AUTHORITY TO CONSTRUCT ENGINEERING EVALUATION

Reviewed by: _____
Title: APCO EKAPCD
Date: _____

Applicant: **JACO OIL COMPANY\JAMIESON HILL DBA HOWARD'S #798**

Mailing Address: P.O. Box 82515
Bakersfield, CA 93380

Contact Name: Jason Rabanal, Compliance Manager
Phone Number: (661) 633-7586 Email jasonr@jaco.com

Application No.: 8096185C Project #: 250429

Location: 851 Upjohn Ave., Ridgecrest QS/T/R: SW04/27S/40E
Latitude/Longitude (Decimal) Latitude: 35.61487 Longitude: -117.68757

Project Title: Modify GDF: Increase Maximum Gasoline Throughput

App. Rec.: 04/29/25 Deemed Complete: 05/20/25
180 Days: 11/16/25 Submittal Date: 08/21/25

Evaluation By: Samuel Johnson

Project Contents:

I. PROPOSAL:

Jaco Oil Company, doing business as Fastrip/Howard's #789 in Ridgecrest, is proposing to increase the annual gasoline throughput at their gasoline dispensing facility (GDF) from 2.4 million to 3 million gallons per year. This modification will result in an increase in emissions of volatile organic compounds (VOC); therefore, evaluation for best available control technology (BACT) emission Offsets will be performed. A portion of emissions are classified as toxic air contaminants (TAC); therefore, a health risk prioritization will be conducted to determine if a more refined assessment is necessary. The GDF is located within 1000 ft. of a charter elementary school, and therefore a school notice is required in accordance with California Health & Safety Code (CH&SC) §42301.6.

II. APPLICABLE RULES and REGULATIONS:

A. Rule 201 - Permits Required (Amended 05/02/96)
Any person building, altering, or replacing any equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, shall first obtain authorization for such construction from the APCO. An Authority to Construct (ATC) shall remain in effect until the permit to operate the equipment for which the application was filed is granted, denied, or canceled.

B. Rule 208.2 - Criteria for Finding of No Significant Environmental Impact [California Environmental Quality Act (CEQA)] (Amended 1/8/98)
Establishes criteria by which a project under review by EKAPCD can be found to have no potential for causing a significant environmental impact, and, thus, be granted a general rule exemption pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

C. Rule 210.1 - New and Modified Stationary Source Review (Amended 05/04/00)
a) Provide for pre-construction review of new and modified stationary sources of affected pollutants to insure emissions will not interfere with the attainment of ambient air quality standards.
b) Insure that appropriate new and modified sources of affected pollutants are constructed with Best Available Control Technology, and
c) Provide for no significant net increase in emissions from new and modified stationary sources for all non-attainment pollutants and their precursors.

E. Rule 412 – Gasoline Storage Tanks (Amended 01/13/22)
Gasoline storage tanks 250 gallons or larger shall be equipped with a permanently affixed submerged fill tube terminating no more than six inches from the tank bottom and California Air Resources Board "certified" Phase I gasoline vapor recovery hardware which will prevent at least 98% by weight of all gasoline vapors displaced during filling of each tank from entering the atmosphere shall be utilized.

F. Rule 412.1 – Refueling of Motor Vehicles (Amended 01/13/22)
Gasoline tanks and dispensers shall be equipped with California Air Resources Board "certified" Phase II gasoline vapor recovery hardware which will prevent at least 95% by weight of the gasoline vapors displaced during refueling of motor vehicles from entering the atmosphere.

G. Rule 419 – Nuisance (Adopted 4/18/72) and California Health and Safety Code (CH&SC) §41700
A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.

H. CH&SC Section 43201.6 – School Notice
Prior to approving an application for a permit to construct or modify a source that emits hazardous air emissions, and that source is located within 1,000 feet from the outer boundary of a schoolsite, the air pollution control officer shall prepare a public notice in which the proposed project or modification for which the application for a permit is made is fully described.

The air pollution control officer shall, at the permit applicant's expense, distribute or mail the public notice to the parents or guardians of children enrolled in a school that is located

within one-quarter mile of the proposed new or modified source and to each address within a radius of 1,000 feet of the source at least 30 days prior to the date final action on the application is to be taken by the officer. The officer shall review and consider all comments received during the 30 days after the notice is distributed, and shall include written responses to the comments in the permit application file prior to taking final action on the application.

Nothing in this subdivision precludes, at the discretion of the air pollution control officer and with the permission of the school, the distribution of the notices to the children to be given to their parents or guardians.

III. EQUIPMENT LOCATION & SCHEMATIC:

See California Air Resources Board (CARB) Executive Order (EO) VR-102-D for schematics of existing Phase I components and CARB EO VR-202-AC for schematics of Phase II components.

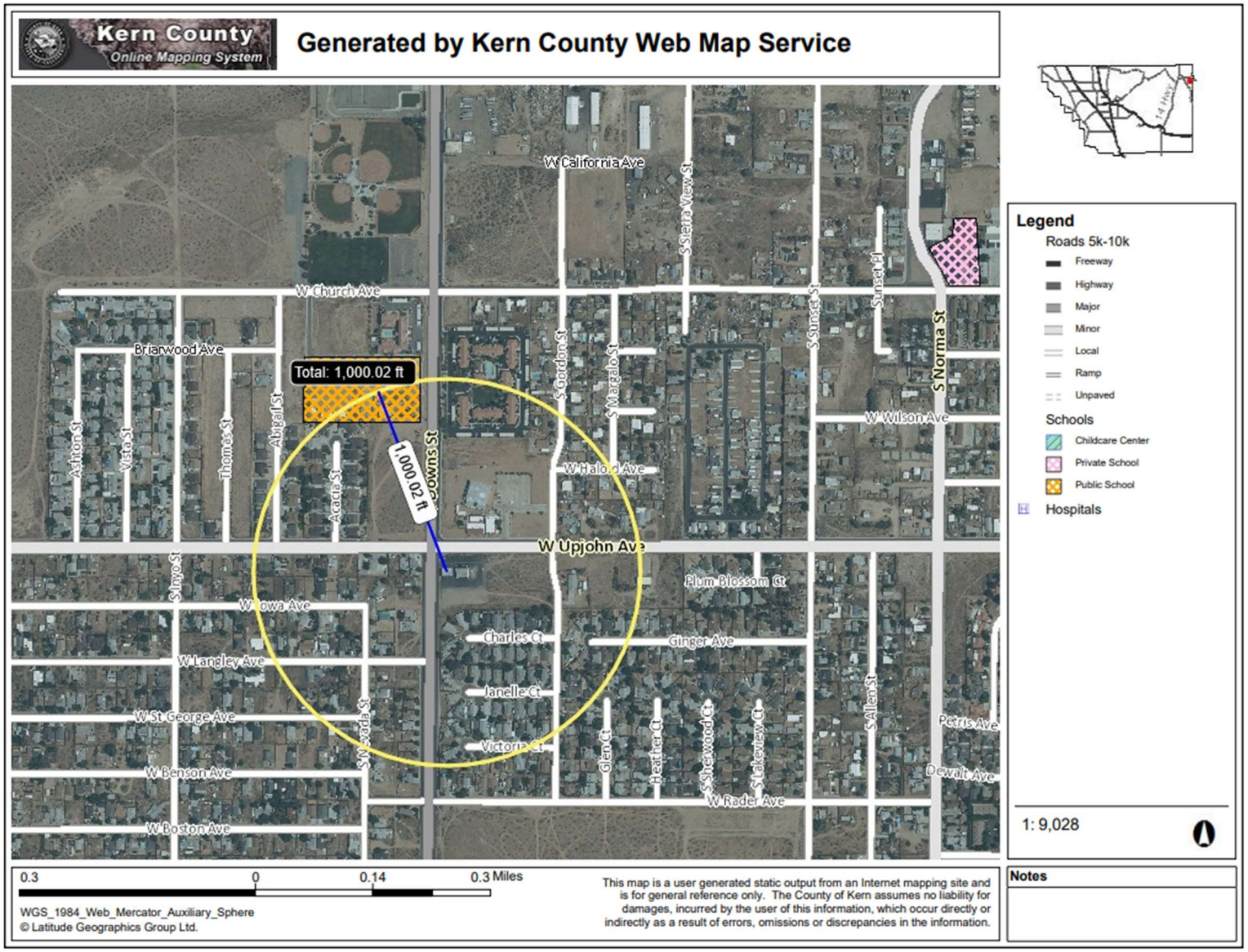

Figure 1: Location of GDF & Nearby Schools

IV. EQUIPMENT LISTING:

Gasoline Storage and Dispensing Facility, including following equipment and design specifications:

A. 12,000-gallon regular unleaded gasoline storage tank with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filing (8096185C);
B. 12,000-gallon regular unleaded gasoline storage tank with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filing (8096186A);
C. Phase I (filling of storage tank) 2-point vapor collection system (VR-101-G) including separate vapor riser with the following CARB certified components:

	Component	Manufacturer/Model Number
1.	**Liquid Fill Adapter**	OPW 61SALP-EVR
2.	**Liquid Fill Cap**	OPW 63TT-EVR
3.	**Vapor Adapter**	OPW 61VSA-EVR
4.	**Vapor Cap**	OPW 1711T-EVR
5.	**Drop Tube**	OPW 61T
6.	**Extractor Assembly**	OPW 233VM
7.	**Float Vent Valve**	OPW 53 VML
8.	**Pressure Vacuum Relief Valve**	Husky 5885

D. Four – Gilbarco Encore 500 model dispensers each equipped with two product nozzles for a total of 8 coaxial assist certified vapor recovery nozzles; and
E. Vapor-assist type Phase II (fueling of vehicle tank) vapor collection system (VR-202-AC) with 8 nozzles, onboard refueling vapor recovery (ORVR) compatible certified vapor recovery nozzles with in-station-diagnostics (ISD), including the following CARB certified components:

	Component	Manufacturer/Model Number
1.	**Nozzle**	Healy Model 900
2.	**Swivel**	N/A
3.	**Flow Limiter**	Healy Model 1301
4.	**Vapor Check Valve**	Included with nozzle
5.	**Coaxial Hose**	Healy 75 Low Permeation
6.	**Breakaway Fitting**	Healy Model 8701VV
7.	**Dispensers**	Gilbarco Encore 500 (NG0 and NG1)
8.	**Dispenser Vacuum Pump**	Healy Model VP1000
9.	**Vapor Processor**	Healy Model 9961 Clean Air Separator
10.	**ISD Equipment/TLS Console**	Veeder-Root 8470XX-XXX
11.	**Vapor Flow Meter**	Veeder-Root 331847-XXX
12.	**Vapor Pressure Sensor**	Veeder-Root 331946-001 or Veeder-Root 861190-201

V. ENGINEERING ANALYSIS:

Emissions of criteria air pollutants from retail gasoline storage & dispensing are expected to consist entirely of VOC, a portion of which are also classified as TAC. VOC emissions from gasoline storage and dispensing result from the following activities: filling of the underground storage tank (UST), refueling of vehicles at dispensers, evaporation of gasoline in the UST & dispensing equipment, and gasoline permeation through the outer wall of the dispensing hose.

Emissions from the filling of the UST (Phase I) are the result of vapors above the liquid gasoline in the tank being displaced during filling; these emissions are controlled by sealing the tank with a valve designed to keep the tank sealed except when an elevated pressure or vacuum condition occurs (aka a 'pressure/vacuum (P/V) vent valve) and routing the displaced vapors to the gasoline delivery vessel using the Phase I enhanced vapor recovery (EVR) equipment. Pressure

driven (aka “breathing”) losses occur as gasoline within the UST evaporates during the periods of low activity or increase in ambient temperature, resulting in an increase in system pressure that forces vapors into the atmosphere; these emissions are typically controlled by the P/V vent valve and a “vapor processor”, a device designed to capture or destroy the gasoline vapors.

Emissions from filling of vehicle fuel tanks (Phase II) occur as a result of vapors within the vehicle fuel tank being displaced during filling, permeation of gasoline through the dispensing hose, and spillage of gasoline before, during, or after fueling. These emissions are typically controlled by Phase II vapor recovery equipment on the dispenser, or with onboard refueling vapor recovery (ORVR) systems on the vehicle being refueled. When liquid gasoline is in contact with the outside wall of the dispensing hose, a portion of the liquid can permeate through the hose wall and be released into the atmosphere. Coaxial dispensing hoses used in vacuum-assist type Phase II EVR systems allow gasoline to contact the outer wall of the hose; these emissions are controlled through the use of CARB certified “low-permeation” dispensing hoses.

The emission factors for gasoline dispensing facilities (GDF) have been revised since the last modification for this facility (2007); these new emission factors are based on a 2013 study conducted by the California Air Resources Board (CARB) Monitoring and Laboratory Division. Additionally, the maximum hourly and daily gasoline throughputs have likely been underestimated when compared to the estimates from the 2022 Gasoline Service Station Industrywide Risk Assessment (IWRA) Technical Guidance, developed by the California Air Resources Board (CARB) and California Air Pollution Control Officer’s Association (CAPCOA). Therefore, the VOC emissions for the GDF will be recalculated based on the methodology from the Technical Guidance and CARB emission factors for gasoline stations equipped with EVR.

Toxic Emission Risk Assessment:

Gasoline vapors contain toxic air contaminants (TAC), including benzene, toluene, and xylenes. Utilizing the information in the Gasoline Service Station Industrywide Risk Assessment (IWRA) Technical Guidance developed by the California Air Resources Board (CARB), an estimate of potential cancer and acute (short-term pollutant exposure) non-cancer health risk to nearby residences and workers was determined. Per the IWRA Guidance, chronic (long-term exposure) non-cancer health risk is not expected to be significant before the cancer & acute non-cancer risk exceeds acceptable health risk to issue a permit and therefore will not be evaluated. The scenario used for the risk assessment was a facility equipped with both Phase I and Phase II EVR equipment and the Lancaster meteorological dataset. The UST vent pipe is estimated to be outside the zone of influence of nearby buildings, and therefore downwash effects are not included in the risk estimates. Estimated health risk for the facility is as follows:

Distance from GDF (meters)	Resident Cancer Risk (per million)	Worker Cancer Risk (per million)	Acute Noncancer Risk (Hazard Index)	Priority
10	22.79	1.88	3.59	High Priority
20	12.97	1.07	2.60	High Priority
30	8.38	0.69	1.93	High Priority
40	5.86	0.48	1.71	High Priority
50	4.33	0.36	1.49	High Priority
60	3.21	0.26	1.49	High Priority
70	2.55	0.21	1.31	High Priority
80	2.08	0.17	1.17	High Priority
90	1.73	0.14	1.05	High Priority
100	1.46	0.12	0.94	Intermediate Priority
120	1.04	0.09	0.63	Intermediate Priority

140	0.81	0.07	0.53	Intermediate Priority
160	0.65	0.05	0.45	Intermediate Priority
180	0.54	0.04	0.40	Intermediate Priority
200	0.45	0.04	0.35	Intermediate Priority
210	0.41	0.03	0.18	Low Priority

In accordance with District risk guidelines, facilities with a potential cancer risk less than 1 in one million or an HI less than 0.2 are deemed to be “Low Priority” for health risk and are not expected to present a significant risk to off-site receptors. Facilities with a potential cancer risk greater than 10 in one million or a hazard index (HI) greater than 1.0 are deemed to be “High Priority” for health risk and require a full health risk assessment (HRA) to be performed. Facilities with a cancer risk between 1 in one million and 10 in one million or a noncancer hazard index between 0.2 and 1.0 are deemed to be “Intermediate Priority”; District policy is to perform an HRA for these facilities.

