on June 25, 2018. Based on the site visit and this comment letter, SAP is requesting that the Water Board revise the Draft Permit.

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I. SAP's CAFO Basin Design and Implementation

Per the site visit and meeting of June 25, 2018, Water Board staff requested that the design and implementation of the CAFO Basin be completed as a top priority. Both SAP and RWQCB staff are in agreement with this priority and SAP is working diligently to expedite the design and construction.

As part of the discussions and requests by Water Board staff regarding the CAFO Basin, SAP prepared a more detailed schedule (**Attachment 1**) that details the site investigation, engineering and permitting work efforts required to complete construction of the sewer diversion, CAFO Basin and roof diversion. The CAFO basin construction will be expedited wherever feasible and will depend upon construction constraints and other factors outside of SAP's control, including but not limited to required local jurisdiction and other approvals necessary for construction. The Water Board staff is also aware of the limitations and constraints of construction of a roof drain storm diversion system in the fully occupied stable area due to horse and human safety.

To further support SAP's prioritization of implementing the CAFO Basin, significant subsurface utility investigations are currently underway to confirm the limits of the entire underground existing sewer diversion system. This is the dedicated collection system in the CAFO areas of the property that will serve as the mechanism to capture, hold and discharge CAFO runoff up to the 25-year, 24-hour storm event to the local sewer system through an existing permit with Los Angeles County Sanitation District. Once the layout, connections, inverts and bypass features are confirmed through ground penetrating radar, CCTV, and potholing, the drainage areas to the sewer diversion system and associated outfalls (1,2, 4 & 14) will be updated to reflect current conditions. To the extent practicable, non-CAFO runoff within the sewer diversion system tributary area will be diverted to Outfall 1 or 4 to eliminate or significantly reduce co-mingling of CAFO runoff with non-CAFO runoff. Following confirmation of the final CAFO/Sewer diversion drainage area, 25-year, 24-hour volumes will be recalculated and the CAFO basin design will be updated to reflect any necessary volume adjustments.

II. SAP Requests that the Regional Water Board Reissue the Draft Permit

As described in detail below, SAP requests that the Water Board reissue a Draft Permit based on the below technical comments and attachments. As described below, the Draft Permit does not appear to be supported by the Water Board's findings and evidence relating to the SAP facility. Based on the substantive comments provided below, SAP requests a meeting with the Water Board staff to discuss each of the below-referenced comments.

In addition, SAP proposes to provide an addendum to the Report of Waste Discharge within 30 days of the meeting incorporating the agreed upon technical items along with a revised TSO as appropriate.

III. SAP Requests that the Regional Water Board Reissue the Draft Permit Based on the Below Technical Comments and Attachments

A. SAP Requests Removal of the Effluent Limitations Based on Inappropriate Criteria

1. SAP Requests Removal of Technology Based Effluent Limitations (“TBELs”) Based on Best Professional Judgment (“BPJ”)

Technology Based Effluent Limitations or TBELs may be imposed through one of three methods. 40 C.F.R. 125.3(c). The Water Board selected the method that imposes technology-based treatment requirements on a case by case basis under section 402(a)(1) of the Clean Water Act and that applies the appropriate factors listed in 40 C.F.R. § 125.3(d) and considers (i) the appropriate technology for the category or class of point sources of which the applicant is a member, based upon all available information; and (ii) any unique factors relating to the applicant. *Id.* at § 125.3(c)(2). In addition, for BAT (Best Available Technology) requirements, the Water Board evaluated the factors set forth in 40 C.F.R. 125.3(d)(3) – the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, and non-water quality environmental impact (including energy requirements).

More specifically, the Draft Permit states that the Water Board used Best Professional Judgment (“BPJ”) to establish effluent limitations for pH, temperature, settleable solids, BOD, TSS, and oil and grease. The Draft Permit states that the Water Board considered the factors pursuant to 40 C.F.R. section 125.3(c)(2) and (d)(3) for these pollutant effluent limitations. The Water Board included a table listing the required factors along with its considerations. Draft Permit, Attachment F, p. F-21. The considerations include several unsubstantiated statements with respect to the use of BPJ. Although the Water Board has significant discretion in deciding how much weight to accord each statutory factor under the Clean Water Act “it is not free to ignore any individual factor entirely.” *Texas Oil & Gas Ass’n v. United States EPA* (5th Cir. 1998) 161 F.3d 923, 934. Here, although all of the factors are listed in the Draft Permit, it appears that the Water Board may have ignored some of the factors.

For example, one of the factors requires that the RWQCB review the appropriate technology for the category or class of point sources of which the applicant is a member, based upon all available information. 40 C.F.R. § 125.3(c)(2)(i). Here, the RWQCB clearly and

unequivocally states that it has not evaluated the category or class of point sources to which SAP is a member. The LARWQCB states that it has made no determination as to what the appropriate technology and makes a blanket statement about dischargers in Region 4 and that “[s]uch technology has been in use for decades.” Draft Permit at F-21.

