FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT MEMORANDUM 12/05/2022

TO: FRAQMD BOARD OF DIRECTORS

FROM: Christopher D. Brown, AICP, APCO

SUBJECT: Public Hearing to Present the Annual Report on the District's AB2588 Air Toxics

"Hot Spots" Program.

RECOMMENDATION:

None, informational item only.

BACKGROUND:

The California Health and Safety Code section 44363 requires the District to prepare and publish an annual report that:

- 1. Describes the priorities and categories of the permitted facilities and summarizes the results of health risk assessments.
- 2. Ranks and identifies facilities according to the degree of cancer risk posed to the public.
- 3. Identifies facilities which expose the public to noncancer health risks.
- 4. Describes the status of the development of control measures to reduce emissions of toxic air contaminants.

The HSC § 44363(b) requires that the District Board hold one or more public hearings to present the report and discuss its content and significance. This code section also requires that the District mail a notice of the report's availability to the County Boards of Supervisors, City Councils, and health departments.

DISCUSSION:

The District prepared the attached Annual Report for the AB 2588 Air Toxics "Hot Spots" Program.

The report is available on the District's website: https://www.fraqmd.org/air-toxics and can be made available to interested parties without internet access by calling the District office.

The report was mailed on November 21, 2022, to the Sutter and Yuba County Boards of Supervisors, the City Councils of Live Oak, Marysville, Wheatland, and Yuba City, and the Sutter and Yuba County Health Departments.

The report also includes a status update on the Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants (CTR).

FISCAL IMPACT:

None, informational item only.

ATTACHMENTS:

Report on the AB 2588 Air Toxics "Hot Spots" Program, November 21, 2022

Agenda Item 7

Attachment 1: Annual Report on the AB 2588 Air Toxics "Hot Spots" Program,
November 21, 2022



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Christopher D. Brown, AICP Air Pollution Control Officer

AB2588 Air Toxics "Hot Spots" Program Annual Report

Update on the Reporting of Criteria Air Pollutants and Toxics Air Contaminants Regulation

Feather River Air Quality Management District

Released: November 21, 2022

Executive Summary

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) is a State of California public right-to-know law requiring local air quality management and air pollution control districts to collect information about the location, type, and quantity of toxic compounds emitted into the air from specified local businesses and industry. The AB 2588 Program Annual Report is published to provide the public with information regarding the AB 2588 Program of the Feather River Air Quality Management District (District). The enabling statutes (California Health & Safety Code (HSC) Sections 44300-44394) require the California Air Resources Board (CARB) and local air districts to implement the "Hot Spots" Program. This report describes the current reporting and evaluation status for facilities being tracked under this program. This report is required by California HSC Section 44363.

The goals of the AB 2588 Program are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, and to notify nearby residents of significant risks. The AB 2588 Program requires certain emitters of airborne toxic compounds to submit toxic emissions inventory reports and updates. Facilities meeting certain criteria must also complete health risk assessments. HSC Section 44363 requires that the District Board conduct a public hearing concerning the subject report which must include information on the following:

- 1) The priorities and categories designated pursuant to section 44360 and a summary of results and progress of the health risk assessment program undertaken;
- 2) The ranking and identification of facilities according to the degree of cancer risk posed to surrounding receptors;
- 3) The identification of facilities which expose individuals or populations to any non-cancer health risks; and
- 4) The status of development of control measures to reduce emissions of toxic air contaminants, if any.

This report covers facility operations in calendar year 2021 for which AB 2588 State fees were assessed on October 1, 2022. The District's status of development of control measures is as of November 1, 2022.

This report also provides an update on the Regulation for the Reporting of Criteria Air Pollutant and Toxic Air Contaminants¹ (CTR) adopted by the California Air Resources Board, effective January 1, 2022. CTR mandated additional emissions reporting requirements for stationary permitted sources.

The District currently has 627 active permits, of which 379 are subject to AB 2588 based on having a permit to operate over 10 tons per year of criteria pollutants except carbon monoxide, or based on Appendix E of the Emission Inventory Criteria and Guidelines². Of those 379, 147 are considered "industrywide" facilities.