The nearest residential receptor is located approximately 35 meters from the dispenser canopy, and the nearest worker receptor is located approximately 58 meters from the canopy. Based on these proximities, the potential cancer risk for the maximum exposed individual resident (MEIR) would be 8.38 in one million, and the potential cancer risk for the maximum exposed individual worker (MEIW) is 0.69 in one million. The acute noncancer hazard Index (HI) at the MEIR and MEIW is 1.93 and 1.49, respectively. Since there are receptors that are potentially exposed to a cancer risk greater than 1 in one million and an acute HI greater than 0.2, an HRA will be performed for the GDF using site specific meteorology and terrain information to verify the potential health risk from the facility.

Using the Air Dispersion Modeling and Risk Tool (ADMRT) module of the Hotspots Analysis and Reporting Program (HARP2), the potential health risks were assessed using the following inputs: default emission source and receptor grid data from the IWRA Guidance, meteorological data from the China Lake airfield, USGS terrain data made available by CARB, and OEHHA specified exposure parameters for residential & worker receptor types. The risk contours can be found in Appendix A of this evaluation. Cancer and noncancer risk at the MEIR and MEIW is as follows:

Cancer:

	Location	Cancer (risk per million)
MEIR	901 W. Upjohn Ave	0.74
MEIW	Hope City Church	0.01

Non-Cancer, Acute Exposure

	Location	Hazard Index (HI)
PMI	35.61486, -117.68771	0.85
MEIR	901 W. Upjohn Ave	0.24
MEIW	Hope City Church	0.18

Based on the results of the HRA, TAC emissions are not anticipated to present a cancer risk greater than 1 in one million to any off-site receptors; therefore, the facility does not present a significant cancer risk to any off-site receptors. Acute HI is greater than 0.2 at some nearby residences; this risk is overwhelmingly driven by the potential hourly benzene emissions during filling of the UST by gasoline delivery vessels.

While the project is authorizing an increase in annual fuel dispensed, this is not expected to have an effect on the amount of fuel delivered by a single delivery vessel to the UST; therefore, this potential acute noncancer risk is not being newly caused by the modification. This updated risk designation for the facility, determined by using the revised risk guidelines for GDFs, will be

included in the District's next annual AB2588 Air Toxics Report.

Since the facility has a noncancer HI greater than 0.2, implementation of best available control technology for toxics (T-BACT) is required. The toxic emissions creating the health risks are VOCs; therefore, controls for VOC emissions would be the candidates for what would constitute TBACT.

GDFs are required to implement EVR for control of VOC emissions, and CH&SC §41954(g)(1) preempts districts from adopting or enforcing GDF vapor recovery procedures or performance standards that are stricter than those adopted by the state board. Therefore, BACT for VOCs (see section VI) shall also constitute TBACT for this modification.

VI. BACT DETERMINATION:

In accordance with CARB's Executive Orders for Gasoline Dispensing Facilities, District Rules 412 & 412.1, and the Benzene Airborne Toxic Control Measure for Retail Service Stations (17 CCR §93101), Phase I and Phase II enhanced vapor recovery (EVR) systems have proven to be Best Available Control Technology (BACT) for control of Volatile Organic Compound (VOC) emissions generated by the filling of gasoline storage tanks and fueling of motor vehicles

The GDF is currently equipped with CARB certified Phase I & Phase II EVR equipment; therefore, BACT has been satisfied for the modification.

VII. CEQA DETERMINATION:

EASTERN KERN APCD PERMITS - CEQA COMPLIANCE
Instructions for Checklist

This form is designed to be used by the permit application processing engineer in implementing requirements of the California Environmental Quality Act (CEQA) for District permitting activities when the District is the lead or responsible agency under CEQA. The District is generally a responsible agency for portions of development projects requiring District permits. The District is a commenting agency for other parts of a project, such as, indirect source emissions and vehicle trips. Most District permits are considered exempt from CEQA (see District List of Exempt Projects). In most cases the environmental document prepared by the lead agency is adequate for the District permitting action. Certain District permit modifications may require supplemental CEQA documents.

CEQA compliance for a project subject to District permit requirements includes two steps:

A. Determining what CEQA-related information, if any, is required from the applicant to deem the application complete (this may also be identified at the pre-application stage, if there is one[1]).

B. Determining and documenting CEQA compliance for each permit application prior to granting a permit by completing the attached form.

The following instructions correspond to the questions on the form:

B.2. Projects subject to District permits often also require a land use or other permit from other agencies. The permit engineer should check the application or request from the applicant information regarding what other agencies will be requiring permits for the project and who the "Lead Agency" will be. District permit processing should begin as soon as adequate information is available to deem the application complete, even if the lead agency has not completed the environmental document (Govt. Code ' 65941 (b), amended 1993), and if the applicant so requests (Govt. Code ' 65951, amended 1993).

B.3. For District permits that do not fall under the preceding case, the engineer shall receive from the applicant a signed and dated environmental questionnaire (Initial Study checklist).

C.2. As a "responsible agency" under CEQA, the Control Officer shall consider information contained in the lead agency's final EIR or ND prior to granting the District permit. Acting on behalf of the Control Officer, the engineer shall review the ND or EIR and adopt any mitigation measures for air quality impacts or project alternatives over which the District has regulatory discretion.

C.3. If any component of the project is not listed, and if exceptions to these exemptions provided in the form are true, then the project cannot be considered exempt. In making a recommendation to issue the District permit, the permit engineer shall review the environmental questionnaire provided by the applicant to establish the project has no potential for resulting in a significant adverse environmental impact to any environmental media (see Initial Study form). The study shall also demonstrate the project will not contribute to significant cumulative impacts and will not have significant impact itself. Although no further action is required under CEQA, the applicant may request a Notice of Exemption to be filed, to reduce the statute of limitations from 180 days to 30 days, on challenges to the decision the project is exempt from CEQA.

[1] *Preapplication under PRC ' 21080.1(b) amended 1993-at the request of the applicant the lead agency must provide for pre-application consultation on the environmental document.*

EASTERN KERN APCD PERMITS -- CEQA COMPLIANCE CHECKLIST

Completeness Review Form

This form shall be completed by the permit application engineer for all Authority to Construct permit applications. The completed form shall be included in the Engineering Evaluation File.

A. General Information

Application Number: 8096185C
Applicant Name: Jaco Oil Co./Jamieson Hill dba Howard's #798
Project Description: Modify GDF: Increase Maximum Gasoline Throughput

B. Determination of Completeness

Check the corresponding action to be taken to determine the application is complete for CEQA purposes and fill in blanks where appropriate.

1. Ministerial Exemption

___This permit application is not subject to CEQA because the evaluation is a ministerial action conducted using fixed standards and objective measurements. No discretion or judgment is required in granting of this permit.