Another one of the factors in 40 C.F.R. section 125.3(c)(2)(ii) is evaluating “[a]ny unique factors relating to the applicant.” The LARWQCB admits that it has not evaluated any unique factors relating to SAP. The Water Board, rather, relies on effluent limitations for these pollutants in storm water discharges that have been included in a number of individual industrial permit for in excess of ten years. Evaluating other industrial permittees is not evaluating the required “unique factors” relating to SAP.

Another one of the factors that the Water Board purportedly evaluated was the cost of the effluent reduction. Draft Permit at F-21-22. Rather than providing an analysis of the cost of the effluent reduction, the Water Board made a blanket statement that “[m]ost storm water dischargers are already employing practicable and economically achievable treatment technologies to ensure compliance with the Basin Plan criteria.” Id. at F-22.

As such, the BPJ-based limitations in the Draft Permit are not based on SAP's ability to achieve these limits based on currently available technologies. It appears that most of the BPJ limits are based on the treatment capabilities of waste water treatment facilities which employ known technologies to treat constant, consistent and predictable flows. It is inappropriate to apply these same standards to SAP's storm water flows, which are highly variable, unpredictable, and episodic. In addition, the Water Board has not demonstrated that additional effluent limits, beyond those based on CTR and Total Maximum Daily Loads (TMDLs), are necessary for SAP's discharges. Based on the above, effluent limitations based on BPJ should be removed from the Draft Permit.

2. SAP Requests That Effluent Limitations Based on CTR/NTR Water Quality Criteria Only Consider CTR/NTR Acute Criteria

Many of the effluent limitations in the draft Permit are based on the CTR/NTR fresh water chronic criteria. See Draft Permit at Table F-7. Permit limitations based on chronic CTR/NTR criteria are not appropriate for this Draft Permit because discharges from SAP only occur during rain events, resulting in episodic, short duration exposures. On this basis, the Reasonable Potential Analysis (“RPA”), as discussed in detail below, and any resulting effluent limitations should be based only on CTR/NTR acute criteria.

3. SAP Requests That the RWQCB Remove the Effluent Limit for Mercury

The Draft Permit includes an effluent limitation for mercury based on the CTR/NTR goal for human health for consumption of organisms only. Draft Permit at Table F-7. Because SAP discharges into a concrete-lined channel and only during rain events, effluent limitations based on human health consumption is inappropriate. It is highly unlikely that anyone can or will fish in the concrete-lined Arcadia Wash channel that does not have a sufficient base flow to sustain aquatic species. On this basis, the effluent limit for mercury should be removed from the Draft Permit.

4. SAP Requests that the RWQCB Remove the Effluent Limitations based on Municipal and Domestic Supply

The Draft Permit includes several effluent limitations based on the Regional Board's Water Quality Control Plan, Los Angeles Region (Basin Plan) municipal and domestic supply (MUN) water quality objectives (maximum contaminant levels). Draft Permit at Table F-7. Similar to the concern regarding the basis for the effluent limitation for mercury, this is an inappropriate standard to apply to SAP's discharges, which as previously described, enter a concrete-lined channel and flow for several miles before entering an unlined drainage area where infiltration may occur. Any limitation based on projection of groundwater should consider the fate and transport that will occur prior to infiltration. On this basis, effluent limitations based on municipal and domestic water supply should be removed from this Draft Permit.

5. SAP Requests that the RWQCB Remove the Dry Weather Discharge Standards

The Draft Permit includes dry weather effluent limitations for cadmium, copper, lead, and zinc based on CTR/NTR Water Quality Criteria. Because SAP only discharges storm water and to a much lesser degree very minor incidental landscape irrigation, the inclusion of dry weather standards in this Draft Permit is inappropriate and unnecessary.

B. SAP Requests that Effluent Limits be Based on Appropriate Water Quality Criteria and an Updated Reasonable Potential Analysis

The Draft Permit used the inappropriate water quality criteria described above to conduct the Reasonable Potential Analysis ("RPA") of the Draft Permit. See Draft Permit at F-27. The Draft Permit states that in accordance with Section 1.3 of the SIP, the Regional Water Board conducted a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the Draft Permit. Id. at F-28.