¹ https://ww2.arb.ca.gov/rulemaking/2020/proposed-amendments-reporting-criteria-air-pollutants-and-toxic-air-contaminants

² https://ww3.arb.ca.gov/ab2588/2588guid.htm

Air Toxics "Hot Spots" Program

The AB 2588 Program established a process to compile an inventory of air toxics emissions from specified facility categories in California and to assess the potential risks to public health as a result of exposure to those emissions. AB 2588 specifies activities that the CARB, the Office of Environmental Health Hazard Assessment (OEHHA), and the districts must carry out to implement the Act.

Facilities are categorized based on their reporting status in the program. Facilities subject to the AB 2588 Program are required to either file an emissions inventory plan and report with the local air district or as an alternative the District prioritizes and conducts the risk assessment as part of a permitting action. The District reviews and approves the plan and reports. The District performs a prioritization score for the facility. If the prioritization score indicates further evaluation is necessary, the facility is required to perform a health risk assessment (HRA). If the results from the HRA indicate a potential significant risk to the public, the facility is required to notify the public exposed to the emissions. A facility subject to the public notification requirement then may need to develop a risk reduction plan to lower the emissions below significance levels. After complying with the initial reporting requirements, based on the prioritization scores or HRA results, facilities may be required to submit update reports every four years.

II. Update to OEHHA Risk Assessment Guidelines

The passage of the Children's Health Protection Act of 1999 (SB 25, Stats. 1999) required Office of Environmental Health Hazard Assessment (OEHHA) to re-evaluate the risk assessment methodologies to ensure infants and children are explicitly addressed in assessing risk. In the last decade, advances in science have shown that early-life exposures to air toxics contribute to an increased lifetime risk of developing cancer, or other adverse health effects, compared to exposures that occur in adulthood. In March 2015 OEHHA adopted revisions to the Guidance Manual for the Preparation of Health Risk Assessments³ to address this greater sensitivity and incorporates the most recent data on childhood and adult exposure to air toxics. The Air Resources Board (working with CAPCOA) adopted Risk Management Guidance⁴ implementing the new guidelines in July 2015.

Although emissions levels and actual exposure have not changed, the new methodology calculations will show that some facilities have a 1.5 to 3 times increase in inhalation health risk due to the new awareness of increased sensitivity in infants and children.

III. The District Prioritization Procedure

The District policy 2.12.1 Facility Prioritization and Risk Assessment Thresholds and associated manuals of operations for prioritization and risk assessment were adopted in May 2017. This policy incorporates the updated risk assessment guidance from OEHHA and CARB.

In the initial years of the AB 2588 Hot Spots Program the District requested emission inventory plans and reports from AB2588 applicable facilities. The District now reviews most facilities

https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0

⁴ https://ww3.arb.ca.gov/ab2588/riskassess.htm

priority during the permit evaluation process. The facilities that are reviewed during the permit evaluation process are evaluated based on potential to emit. If a facility is exempt from AB 2588 based on potential to emit, or is subject to AB 2588 and a low priority, no further action is taken under the AB 2588 program for that facility until they submit an application to modify their permit. If a facility is reviewed under AB 2588 based on potential to emit is determined to be an intermediate priority, the facility is entered into the annual emissions inventory and toxics emissions are reported after the first year of operation and at least every four years after. If a facility is reviewed under AB 2588 based on potential to emit is determined to be a high priority, the facility is entered into the annual emissions inventory and toxic emissions are reported annually. If the facility's actual emissions result in a high priority, the facility will be required to pay state AB 2588 fees and submit an HRA, unless it's an industrywide facility. The District will prepare the HRA for the industrywide facilities based on the guidelines developed by CAPCOA, CARB, and OEHHA.

Facilities that submit their own emissions inventory plan and report and are prioritized as intermediate must submit a Quadrennial Update Survey every four years. Facilities that submit their own emission inventory plan and report and are prioritized as high must submit an HRA and pay state AB 2588 fees.

The District has established the following prioritization criteria:

Facility Score*	Facility Description
TS ≥ 10	High Priority
1 ≤ TS ≤ 10	Intermediate Priority
TS < 1	Low Priority

^{*}The facility's score is determined by the greater of the Carcinogenic Effects calculation or the Non-carcinogenic Effects calculation.