2. Project Was Exempted by or is Subject to Negative Declaration or EIR by Another Agency

___This permit application was exempted by or is subject to a ND or EIR prepared (or under preparation) by another agency. The District has received the necessary information indicating another agency is acting as the Lead Agency. Therefore, the application shall be deemed complete for CEQA purposes.

3. All Other Permits

X The District has received from the applicant, a completed, signed and dated environmental questionnaire and any other information necessary for preparing a negative declaration or EIR, if required (see Form Instructions B.3.). Therefore, the application shall be deemed complete for CEQA purposes.

C. Final Action

Check the appropriate action taken by the APCO prior to issuing the final permit.

1. Ministerial Action

___This permit application is exempt from CEQA because the permit evaluation is a ministerial action. CEQA does not apply to ministerial actions. No further action is necessary.

2. Project Was Exempted by or is Subject to Negative Declaration or EIR by Another Agency

___This permit application was exempted by or was subject to an EIR or Negative Declaration by another agency. The final action on the District permit was taken only after review and consideration of information in the certified CEQA document by the Control Officer, or authorized District representative of the Control Officer.

3. Exemption

X This permit application is exempt from CEQA because the project, as a whole, is listed in the District List of Exempt Projects AND because the project has no potential for causing a significant adverse environmental impact. A General Exemption under CEQA Section 15061 (b) (3) applies if the project is not listed in the District Exemption List AND it can be seen with certainty the project will not have a significant adverse effect on the environment. In making this determination,

a. a review of information submitted by the applicant has been conducted indicating there is no potential for a significant adverse environmental impact on any environmental media from the project;
b. emissions offsets were not required by EKAPCD Rule 210.1, Subsection III.B.;
c. recognized Best Available Control Technology (BACT) was proposed; and
d. no unusual circumstances such as location, or cumulative impacts from successive projects of the same type in the same place over time, were determined to result in significant adverse environmental impacts.

4. Permit is Not Exempt from CEQA

___This permit was found not to be exempt from CEQA and no other agency will be conducting a CEQA review for the project. The District has prepared and adopted a Negative Declaration/Addendum or certified an EIR for the project. The final action by the District was taken only after information contained in the final EIR or ND was considered and any significant adverse environmental effects were mitigated to the maximum extent feasible.

EASTERN KERN AIR POLLUTION CONTROL DISTRICT
2700 "M" STREET SUITE 302, BAKERSFIELD, CA 93301-2370
PHONE: (661) 862-5250 • FAX: (661) 862-5251 • www.kernair.org

ENVIRONMENTAL INFORMATION FORM AND INITIAL STUDY EVALUATION

Applicant: Jamieson Hill Company/Fastrip #798

Contact: Jason Rabanal

Title: Compliance Manager **Phone:** 661-633-7586

Project Description: Annual Throughput Limit Increase

Environmental Information	**Yes**	**No**	**Maybe**
Will the proposed project with regard to the proposed location:			
1. Conflict with the adopted environmental plans and goals of the community?	[ ]	[X]	[ ]
2. Have a substantial, demonstrable negative aesthetic effect?	[ ]	[X]	[ ]
3. Substantially affect a rare or endangered species of animal or plant or the habitat of the species?	[ ]	[X]	[ ]
4. Interfere substantially with the movement of any resident or migratory fish or wildlife species?	[ ]	[X]	[ ]
5. Substantially diminish habitat for fish, wildlife or plants?	[ ]	[X]	[ ]
6. Breach published national, state, or local standards relating to solid waste or litter control?	[ ]	[X]	[ ]
7. Substantially degrade water quality or contaminate a public water supply?	[ ]	[X]	[ ]
8. Substantially degrade or deplete ground water resources or interfere substantially with ground water recharge?	[ ]	[X]	[ ]
9. Disrupt or adversely affect a prehistoric or historic archeological site or a property of historic or cultural significance to a community or ethnic or social group; or a paleontological site except as part of scientific study?	[ ]	[X]	[ ]
10. Induce substantial growth or concentration of population?	[ ]	[X]	[ ]
11. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?	[ ]	[X]	[ ]
12. Displace a substantial number of people?	[ ]	[X]	[ ]

Environmental Information	Yes	No	Maybe
13. Encourage activities which result in the use of large amounts of fuel, water or energy?	[ ]	[x]	[ ]
14. Use fuel, water or energy inefficiently?	[ ]	[x]	[ ]
15. Increase substantially the ambient noise level for adjoining areas?	[ ]	[x]	[ ]
16. Cause substantial flooding, erosion or siltation?	[ ]	[x]	[ ]
17. Expose people or structures to major geologic hazards?	[ ]	[x]	[ ]
18. Extend a sewer trunk line with capacity to serve new development?	[ ]	[x]	[ ]
19. Disrupt or divide the physical arrangement of an established community?	[ ]	[x]	[ ]
20. Create a potential public health hazard or involve the use, production, or disposal of materials which pose a hazard to people or animal or plant populations in the area affected?	[ ]	[x]	[ ]
21. Conflict with established recreational, educational, religious or scientific uses?	[ ]	[x]	[ ]
22. Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land?	[ ]	[x]	[ ]
23. Interfere with emergency response or evacuation plans?	[ ]	[x]	[ ]
24. Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations?	[ ]	[x]	[ ]
25. Emits Greenhouse Gas (GHG) emissions greater than 25,000 tons?	[ ]	[x]	[ ]

NOTE: Please attach any pertinent explanatory information.

CERTIFICATION:

I hereby certify the statement furnished above and in attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Print Signing Authority Name If Different: _____

Signature: _____ **Date:** 4/17/2025

VIII. EMISSION CALCULATIONS:

A. Assumptions:

1. Maximum annual throughput: 3,000,000 gal/year (applicant)
2. Maximum hourly throughput:
   i. Dispensing: 1,000 gal/hr (2022 CARB IWRA guidance)
   ii. UST Filling: 8,800 gal/hr (2022 CARB IWRA guidance)
3. Maximum Daily operation:
   i. Dispensing: 24 hr/day
   ii. UST Filling: Two deliveries per day (17,600 gal/day)
4. EVR equipment meets CARB performance standards
5. 90% of vehicles refueled equipped with ORVR (CARB estimate for 2024)

B. Emission Factors (EF):

Emission Source	Controlled (EVR) EF (lb VOC/1000-gal)
Bulk Transfer	0.15
Breathing Losses	0.024
Spillage	0.24
Hose Permeation	0.009
Refueling (non-ORVR)	0.42
Refueling (ORVR)	0.021

C. Emission Calculations

Phase I (Bulk Transfer) Emissions:

$$8{,}800\,\frac{gal}{hr} * 0.15\,\frac{lb\ VOC}{1000\ gal} = 1.320\,\frac{lb}{hr}$$

$$17{,}600\,\frac{gal}{day} * 0.15\,\frac{lb\ VOC}{1000\ gal} = 2.640\,\frac{lb}{day}$$

$$3{,}000{,}000\,\frac{gal}{year} \times 0.15\,\frac{lb\ VOC}{1000\ gal} \times \frac{1}{2000}\,\frac{ton}{lb} = 0.225\,\frac{tons}{year}$$