According to the Draft Permit, if a reasonable potential exists to exceed applicable water quality criteria or objectives then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. Id. at F-29. To reflect the most current storm water discharge conditions and facility operations, GSI updated the

RPA using data sets from samples collected in 2017 and 2018. GSI also updated the Applicable Water Quality Criteria used in the Draft Permit based on the above comment in subsection A and as summarized below:

- Effluent limitations based on BPJ were removed
- CTR/NTR fresh water acute criteria were used instead of chronic criteria
- CTR/NTR goals for human health consumption of organisms were not used
- Basin Plan objectives for municipal and domestic supply were not used
- Dry weather discharge limitations were removed

The results of GSI's updated RPA and reassessment of possible effluent limitations is provided in **Attachment 2**. This attachment also provides a comparison between this updated RPA and the prior RPA included in the Draft Permit. Please note that green italics indicate removal of outfalls (discharge points)/ required analytical parameters or selected criteria. Red italics indicate adding of additional required analytical parameters at the designated outfall/discharge points or selected criteria based on the updated RPA and the comparison of the previous RPA.

Based on the updated RPA, most of the analytical parameters do not demonstrate reasonable potential and should be removed from the monitoring program as presented in **Attachment 2**. The remaining analytical parameters for SAP are ammonia as nitrogen, cadmium (wet weather), copper (wet weather), lead (wet weather), zinc (wet weather), fecal coliform, E. coli, and chronic toxicity.

C. SAP Requests that the Draft Permit allow for the Use of Rain Gauge Data and Hydraulic Analysis for Estimating Outfall Discharge Rates and Volumes

The Draft Permit requires that each outfall covered under the permit include flow monitoring. Draft Permit at Section IV.A.1.a, Table 4. SAP requests that the Draft Permit allow for discharge flows based on rain gauge data and detailed hydrologic analysis of discharge point tributary areas. Rain gauge data will be utilized to convert rainfall depths to flow (million gallons per day – MGD) in lieu of flow monitors at each proposed outfall. The reason for this request includes the following:

- Flow meters have intensive setup, calibration and maintenance requirements and require installation of weirs or other means to measure flow depth and/or velocity. While flow meters can provide accurate measurements under ideal controlled conditions, they commonly fail or provide inaccurate readings during storm events.

- Setting up flow meters in advance of rain events is challenging based on the location of the outfalls (parking lots and access roads), nature of the existing operations and traffic/crowd logistics.
- There are inherent challenges of collecting accurate flows from storm events based on their high maintenance requirements and inconsistent readings.

In order to utilize rain gauge data to estimate flow, a detailed hydrologic analysis will occur to ensure rainfall data are converted accurately to flows, including field validation. The following steps will be taken to validate the approach.

- Development of a detailed hydrologic model for two outfalls using a continuous simulation model (CA Hydrologic Model from Clear Creek or SMMM Model from EPA) including one large drainage area and one smaller drainage area
- Incorporation of local rainfall data into the continuous model simulation
- Impervious/pervious delineation for all surfaces within the drainage areas including field verification
- Incorporation of 2016 Geotechnical Report to incorporate appropriate soil types and infiltration rates (i.e. losses) for each drainage area
- Incorporation of all inlets and storm drain facilities to properly account for collection, routing and hydraulic conveyance mechanisms in the model including field verification
- Generation of hydrographs including total volume and peak flows
- Use of interim flow meters to collect flow data and allow for field calibration of the hydrologic model
- Adjustment of model to match field data to ensure a high level of accuracy between rain gauge data and outfall flow data.

SAP proposes to install temporary flow meters on the two representative outfalls to gather outfall specific flow data and calibrate the hydrologic model. SAP will collect flow data during the 2018/2019 rainy season to calibrate the hydrologic model to ensure a high level of confidence between the modeled flow data and the measured field data. This approach will ensure that rainfall depths obtained from gauges do not under report flows or overestimate leaving the site.

SAP will be responsible for a submittal of the entire hydrologic model and statistical analysis demonstrating consistency between rain gauge data, estimated discharges from the outfalls and validated field discharges data. Upon review and approval of the study, on-site rain gauge data will be used to provide discharge flows for each outfall.

D. SAP Requests the Use of an Infiltration Standard as an Alternative NPDES Compliance Approach

SAP is committed to the design and installation of BMPs that promote capture and infiltration of storm water to recharge and augment local groundwater water supplies. Infiltration effectively eliminates discharge of pollutants to surface water and should be incentivized through the NPDES Permitting program. SAP believes the RWQCB should consider the significant pollutant mass reduction and overall benefits of using an infiltration-based approach over a more typical treat and discharge methods. SAP commissioned a modeling effort to provide the technical basis and illustrate the ability of infiltration-based approaches to meet TMDL water quality based effluent limits.

TMDL compliance modeling was performed for each SAP drainage area identified in the Draft Permit to assess alternative compliance scenarios for storm water retention and infiltration. The initial analysis indicates that zinc is the most stringent (limiting) parameter subject to TMDLs in the Los Angeles River Watershed. As a result, the TMDL modeling is based on the Los Angeles River Metals TMDL mass-based waste load allocation (WLA) of the critical parameter zinc. The modeling was performed using various storm event intensities and site-specific drainage area flow calculations to establish an appropriate size storm to show the rate of compliance with TMDL WLA through on-site retention/infiltration. The results of our modeling, by drainage area are included in **Table 1** below. Additional information, including the assumptions used when developing the model are included in **Attachment 3**.

