# **Appendix CC-1**

GHG Emissions from the Existing Sacramento Raceway



April 19, 2021

Mr. Angelo Tsakopoulos **Tsakopoulos Investments** 1435 River Park Drive, Suite 500 Sacramento, CA 95815

**SUBJECT:** GHG Emissions from the Existing Sacramento Raceway Operations

Dear Mr. Tsakopoulos:

This letter summarizes the greenhouse gas (GHG) emissions from the existing Sacramento Raceway (Raceway) operations. The emission estimates herein are provided as a point of information because they were not addressed in the previously prepared Air Quality Management Plan<sup>1</sup> (AQMP) or Greenhouse Gas Reduction Plan<sup>2</sup> (GHGRP). These emissions were not subtracted or credited in the AQMP or GHGRP, even though when the housing, schools, and parks that are included on the Raceway property as part of the Jackson Township Specific Plan (Jackson Township) are built, Raceway operations will cease and the emissions reported herein would be eliminated.

Attachment 1 shows the potential GHG emissions from the operation of the Raceway. The emissions were calculated for future calendar year 2035 to be consistent with the AQMP and GHGRP. The vehicle miles traveled (VMT) and GHG emission factors used in Attachment 1 were calculated consistent with the Sacramento Raceway health effects report<sup>3</sup>, but with the emission factors updated to calendar year 2035. Table 1 shows the total annual GHG emissions in terms of metric tons per year (MT/yr). The VMT and Raceway operation assumptions were based on estimated actual operations in calendar year 2019 as explained in the health effects report.

Table 1
Estimated Sacramento Raceway GHG Emissions

Description	Annual GHG Emissions (MT/yr)
Drag Racing	1,586
Motocross	24
TOTAL	1,610

Revision 2 Updated Air Quality Mitigation Plan and Greenhouse Gas Reduction Plan for The Proposed Jackson Township Specific Plan, dated May 30, 2019.

<sup>&</sup>lt;sup>2</sup> Revision 3a Updated Greenhouse Gas Reduction Plan for the Proposed Jackson Township Specific Plan, dated January 4, 2021.

<sup>&</sup>lt;sup>3</sup> Air Quality Health Effects Assessment of the Sacramento Raceway, dated April 19, 2021.

If you have additional questions or concerns, please feel free to contact the undersigned at <a href="mailto:rerbes@kleinfelder.com">rerbes@kleinfelder.com</a> or by phone at 303.748.7190. In the alternative you may contact Ms. Amal Hijazi at ahijazi@kleinfelder.com or by phone at 303.237.6601.

Sincerely,

**KLEINFELDER** 

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Russell E. Erbes, CCM

Senior Principal Air Quality Scientist

Attachment 1

#### **ATTACHMENT 1**

#### **ESTIMATED SACRAMENTO RACEWAY GHG EMISSIONS**

#### **SACRAMENTO RACEWAY 2019 EMISSIONS**

## Annual Emissions for all NHRA, non-NHRA, and Test & Tune Events

	CO2e
Spectator Vehicles to/from Raceway for Drags	
Emission Factors (g/mi)	235.47
Number of vehicles	64900
Miles per vehicle	Not Used
Total miles	4719000
Emissions (grams per year)	1111182930
Emissions (MT/yr)	1111.2
Tow Vehicles to/from Raceway for Drags	
Emission Factors (g/mi)	549.92
Number of vehicles	4960
Miles per vehicle	Not Used
Total miles	237700
Emissions (grams per year)	130715984
Emissions (MT/yr)	130.7
Non-Trailered Race Vehicles to/from Raceway for Drags	400.10
Emission Factors (g/mi)	490.10
Number of vehicles	10020
Miles per vehicle	NA
Total miles	533700
Emissions (grams per year)	261566370
Emissions (MT/yr)	261.6
Spectator Vahislas On Site at Passivia of Proces	
Spectator Vehicles On-Site at Raceway for Drags	1377.31
Emission Factors (g/mi) Number of vehicles	
Miles per vehicle	64900 0.5
Total miles	32450
Emissions (grams per year)	44693709.5
Emissions (grams per year)  Emissions (MT/yr)	44693709.5
ETTISSIOTIS (IVIT/YI)	44./
Tow Vehicles On-Site at Raceway for Drags	
Emission Factors (g/mi)	672.68
Number of vehicles	4960
Miles per vehicle	1
Total miles	4960
Emissions (grams per year)	3336492.8
Emissions (MT/yr)	3.3
(\text{\text{W1}}\frac{\pi_1}{\pi_1})	
Non-Trailered Race Vehicles On-Site at Raceway for Drags	
Emission Factors (g/mi)	787.30
Number of vehicles	10020
Miles per vehicle	1
Total miles	10020
Emissions (grams per year)	7888746.0
Emissions (grams per year) Emissions (MT/yr)	7888746.0 7.9