Phase II (Breathing, Refueling, Spillage, & Permeation) Emissions:

$$0.024\,\frac{lb\ VOC}{1000\ gal} + \left(0.42\,\frac{lb\ VOC}{1000\ gal} \times 0.10\right) + \left(0.021\,\frac{lb\ VOC}{1000\ gal} \times 0.90\right) + 0.24\,\frac{lb\ VOC}{1000\ gal} + 0.009\,\frac{lb\ VOC}{1000\ gal} = 0.334\ \frac{lb\ VOC}{1000\ gal}$$

$$1000\,\frac{gal}{hr} \times 0.334\ \frac{lb\ VOC}{1000\ gal} = 0.334\,\frac{lb}{hr}$$

$$1000\,\frac{gal}{hr} \times 24\,\frac{hr}{day} \times 0.334\ \frac{lb\ VOC}{1000\ gal} = 8.014\,\frac{lb}{day}$$

$$3{,}000{,}000\,\frac{gal}{year} \times 0.334\ \frac{lb\ VOC}{1000\ gal} \times \frac{1}{2000}\,\frac{ton}{lb} = 0.501\,\frac{tons}{year}$$

Combined Phase I & Phase II Emissions:

$$1.320\,\frac{lb}{hr} + 0.334\,\frac{lb}{hr} = 1.654\,\frac{lb}{hr}$$

$$2.640\,\frac{lb}{day} + 8.014\,\frac{lb}{day} = 10.654\,\frac{lb}{day}$$

$$0.225\frac{ton}{yr} + 0.501\frac{ton}{yr} = 0.726\frac{ton}{yr}$$

8096185C:

$$1.654\frac{lb}{hr} \times \frac{12{,}000\ gal.\ reg.}{24{,}000\ gal.total} = 0.827\frac{lb}{hr}$$

$$10.654\frac{lb}{day} \times \frac{12{,}000\ gal.\ reg.}{24{,}000\ gal.total} = 5.327\frac{lb}{day}$$

$$0.726\frac{ton}{yr} \times \frac{12{,}000\ gal.\ reg.}{24{,}000\ gal.total} = 0.363\frac{ton}{yr}$$

8096186A:

$$1.654\frac{lb}{hr} \times \frac{12{,}000\ gal.\ reg.}{24{,}000\ gal.total} = 0.827\frac{lb}{hr}$$

$$10.654\frac{lb}{day} \times \frac{12{,}000\ gal.\ reg.}{24{,}000\ gal.total} = 5.327\frac{lb}{day}$$

$$0.726\frac{ton}{yr} \times \frac{12{,}000\ gal.\ reg.}{24{,}000\ gal.total} = 0.363\frac{ton}{yr}$$

Potential to Emit After Modification:

			Emissions (VOC)		
	Fuel Type	**Size (gal)**	**lb/hr**	**lb/day**	**ton/year**
‘185C	Regular	12,000	0.827	5.327	0.363
‘186A	Premium	12,000	0.827	5.327	0.363
[redacted]			1.654	10.654	0.726

Potential to Emit Prior to Modification (Revised Emission Factors):

			Emissions (VOC)		
	Fuel Type	**Size (gal)**	**lb/hr**	**lb/day**	**ton/year**
‘185B	Regular	12,000	0.827	5.327	0.290
‘186A	Premium	12,000	0.827	5.327	0.290
[redacted]			1.654	10.654	0.581

Emissions Increase:

			Emissions (VOC)		
	Fuel Type	**Size (gal)**	**lb/hr**	**lb/day**	**ton/year**
‘185	Regular	12,000	0.000	0.000	0.073
‘186	Premium	12,000	0.000	0.000	0.073
[redacted]			0.000	0.000	0.145

Previous Emission Calculation (NSR Balance/SSPE):

			Emissions (VOC)		
	Fuel Type	**Size (gal)**	**lb/hr**	**lb/day**	**ton/year**
‘185B	Regular	12,000	0.240	5.750	1.049
‘186A	Premium	12,000	0.240	5.750	1.049
[redacted]			0.480	11.500	2.099

Emissions Change (NSR balance/SSPE):

	Fuel Type	Size (gal)	Emissions (VOC) lb/hr	lb/day	ton/year
'185	Regular	12,000	0.587	-0.423	-0.686
'186	Premium	12,000	0.587	-0.423	-0.686
[redacted]			1.174	-0.846	-1.372

IX. EMISSION CHANGES:

A. **PROJECT'S EMISSION CHANGE**:
Sum of emissions changes for all emissions units to be included in the NSR Balances (NSRB) and the Stationary Source Potentials to Emit (SSPE).

	PM_{10}	SOx	NOx	VOC	CO
lb/day:	0.00	0.00	0.00	-0.85	0.00
tons/yr	0.00	0.00	0.00	-1.37	0.00

B. **PRE-PROJECT NSR BALANCES AND SSPE:**

	NSRB	NSRB	SSPE	SSPE	NSRB
Pollutant:	PM_{10}	SOx	NOx	VOC	CO
lb/day:	0.00	0.00	0.00	11.50	0.00
tons/yr:	0.00	0.00	0.00	2.10	0.00

C. **POST-PROJECT CUMULATIVE NSR BALANCE AND SSPE**:
Pre-Project NSR Balance/SSPE + Projects Emissions Change

	NSRB	NSRB	SSPE	SSPE	NSRB
Pollutant:	PM_{10}	SOx	NOx	VOC	CO
lb/day:	0.00	0.00	0.00	10.65	0.00
tons/yr:	0.00	0.00	0.00	0.73	0.00

NOTE: A negative NSR balance is not allowed. Reductions causing a negative balance shall be banked (if qualified) pursuant to Rule 210.3.

X. CONCLUSIONS:

A. Rule 210.1 (conclusions based on worst case):
X Satisfies requirements of Subsection III.A. (BACT)
X Project not subject to Subsection, III.B. (offsets), NSR balance for SOx< 27 tons/yr and PM_{10} < 15 tons/yr and SSPE for VOC and NOx < 25 tons/yr,.
___Project subject to Subsection III.B. (offsets),
___Project not subject to NSR requirements.

B. Rule 302: Stationary containers with a capacity of 5,000<gal<15,000 are subject to an annual permit fee of $211 in accordance with Schedule 5, Line 1; however, first year permit fees are not required for modifications.

C. Rule 412: Gasoline storage tanks are equipped with a permanently affixed submerged fill tube terminating no more than six inches from the tank bottom and California Air Resources Board "certified" Phase I gasoline vapor recovery hardware which will prevent at least 98% by weight of all gasoline vapors displaced during filling of each tank from entering the atmosphere. Compliance with Rule 412 is expected.

D. Rule 412.1: Gasoline tanks and dispensers shall be equipped with California Air Resources

Board "certified" Phase II gasoline vapor control hardware which will prevent 95% by weight of the gasoline vapors displaced during refueling of motor vehicles from entering the atmosphere. Compliance with 412.1 is expected.

E. Rule 419 and CH&SC §41700: The facility utilizes CARB certified Phase I and Phase II EVR equipment for control of gasoline vapors; therefore, nuisance emissions are not anticipated. TAC emission increases associated with the annual throughput are not expected to result in a significant carcinogenic or chronic non-carcinogenic risk to off-site receptors. Re-assessment of potential acute risk in accordance with the revised IWRA guidelines indicates the facility is an "intermediate" risk, overwhelmingly due to TAC emissions during bulk loading of the USTs. This risk is not newly created by the proposed modification; therefore, the proposed increase in maximum annual throughput would not result in a significant health risk to nearby receptors. Compliance with Rule 419 and CH&SC §41700 is expected.

F. CH&SC §42301.6: A 30-day school notice period is being held from September 9, 2025 to October 9, 2025. Written comments received will be considered and responses incorporated into final evaluation.