Table 1. TMDL Modeling Results for Los Angeles River Watershed Mass-Based WLAs for Zinc

TMDL Modeling Results for Los Angeles River Watershed Mass-Based WLAs for Zinc						
Designed Infiltration BMP to Capture/Reuse Storm Water			The 85th Percentile, 24-Hour Storm 1.44 inches	The 90th Percentile, 24-Hour Storm 1.71 inches	The 95th Percentile, 24-Hour Storm 2.42 inches	The 99th Percentile, 24-Hour Storm 3.75 inches
Coverage Area	Outfall Number	Drainage Area	TMDL Alternative Compliance Rate	TMDL Alternative Compliance Rate	TMDL Alternative Compliance Rate	TMDL Alternative Compliance Rate
NON-CAFO	1	DA-1	90.9%	93.4%	97.9%	99.6%
NON-CAFO	002/003 (one outfall)	DA-2&3	97.1%	98.4%	99.7%	100.0%
NON-CAFO	4	DA-4	89.6%	92.6%	97.4%	99.6%
NON-CAFO	005/006 (one outfall)	DA-5&6	89.7%	92.7%	97.4%	99.6%
NON-CAFO	7	DA-7	97.6%	98.9%	99.9%	100.0%
NON-CAFO	8	DA-8	87.9%	91.7%	96.2%	99.1%
NON-CAFO	9	DA-9	92.3%	94.5%	98.3%	99.8%
NON-CAFO	10	DA-10	100.0%	100.0%	100.0%	100.0%
NON-CAFO	11	DA-11	93.7%	96.2%	99.1%	99.9%
NON-CAFO	12	DA-12	100.0%	100.0%	100.0%	100.0%
NON-CAFO	13	DA-13	91.3%	93.9%	98.1%	99.6%
CAFO	14	DA-14	92.2%	94.3%	98.3%	99.7%
CAFO	15	DA-15	93.3%	96.0%	98.9%	99.9%

This approach is consistent with the State Water Board's recently proposed Industrial General Permit (IGP) amendment to incorporate Total Maximum Daily Load (TMDL) requirements. The proposed IGP includes an on-site TMDL alternative compliance option that states "[i]f a discharger can maintain the effective capacity to capture, infiltrate and/or evapotranspire the volume of runoff produced up to and during the 85th percentile 24-Hour precipitation event based upon local, historical precipitation data and records, a discharge is deemed in compliance with IGP."

Based on the above, SAP requests use of infiltration as a surrogate for compliance in the non-CAFO areas of the facility. Under this approach SAP's demonstration of infiltrating a target design storm would be considered compliance under this permit.

E. SAP Requests that a Single Flow-Weighted Average Be Used to Determine Compliance with Effluent Outfall Limits

For Non-CAFO outfalls (outfalls unrelated to Concentrated Animal Feeding Operations) included in the Monitoring and Reporting Program for the NPDES Permit, SAP requests the RWQCB incorporate the ability to use a single flow weighted average to determine compliance with effluent limits in the Permit. The proposed monitoring program will consist of sampling each discharge point during rain events, analyze those samples separately, and then calculating the flow-weighted average by assigning a percentage to each discharge point's sampling data depending on the amount of flow that is directed to each discharge point. Each data point from the three discharge points shall be multiplied by the appropriate percentage and summed to create a singular flow-weighted average result for each day of discharge for each constituent.

The flow-weighted average approach is proposed for several reasons. SAP discharges into the East Arcadia Wash, a concrete rectangular flood channel flood that remains fully lined as it discharges into the Rio Hondo flood control channel (another fully improved rectangular channel) before the Rio Hondo daylighting into the Whittier Narrows Park/Whittier Narrows Recreation area upstream of the Whittier Narrows Dam and Rio Hondo Spreading Grounds which reside downstream of the Dam. The Arcadia Wash bisects the SAP property and all twelve non-CAFO discharge points covered under the permit discharge into the Wash within 1,000 linear feet of each other. Since the discharges into the Arcadia Wash only occur as a result of significant storm events, the discharges will be thoroughly combined with themselves, as well as with other storm flows that discharge into Arcadia Wash within SAP property such as Westfield Mall and LA County Arboretum and Botanical Gardens, before reaching the Rio Hondo flood control channel, the Whittier Narrows Dam and the Rio Hondo Spreading Grounds. As such, it is appropriate to flow-weight the results from each discharge point to assess the overall quality of the water leaving the facility and compare those values to the effluent limits established in the NPDES Permit.

This approach and methodology is not unique or precedent setting and has been used in other NPDES permits, see e.g., Order No. R8-2014-007; NPDES No. CA0105449 (California Steel Industries, Inc.).