NHRA Vehicles Racing for Drags	
Emission Factors (g/mi)	554.27
Number of vehicles	3240
Miles per vehicle	0.75
Total miles	2430
Emissions (grams per year)	1346876.1
Emissions (MT/yr)	1.3
NHRA Vehicles Staging and Return for Drags	
Emission Factors (g/mi)	956.59
Number of vehicles	3240
Miles per vehicle	0.85
Total miles	2754
Emissions (grams per year)	2634448.9
Emissions (MT/yr)	2.6
Non-NHRA Vehicles Racing for Drags	
Emission Factors (g/mi)	554.27
Number of vehicles	20720
Miles per vehicle	0.5
Total miles	10360
Emissions (grams per year)	5742237.2
Emissions (MT/yr)	5.7
Non-NHRA Vehicles Staging and Return for Drags	
Emission Factors (g/mi)	956.59
Number of vehicles	20720
Miles per vehicle	0.6
Total miles	12432
Emissions (grams per year)	11892326.9
Emissions (MT/yr)	11.9
Test and Tune Vehicles Racing for Drags	
Emission Factors (g/mi)	554.27
Number of vehicles	6000
Miles per vehicle	0.5
Total miles	3000
Emissions (grams per year)	1662810.0
Emissions (MT/yr)	1.7
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Test and Tune Vehicles Staging and Return for Drags	
Emission Factors (g/mi)	956.59
Number of vehicles	6000
Miles per vehicle	0.6
Total miles	3600
Emissions (grams per year)	3443724.0
Emissions (MT/yr)	3.4
Total Annual Emissions (MT/yr) for Drags	1586

#### **SACRAMENTO RACEWAY 2019 EMISSIONS**

### **Annual Emissions for all Motocross Events**

	NOx
Spectator Vehicles to/from Raceway for Motocross	
Emission Factors (g/mi)	235.47
Number of vehicles	900
Miles per vehicle	Not Used
Total miles	54000
Emissions (grams per year)	12715380
Emissions (MT/yr)	12.7
Tow Vehicles to/from Raceway for Motocross	
Emission Factors (g/mi)	549.92
Number of vehicles	225
Miles per vehicle	Not Used
Total miles	13500
Emissions (grams per year)	7423920
Emissions (MT/yr)	7.4
Spectator Vehicles On-Site at Raceway for Motocross	
Emission Factors (g/mi)	1377.31
Number of vehicles Note 1	900
Miles per vehicle	1.5
Total miles	1350
Emissions (grams per year)	1859368.5
Emissions (MT/yr)	1.9
Tow Vehicles On-Site at Raceway for Motocross	
Emission Factors (g/mi)	672.68
Number of vehicles Note 2	135
Miles per vehicle	1.5
Total miles	202.5
Emissions (grams per year)	136217.7
Emissions (MT/yr)	0.1
Motocross Vehicles Racing for MX	
Emission Factors (g/mi)	242.54
Number of vehicles Note 3	540
Miles per vehicle	15
Total miles	8100
Emissions (grams per year)	1964574.0
Emissions (MT/yr)	2.0
Total Annual Emissions (MT/yr) for Motocross	24

**Total Miles** 77153