XI. RECOMMENDATIONS:

Issue Authority to Construct No. 8096185C with the following conditions:

EQUIPMENT DESCRIPTION: Gasoline Storage and Dispensing Facility, including following equipment and design specification:

A. 12,000-gallon regular unleaded gasoline storage tank with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filing (8096185C);
B. 12,000-gallon regular unleaded gasoline storage tank with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filing (8096186A);
C. Phase I (filling of storage tank) 2-point vapor collection system (VR-101-G) including separate vapor riser with the following CARB certified components:

	Component	Manufacturer/Model Number
1.	**Liquid Fill Adapter**	OPW 61SALP-EVR
2.	**Liquid Fill Cap**	OPW 63TT-EVR
3.	**Vapor Adapter**	OPW 61VSA-EVR
4.	**Vapor Cap**	OPW 1711T-EVR
5.	**Drop Tube**	OPW 61T
6.	**Extractor Assembly**	OPW 233VM
7.	**Float Vent Valve**	OPW 53 VML
8.	**Pressure Vacuum Relief Valve**	Husky 5885

D. Four – Gilbarco Encore 500 model dispensers each equipped with two product nozzles for a total of 8 coaxial assist certified vapor recovery nozzles; and
E. Vapor-assist type Phase II (fueling of vehicle tank) vapor collection system (VR-202-AC) with 8 nozzles, onboard refueling vapor recovery (ORVR) compatible certified vapor recovery nozzles with in-station-diagnostics (ISD), including the following CARB certified components:

	Component	Manufacturer/Model Number
1.	**Nozzle**	Healy Model 900
2.	**Swivel**	N/A
3.	**Flow Limiter**	Healy Model 1301
4.	**Vapor Check Valve**	Included with nozzle
5.	**Coaxial Hose**	Healy 75 Low Permeation
6.	**Breakaway Fitting**	Healy Model 8701VV

7.	**Dispensers**	Gilbarco Encore 500 (NG0 and NG1)
8.	**Dispenser Vacuum Pump**	Healy Model VP1000
9.	**Vapor Processor**	Healy Model 9961 Clean Air Separator
10.	**ISD Equipment/TLS Console**	Veeder-Root 8470XX-XXX
11.	**Vapor Flow Meter**	Veeder-Root 331847-XXX
12.	**Vapor Pressure Sensor**	Veeder-Root 331946-001 or Veeder-Root 861190-201

OPERATIONAL CONDITIONS:

1. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
2. The Phase I vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's specification, applicable CARB Executive Order, and CARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System to prevent at least 98% by weight of all gasoline vapors from entering atmosphere. (Rule 412)
3. The Phase II vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's specification, applicable CARB Executive Order, and CARB-Approved Installation and Maintenance Manual for the Phase II Vapor Recovery System including In-Station Diagnostics to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rule 412.1)
4. The Phase II Vapor Recovery System and In-Station Diagnostics (ISD) System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
5. Any component changes to the Phase I or Phase II vapor recovery systems shall be approved in advance by District. (Rules 209, 412, 412.1)
6. Gasoline storage tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
7. Gasoline storage tanks shall be equipped with pressure/vacuum relief valve with a positive pressure setting of 2.5 to 6.0 inches H_2O and negative pressure setting of 6.0 to 10.0 inches H_2O. (Rule 412)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. All Phase I (filling of storage tank) vapor collection equipment shall be used when gasoline storage tanks are filled. (Rule 412)
10. Phase II (filling of vehicle tank) vapor collection equipment shall be used when vehicle tanks are filled. (Rule 412.1)
11. Retail stations shall post following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 209)
12. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000 ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
13. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)
14. The operator shall conduct periodic maintenance inspections, based on the largest monthly amount of gasoline dispensed by the facility in the calendar year, as follows:
    a. Less than 25,000 gallons per month - one day per week; and

b. Greater than or equal to 25,000 gallons per month - five days per week.
All inspections shall be documented within the O&M manual. (Rule 412.1)

15. The person conducting the inspections shall, at a minimum, verify the following during inspections: (Rule 412, 412.1)

Storage Tank Fill Ports	Dispensers
Tank fill caps and vapor caps are not missing, damaged, or loose	Fueling instructions required by operational condition 12 are clearly displayed with the appropriate toll-free complaint phone number and toxic warning signs
The fill cap gasket and vapor cap gaskets are not missing or damaged	The following nozzle components are in place and in good condition as specified in the applicable CARB Executive Orders: faceplate/face cone, bellows, latching device spring, vapor check valve, spout (proper diameter/vapor collection holes), insertion interlock mechanism, automatic shut-off mechanism, hold open latch
The fill adapter and vapor adapter are securely attached to the risers	The hoses are not torn or crimped
Any spring-loaded submerged fill tube seals properly against the coaxial tubing, and the dry break (poppet-valve) is not missing or damaged	The vapor path of coaxial hoses associated with bellows-equipped nozzles does not contain more than 100 ml of liquid, or as required by the applicable CARB Executive Order
The submerged fill tube is not missing or damaged	i. The amount of liquid in the vapor path shall be determined by lowering the gasoline dispensing nozzle into a container, opening the vapor check valve, and allowing the hose to drain until such time that no more liquid drains from the nozzle. ii. The amount of liquid drained into the container shall be measured using a graduated cylinder or graduated beaker.

16. The permittee shall perform and pass a Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems using ARB TP-201.3 in accordance with Exhibit 8 of Executive Order VR-202-AC within 60 days of completion of installation or modification and at least once every 12 months. (Rules 412, 412.1)
17. The permittee shall perform and pass a "Static Torque of Rotatable Phase I Adaptors" test using ARB procedure TP-201.1B within 60 days of completion of installation or modification and at least once every three years. (Rule 412)
18. The permittee shall perform and pass a Pressure Integrity of Drop Tube Drain Valve Assembly Test using ARB TP-201.1C or a Pressure Integrity of Drop Tube Overfill Protection Devices Test using ARB TP-201.1D if an overfill protection device is installed, within 60 days of completion of installation or modification and at least once every three years. (Rule 412)
19. The permittee shall perform and pass a Leak Rate and Cracking Pressure of Pressure Vacuum Vent Valves on all pressure/vent (PV) valves at the facility in accordance with ARB Test Procedure TP-201.1E within 60 days of completion of installation or modification and at least once every 12 months. (Rule 210.1)
20. The permittee shall perform and pass a Static Pressure Test for the Healy Clean Air Separator using the test procedure from Exhibit 4 of Executive Order VR-202-AC within 60

days of completion of installation or modification and at least once every 12 months. (Rule 412.1)

21. The permittee shall perform and pass a Vapor-to-Liquid Volume Ratio Test using the test procedure from Exhibit 5 of Executive Order VR-202-AC within 60 days of completion of installation or modification and at least once every twelve (12) months from the date of the last successfully passed test. (Rule 412.1)
22. The permittee shall perform and pass an ISD Operability Test using the test procedure from Exhibit 9 of Executive Order VR-202-AC within 60 days of completion of installation or modification and at least once every 12 months. (Rule 412.1)
23. The permittee shall perform and pass a dispenser integrity test in accordance with Exhibit 14 of Executive Order VR-202-AC within 60 days of completion of installation or modification and at least once every 12 months. (Rule 412.1)
24. The permittee shall perform and pass a Dynamic Back Pressure Test using ARB TP-201.4 within 60 days of completion of installation or modification and at least once every 12 months. (Rule 412)
25. The permittee shall perform and pass a Nozzle Bag Test using the test procedure from Exhibit 7 of Executive Order VR-202-AC within 60 days of completion of installation or modification and at least once every 12 months. (Rule 412.1)
26. The District shall be notified by the permittee 7 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (Rules 108.1, 412)
27. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
28. The operator shall implement a periodic maintenance inspection program for the certified Phase II vapor recovery system in accordance with ARB approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System Including Veeder-Root ISD System. The program shall be documented in an operation and maintenance (O&M) manual and shall at a minimum contain the following information:

a.	All applicable ARB Executive Orders, Approval Letters, and District Permits;
b.	The manufacturer's specifications and instructions for installation, operation, repair, and maintenance required pursuant to ARB Certification Procedure CP-201, and any additional instruction provided by the manufacturer;
c.	System and/or component testing requirements, including test schedules and passing criteria for each of the standard tests. The owner/operator may include any non-ARB required diagnostic and other tests as part of the testing requirements;
d.	Protocol for performing periodic maintenance inspections including the components to be inspected and the defects requiring repair; and
e.	Additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, ARB Executive Orders, and District permit conditions, including replacement schedules for failure or wear prone components. (Rule 412.1)