F. SAP is Requesting Removal of Outfalls 5, 6 11 & 12 from the Draft Permit

Based on the site visit and discussions with the Regional Water Board staff on June 25, 2018, SAP is requesting removal of Outfalls 5, 6, 11 & 12 from the Draft Permit due to the fact that these outfalls consist of non-industrial land uses. The specific land uses include buildings and roofs, landscaping, asphalt parking areas, ticketing window and outside eating area which is fully covered and drains to the sewer. These land uses are more consistent with local MS4 land uses. No horses are allowed in the drainage areas associated with these outfalls with the exception of Outfall 6. Outfall 6 contains a small outdoor pen adjacent to the Grandstand which stables the carriage horses during race meets under the grandstand. During race days, one or two horses are allowed into the outdoor pen for a few hours each race day. In order to eliminate all potential runoff from the outdoor pen within Outfall 6 to reaching Arcadia Wash, a 6" concrete curb will be formed around the exterior edge of the pen to contain any runoff from the pen while maintaining safety for any horses within the pen. In addition, on-going housekeeping BMPs will be maintained, including cleaning of the pen daily.

G. SAP is Requesting the Draft Permit Recognize High Flow Suspension for Rec-1 Bacteria Water Quality Objectives and Applicability to Arcadia Wash

SAP is requesting specific language be included in the permit referencing the High Flow Suspension criteria associated with the Los Angeles River Bacteria TMDL, the Basin Plan and suspension of recreational beneficial uses in engineered channels during unsafe wet

weather conditions. Based on the Water Board Basin Plan (Table 2-1a Beneficial Uses of Inland Surface Waters,) the Arcadia Wash is designated as a High Flow Suspension channel along with a REC1 designation as Pm (Potential Beneficial use with access prohibited by Los Angeles County Department in the concrete-channelized areas and a REC2 designation as I (Intermittent Beneficial Use). Based on the HFS designation, REC1 bacteriological objectives are suspended with rainfall events greater than ½" and the 24 hours following the end of the ½" rain event or greater as measured at the nearest local rain gauge. SAP is requesting the SFS provisions be incorporated into the Draft Permit.

H. SAP is Requesting Inclusion of a Special Request for Mixing Zone Study and Translator Study in Tentative Permit

SAP is requesting that the Tentative Permit include a placeholder for a future Special Study including a Mixing Zone and Translator Study if the water quality discharges are exceeding permit limits. Also, to the extent that the CTR values for several metals are hardness dependent, SAP should be permitted to adjust CTR-based effluent limitations based on a hardness study.

The RWQCB does not account for dilution credits or mixing in the Tentative Order. Section C.4.b of the Fact Sheet states, *"Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is included. However, in accordance with the reopener provision in Section VI.C.1.e, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Regional Water Board."* To the extent the Tentative Order regulates only storm water and there are no wastewater or non-storm water contributions from SAP, there is significant dilution from the watersheds above and below SAP during storm events. Section C.1.e indicates the Order can be re-opened upon submission of adequate information by the Discharger, as determined by the RWQCB, to provide for dilution credits or a mixing zone.

I. SAP Requests Removal of Harbors Toxics TMDL Water Column and Sediment Monitoring Requirements

SAP should not be considered a Responsible Discharger for the Harbor Toxics TMDL because it is highly unlikely that flows from SAP will reach the lower reaches of the Los Angeles River. Runoff from SAP discharge to the lined Arcadia Wash which then discharges to the lined Rio Hondo above the Whittier Narrows Dam and Rio Hondo Spreading Grounds. The dam and spreading grounds are operated to maximize storm water capture and infiltration, which includes storm flows from SAP.

IV. Conclusion

In conclusion, we appreciate the opportunity to present these comments and we look forward to your review. As stated above, we would welcome the opportunity to meet with the Water Board staff and SAP's representatives to further address these comments.

Very truly yours,

A handwritten signature in black ink, appearing to read 'W. Funderburk, Jr.', with a stylized, flowing script.

William W. Funderburk, Jr.

cc: Cris Morris
Mazhar Ali

Enclosure: Attachments

ATTACHMENT 1

Los Angeles Turf Club NPDES Implementation Schedule July 20, 2018

#	Traits	Title	Expected Start	Expected End	2018				2019				2020				2021				2022				2023			
					Q2	Q3	Q4		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
0	☐	SAP South IP Implementation 20180718	July 6, 2018	Nov 1, 2023																								
1		NPDES Permit	July 6, 2018	Sep 13, 2018																								
2	○	Prepare Comment response	July 10, 2018	Jul 23, 2018																								
3	○	Permit issued	Sep 13, 2018	Sep 13, 2018																								
4		SWPPP Update Preparation	July 6, 2018	Aug 16, 2018																								
5		Site Investigation	July 23, 2018	Dec 5, 2018																								
6		Utility investigation CAFO	July 23, 2018	Aug 24, 2018																								
12		Utility Investigation Non-CAFO	Aug 6, 2018	Sep 5, 2018																								
18		Infiltration strategy	Sep 6, 2018	Oct 17, 2018																								
24		Engineering Evaluation ROWD Addendum	Oct 18, 2018	Dec 5, 2018																								
30		Implementation	July 6, 2018	Nov 1, 2023																								
31		CAFO Area Phase 1	Dec 6, 2018	Oct 7, 2020																								
32		Basin and sewer Diversion	Dec 6, 2018	Oct 7, 2020																								
33		Design	Dec 6, 2018	Jul 31, 2019																								
44		Permitting	Aug 15, 2019	Dec 19, 2019																								
48		Construction	Dec 27, 2019	Oct 7, 2020																								
57	○	CAFO Area Phase 2/3	Apr 18, 2019	Sep 24, 2022																								
58		Isolated Roof Drain System Design	Apr 18, 2019	Sep 24, 2022																								
59		Design	Apr 18, 2019	Dec 4, 2019																								
62		Permitting	Dec 5, 2019	Apr 10, 2020																								
66		Construction Phase 1	Apr 20, 2020	Sep 25, 2020																								
73		Construction Phase 2	May 3, 2021	Sep 25, 2021																								
80		Construction Phase 3	April 4, 2022	Sep 24, 2022																								
87		Non- CAFO Area Phase 1	July 6, 2018	Jul 22, 2019																								
95		Non-CAFO Phase 2	July 23, 2019	Aug 3, 2020																								
100		Non-CAFO Phase 3	Nov 26, 2019	May 8, 2023																								
104		Reporting	Nov 1, 2019	Nov 1, 2023																								

ATTACHMENT 2

Summary of Proposed Storm Water Monitoring Parameters, Discharge Points, and Selected Water Quality Criteria- Comparison						
- New RPA based on most recent three data sets from qualifying storm events on January 9, 2017, February 6, 2017, and January 9, 2018.						
- Green italics indicate removal of discharge points/ parameters or selected criteria. Red italics indicate adding of discharge points/ parameters or selected criteria.						
Parameter	Discharge Points ³	Selected Criteria If Applicable Based on Fact Sheet Table F-7		Units	Effluent Limitations Maximum Daily	Basis ¹
		Old RPA	Updated RPA			
pH	All	Not Applicable	Not Applicable	unit	6.5–8.5 ²	BP
Temperature	All	Not Applicable	Not Applicable	°F	86	TP, BPJ
Settleable Solids	All	Not Applicable	Not Applicable	ml/L	0.3	BPJ
BOD5 @ 20°C	All	Not Applicable	Not Applicable	mg/L	30	BPJ
TSS	All	Not Applicable	Not Applicable	mg/L	75	BPJ
Oil and Grease	All	Not Applicable	Not Applicable	mg/L	15	BPJ
Ammonia as Nitrogen	All	Not Applicable	Not Applicable	mg/L	8.7	TMDL
Antimony	004, 012	MUN: 6.00 µg/L	No Applicable Criteria	µg/L	6	CTR
Arsenic	001, 002-003, 004, 005-006, 007, 008, 009, 013, 014, 015	MUN: 10.00 µg/L	Fresh Water Acute Criteria: 340.00 µg/L	µg/L	10	CTR
Beryllium	002-003, 004, 007, 013	MUN: 4.00 µg/L	No Applicable Criteria	µg/L	4	CTR
Cadmium, Total Recoverable (Wet Weather)	All	TMDL: 3.1 µg/L	TMDL: 3.1 µg/L	µg/L	3.1	TMDL
Cadmium, Total Recoverable (Dry Weather based on CTR criteria)	002-003, 004, 005-006, 007, 010, 013, 014, 015	Fresh Water Chronic Criteria: 1.65 µg/L	Not Applicable for Dry Weather	µg/L	2.5	CTR
Chromium III, Total Recoverable	002-003, 004, 005-006, 007, 013, 014, 015	Fresh Water Chronic Criteria: 136.22 µg/L	Fresh Water Acute Criteria: 11431 µg/L	µg/L	224	CTR
Chromium VI, Total Recoverable	001, 002-003, 004, 005-006, 007, 013, 014, 015	Fresh Water Chronic Criteria: 11.4 µg/L	Fresh Water Acute Criteria: 16.3 µg/L	µg/L	16.3	CTR
Copper, Total Recoverable (Wet Weather)	All	TMDL: 67.5 µg/L	TMDL: 67.5 µg/L	µg/L	67.5	TMDL
Copper, Total Recoverable (Dry Weather based on CTR criteria)	All (except 005-006)	Fresh Water Chronic Criteria: 6 µg/L	Not Applicable for Dry Weather	µg/L	8.7	CTR
Lead, Total Recoverable (Wet Weather)	All	TMDL: 62 µg/L	TMDL: 62 µg/L	µg/L	62	TMDL
Lead, Total Recoverable (Dry Weather based on CTR criteria)	All (except 007)	Fresh Water Chronic Criteria: 1.66 µg/L	Not Applicable for Dry Weather	µg/L	2.7	CTR
Mercury, Total Recoverable	001, 002-003, 004, 005-006, 007, 009, 010, 011, 012, 013, 014, 015	Human Health: 0.051 µg/L	No Applicable Criteria	µg/L	0.1	CTR
Nickel, Total Recoverable	002-003, 004, 005-006, 007, 009, 013, 014, 015	Fresh Water Chronic Criteria: 33.86 µg/L	Fresh Water Acute Criteria: 304.53 µg/L	µg/L	56	CTR
Selenium, Total Recoverable	002-003, 004, 005-006, 007, 011, 012, 013, 014	Fresh Water Chronic Criteria: 5 µg/L	Fresh Water Acute Criteria: 20 µg/L	µg/L	8.2	CTR
Silver, Total Recoverable	004, 005-006, 007, 014	Fresh Water Acute Criteria: 1.69 µg/L	Fresh Water Acute Criteria: 1.69 µg/L	µg/L	1.7	CTR
Thallium	004, 005-006, 007, 011, 012, 013, 014, 015	MUN: 2.00 µg/L	No Applicable Criteria	µg/L	2	CTR
Zinc, Total Recoverable (Wet Weather)	All	TMDL: 159 µg/L	TMDL: 159 µg/L	µg/L	159	TMDL
Zinc, Total Recoverable (Dry Weather based on CTR criteria)	All	Fresh Water Chronic/Acute Criteria: 77.72 µg/L	Not Applicable for Dry Weather	µg/L	77.7	CTR
Bis(2-ethylhexyl) phthalate	001, 004, 005-006, 007, 009, 011, 012, 013, 014, 015	MUN: 4 µg/L	No Applicable Criteria	µg/L	4	CTR
Cyanide	005-006, 008	Fresh Water Chronic Criteria: 5.2 µg/L	Fresh Water Acute Criteria: 22 µg/L	µg/L	8.5	CTR
Fecal Coliform	All	Not Applicable	Not Applicable	MPN/100ml	4	BP
E. coli	All	Not Applicable	Not Applicable	CFU/100 ml or MPN/100 ml	5	TMDL
Chronic Toxicity ⁶	All	Not Applicable	Not Applicable	Pass or Fail, % Effect	Pass or % Effect <50	BP