29. The operator shall maintain on the premises a log of any repairs made to the certified Phase I or Phase II vapor recovery system. The repair log shall include the following:

a.	Date and time of each repair;
b.	Name of the person(s) who performed the repair, and if applicable, the name, address and phone number of the person's employer;
c.	Description of service performed;
d.	Each component that was repaired, serviced, or removed;
e.	Each component that was installed as replacement, if applicable; and
f.	Receipts or other documents for parts used in the repair and, if applicable, work orders which shall include the name and signature of the person responsible for performing the repairs. (Rule 412.1)

30. The operator shall maintain monthly gasoline throughput records. (Rule 412.1)
31. All records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 412.1)

32. There shall be no odors detectable at or beyond the property boundary. (Rule 419)
33. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC §41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 210.1)

SPECIAL CONDITIONS:

aa. Facility gasoline throughput shall not exceed 3,000,000 gallons per year. (Rule 210.1)
bb. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
cc. Owner/operator of this facility shall comply with ARB Special Advisory No. 405 and subsequent amendments regarding response to ISD Alarms. (Rule 412.1)
dd. All delivery vessels shall have a CARB certified vapor recovery system for cargo containers. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
ee. The hatch on a delivery vessel shall be equipped with a leak-free cover and the hatch shall not be opened for visual inspection unless at least three minutes have elapsed since loading or unloading has stopped. The dome hatch, once opened, shall not be held open longer than three minutes, except as directed by local, state, or federal agencies having jurisdiction. (Rule 412)
ff. Gasoline vapors shall not be purged from delivery vessel into the atmosphere. This includes relieving container pressure by manually “popping” the poppet valve on the truck-mounted vapor return line. (Rule 412)

Attachment A

Health Risk Assessment

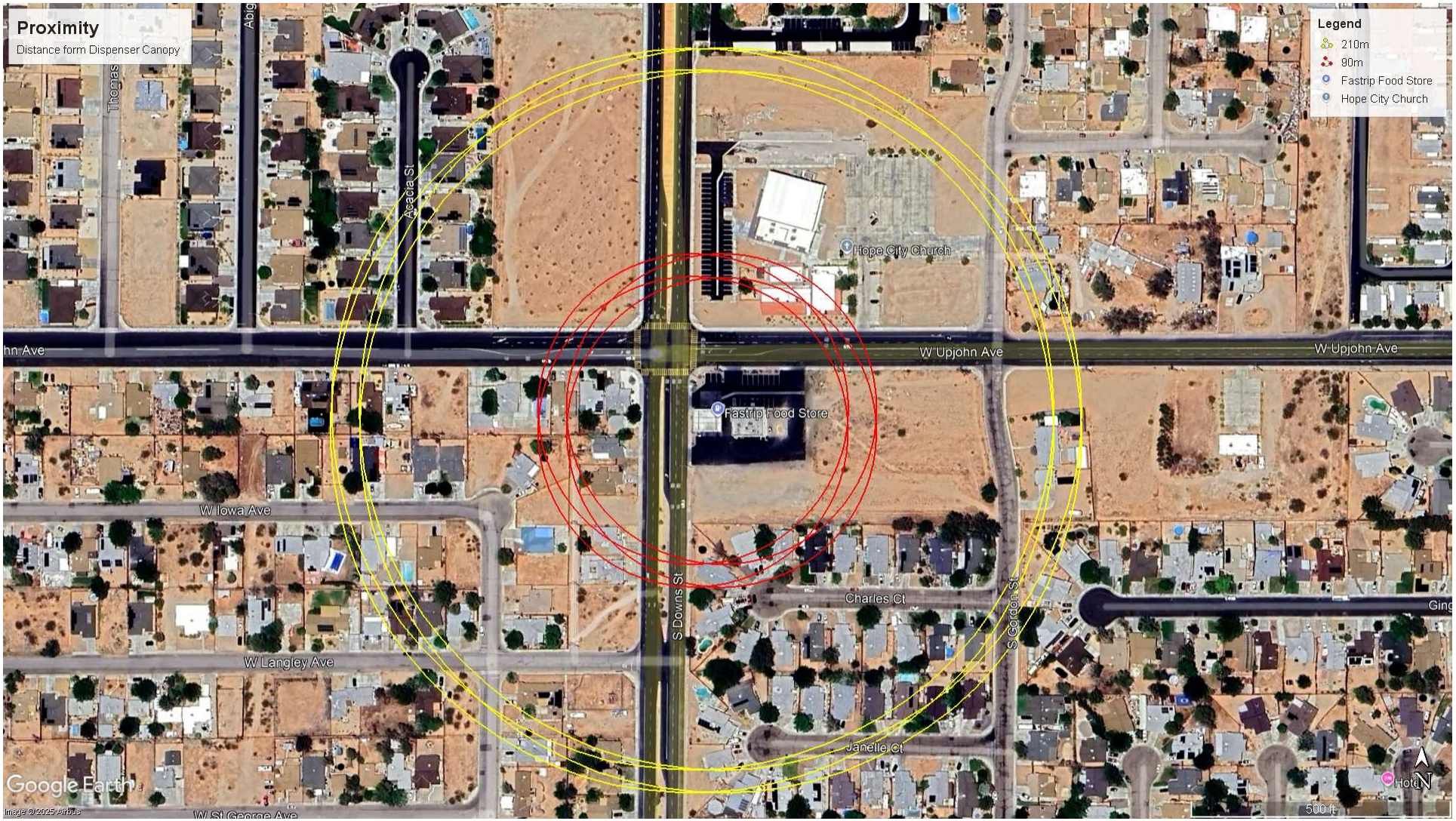

Figure A1: Proximity to GDF

2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
Version 1.0 - February 18, 2022

Required Value	User Defined Input	Instructions
Annual Throughput (gallons/year)	3000000	Enter your gas station's annual throughput in gallons of gasoline dispensed per year.
Hourly Dispensing Throughput (gallons/hour)	1000	The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4
Hourly Loading Throughput (gallons/hour)	8880	The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5.
Meteorological Data	Lancaster	Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met
Distance to Nearest Resident (meters)	35	Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Nearest Business (meters)	58	Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Acute Receptor (meters)	10	Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Control Scenario	EVR Phase I & EVR Phase II	Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls.
Include Building Downwash Adjustments	yes	Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment.