Note:

- BP= Basin Plan; TP= Thermal Plan; BPJ= Best professional judgment; TMDL= Los Angeles River and Tributaries Metals TMDL (Resolution R07-014); CTR= California Toxic Rule.
- Instantaneous minimum and maximum range for pH.
- Effluent limitations established at Outfall 014 and 015 are applicable to discharges from the production areas. The discharges only occur when rainfall events cause and overflow of collected storm water from a facility designed, constructed, operated, and maintained to contain all CAFO runoff from a 25-year, 24-hour rain event.
- The single sample fecal coliform concentration shall not exceed 400/100ml and the geometric mean limit shall not exceed 200/100ml. The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period).
- The single sample E. coli concentration shall not exceed 235/100ml and the geometric mean limit shall not exceed 126/100ml. The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period).
- The maximum daily effluent limitation (MDEL) is exceeded when a toxicity test results in a "fail," and the percent effect is greater than or equal to 0.50.

Summary of Proposed Storm Water Monitoring Parameters, Discharge Points, and Selected Water Quality Criteria - Final Proposed Version
- New RPA based on most recent three data sets from qualifying storm events on January 9, 2017, February 6, 2017, and January 9, 2018.

Parameter	Discharge Points ³	Selected Criteria If Applicable Based on Fact Sheet Table F-7		Units	Effluent Limitations Maximum Daily	Basis ¹
		Old RPA	Updated RPA			
Ammonia as Nitrogen	All	Not Applicable	Not Applicable	mg/L	8.7	TMDL
Cadmium, Total Recoverable (Wet Weather)	All	TMDL: 3.1 µg/L	TMDL: 3.1 µg/L	µg/L	3.1	TMDL
Copper, Total Recoverable (Wet Weather)	All	TMDL: 67.5 µg/L	TMDL: 67.5 µg/L	µg/L	67.5	TMDL
Lead, Total Recoverable (Wet Weather)	All	TMDL: 62 µg/L	TMDL: 62 µg/L	µg/L	62	TMDL
Zinc, Total Recoverable (Wet Weather)	All	TMDL: 159 µg/L	TMDL: 159 µg/L	µg/L	159	TMDL
Fecal Coliform	All	Not Applicable	Not Applicable	MPN/100ml	⁴	BP
E. coli	All	Not Applicable	Not Applicable	CFU/100 ml or MPN/100 ml	⁵	TMDL
Chronic Toxicity ⁶	All	Not Applicable	Not Applicable	Pass or Fail, % Effect	Pass or % Effect <50	BP

Note:

1. BP= Basin Plan; TP= Thermal Plan; BPJ= Best professional judgment; TMDL= Los Angeles River and Tributaries Metals TMDL (Resolution R07-014); CTR= California Toxic Rule.

2. Instantaneous minimum and maximum range for pH.

3. Effluent limitations established at Outfall 014 and 015 are applicable to discharges from the production areas. The discharges only occur when rainfall events cause an overflow of collected storm water from a facility designed, constructed, operated, and maintained to contain all CAFO runoff from a 25-year, 24-hour rain event.

4. The single sample fecal coliform concentration shall not exceed 400/100ml and the geometric mean limit shall not exceed 200/100ml. The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period).

5. The single sample E. coli concentration shall not exceed 235/100ml and the geometric mean limit shall not exceed 126/100ml. The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period).

6. The maximum daily effluent limitation (MDEL) is exceeded when a toxicity test results in a "fail," and the percent effect is greater than or equal to 0.50.

ATTACHMENT 3

TMDL Modeling Results for Los Angeles River Watershed Mass-Based WLAs for Zinc						
Designed Infiltration BMP to Capture/Reuse Storm Water			The 85th Percentile, 24-Hour Storm 1.44 inches	The 90th Percentile, 24-Hour Storm 1.71 inches	The 95th Percentile, 24-Hour Storm 2.42 inches	The 99th Percentile, 24-Hour Storm 3.75 inches
Coverage Area	Outfall Number	Drainage Area	TMDL Alternative Compliance Rate	TMDL Alternative Compliance Rate	TMDL Alternative Compliance Rate	TMDL Alternative Compliance Rate
NON-CAFO	1	DA-1	90.9%	93.4%	97.9%	99.6%
NON-CAFO	002/003 (one outfall)	DA-2&3	97.1%	98.4%	99.7%	100.0%
NON-CAFO	4	DA-4	89.6%	92.6%	97.4%	99.6%
NON-CAFO	005/006 (one outfall)	DA-5&6	89.7%	92.7%	97.4%	99.6%
NON-CAFO	7	DA-7	97.6%	98.9%	99.9%	100.0%
NON-CAFO	8	DA-8	87.9%	91.7%	96.2%	99.1%
NON-CAFO	9	DA-9	92.3%	94.5%	98.3%	99.8%
NON-CAFO	10	DA-10	100.0%	100.0%	100.0%	100.0%
NON-CAFO	11	DA-11	93.7%	96.2%	99.1%	99.9%
NON-CAFO	12	DA-12	100.0%	100.0%	100.0%	100.0%
NON-CAFO	13	DA-13	91.3%	93.9%	98.1%	99.6%
CAFO	14	DA-14	92.2%	94.3%	98.3%	99.7%
CAFO	15	DA-15	93.3%	96.0%	98.9%	99.9%

Rational Method						TMDL					
						Zinc (159 ug/L)					
						3/7/2016	12/16/2016	1/9/2017	Ave	min	Max
Drainage Area	Description	Acreage	Runoff Coefficient C	% Slope	% Impervious						
DA-1	Maintenance Area	22.03	0.5	2%	35%	379	2220	87.2	895	87	2220
DA-2&3	Infield / Racetrack	1.01	0.6	2%	50%	365	327	268.5	320	269	365
DA-4	West Infield	10.36	0.6	2%	50%	537	931	1490	986	537	1490
DA-5&6	Executive Offices	0.79	0.6	2%	41%	N/A	720	1191	956	720	1191
DA-7	Paddock Garden	0.63	0.8	2%	75%	231	134	312	226	134	312
DA-8	Paddock Garden	0.2	0.7	2%	65%	N/A	2580	564	1572	564	2580
DA-9	Paddock Garden	0.52	0.9	2%	95%	284	370	467	374	284	467
DA-10	Paddock Garden	3.85	0.7	2%	60%	66	38.5	140	82	39	140
DA-11	Rooftop, Parking & Will Call	0.7	0.9	2%	90%	156	371	357	295	156	371
DA-12	Plaza, Parking & Drive Aisle	2.09	0.9	2%	87%	37	56.1	69.6	54	37	70
DA-13	Infield / Racetrack	39.45	0.6	2%	50%	1320	204	576	700	204	1320
DA-14	Stable	11.34	0.6	2%	55%	603	759	394	585	394	759
DA-15	Stable	34.87	0.6	2%	48%	446	611	327	461	327	611