Risk Value	Results
Max Residential Cancer Risk	8.38
Max Worker Cancer Risk (chances/million)	0.36
Chronic HI	0.03
Acute HI	3.59

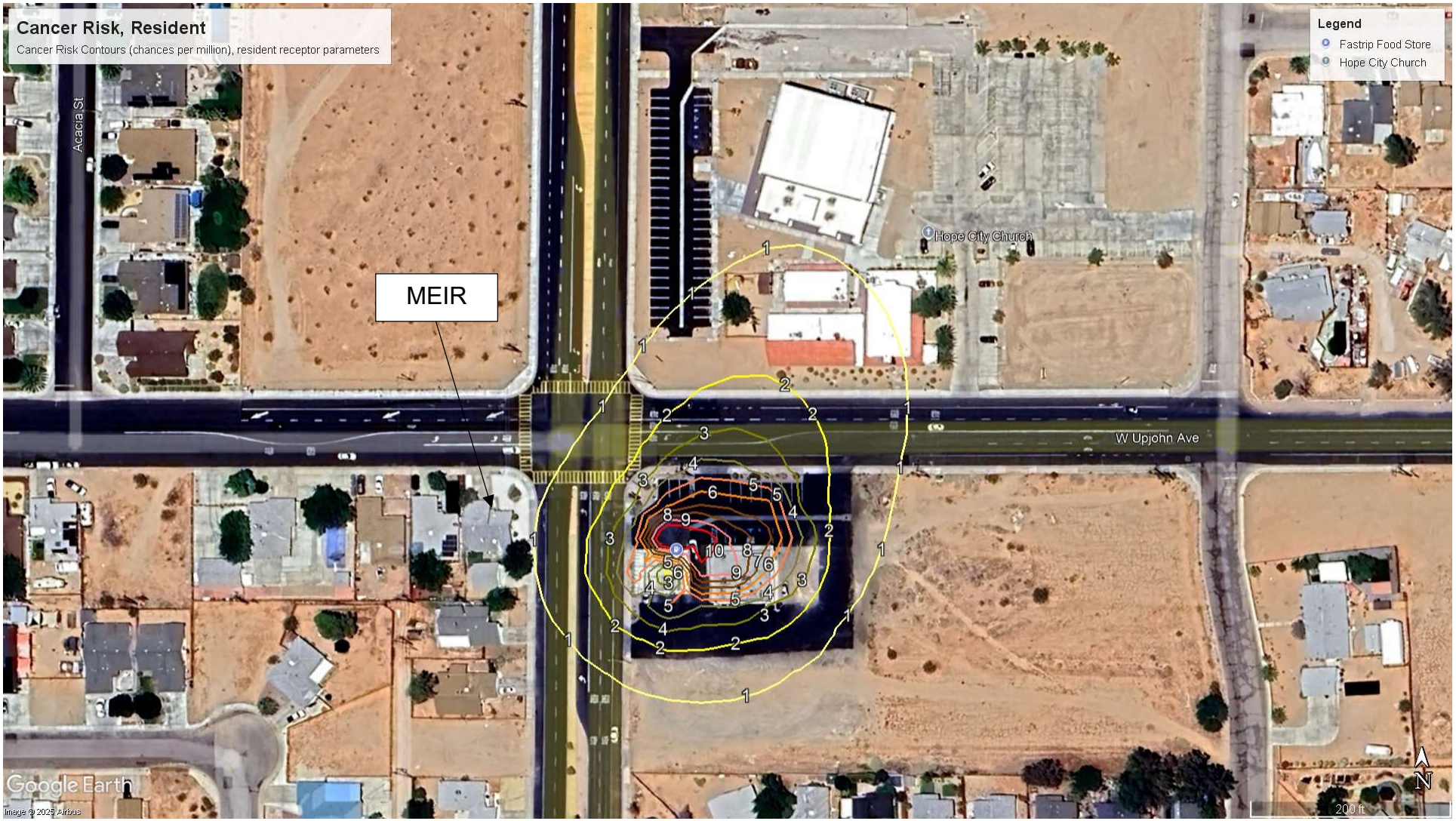

Figure A2: Resident Cancer Risk Contours

Figure A3: Worker Cancer Risk Contours

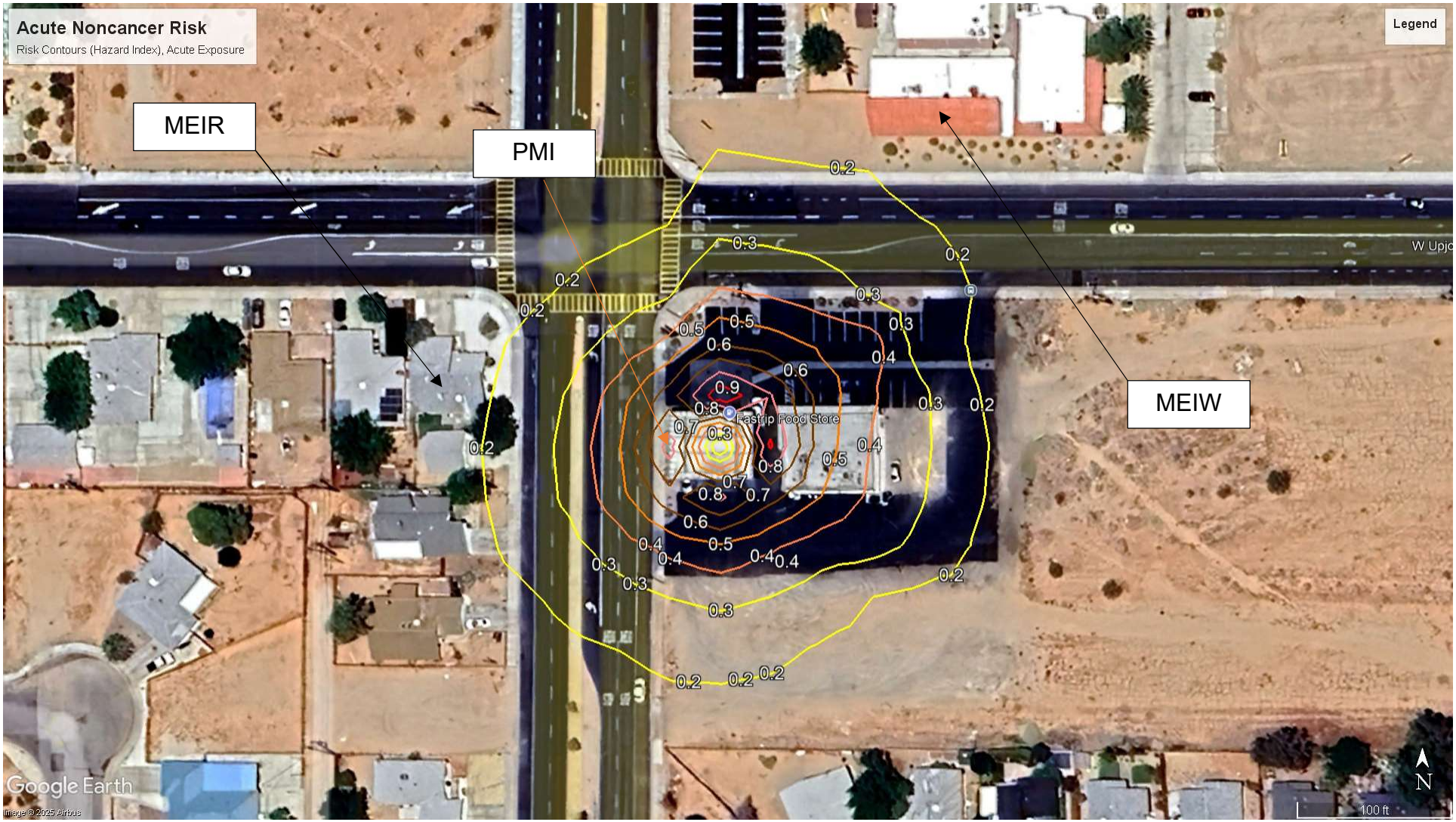

Figure A4: Acute Noncancer Risk Contours