A. Industrywide Facilities

The District considers retail gas stations, auto body shops, dry cleaners, and diesel-engine only facilities to be industrywide facilities. The District uses the industrywide guidelines to assess priority and risk for these facilities.

Industrywide Category	Number of Facilities
Gas Station	79
Autobody Shops	23
Dry Cleaner	1
Diesel Engine Only	44

B. Core Facilities

Core facilities are the remaining facilities that are subject to the AB 2588 Program and not industrywide facilities.

IV. Prioritized Facilities and Health Risk Assessments

The District is in the process of reprioritizing facilities under the new guidelines and procedures and is requesting updated Health Risk Assessments from facilities that have been prioritized as high based on actual emissions. In addition, new emissions factors and an updated industrywide HRA guidelines have become available 2022.

CARB and CAPCOA released new emission factors and an updated industrywide risk assessment guidelines for retail gasoline dispensing facilities. The District began using the new emission factors and IWD HRA guidelines on May 4, 2022.

New emission factors for crematories have resulted in higher acute health impacts. This is a result of better data showing higher impacts rather than an increase in emissions. The District completed one HRA for a crematory in 2021 and one in 2022. The remaining crematories shall be re-prioritized the new prioritization procedure and updated emission factors.

In the upcoming year the District will continue reviewing source categories, prioritizing facilities using the updated procedure, and request HRA's for high priority facilities. The District continue to use industrywide health risk assessment guidelines from CAPCOA and CARB to perform HRA's for industrywide facilities. In the upcoming calendar year 2023 the guidelines for diesel engines may be released, and once it's released, the District will implement the IWD HRA guidelines for diesel engines on high priority diesel engine-only facilities.

The District currently has 627 active facilities, of which 379 are subject to AB 2588 based on having a permit to operate over 10 tons per year of criteria pollutants except carbon monoxide, or based on Appendix E of the Emission Inventory Criteria and Guidelines⁵. those 379, 147 are considered "industrywide" facilities. The District has prioritized 89 as low, 186 as intermediate, and 30 as high priority for the AB 2588 Program. The District has 74xxx facilities that have not yet been reviewed for AB 2588 applicability.

Priority Score	Number of Facilities		
Low	89		
Intermediate	186		
High	30		

The Emission Inventory Criteria and Guidelines were updated effective March 2022, including the applicability table in Appendix E⁶. Beginning in 2023 for operations in 2022, many more facilities will be subject to the AB 2588 program, including any using diesel engines over 5 hours per year.

https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/hotspots2020/eicgappefro.pdf

⁵ https://ww3.arb.ca.gov/ab2588/2588guid.htm

The top 10 highest priority facilities for cancer risk in the District based on 2021 emissions are:

Туре	Facility ID	Facility	Location	Priority Score	HRA Score
Diesel engine at wood processing facility	37020	Unity Forest Products	1162 Putman Ave, Yuba City	114	3.8 per million
Emergency backup diesel generator	23002	Rideout Hospital	726 Fourth Street, Marysville	65	8 per million
Emergency backup diesel engine	23001	Cedar Grove MHRC	1251 Stabler Ln, Yuba City	51	Pending IWD HRA Guidelines
Emergency backup diesel engine	23056	City of Marysville	130 F Street, Marysville	43	Pending IWD HRA Guidelines
Crematory	28012	Heaven's Gate	603 Fourth Street, Wheatland	36	9.25 per million
Gas Station	14095	Sam's Club	900 Walton Ave, Yuba City	30	7.2 per million
Emergency backup diesel engine	23247	Sierra Central Credit Union	1351 Harter Pkwy, Yuba City	27	Pending IWD HRA Guidelines
Gas Station with emergency backup diesel engine	14031	Fast Choice Markets	16823 Willow Glen Road, Brownsville	25	Pending IWD HRA Guidelines
Emergency backup diesel generator with private gasoline dispensing	16003	Holt of CA	7310 Pacific Ave, Pleasant Grove	23	Pending IWD HRA Guidelines
Emergency backup diesel generator	23118	Fremont Medical Center	970 Plumas St, Yuba City	21	Pending IWD HRA Guidelines

The top ten highest priority for non-cancer chronic risk in the District based on 2021 emissions are:

Туре	Facility ID	Facility	Location	Priority Score	HRA Score*
Welding/Fabrication	24018	COE Orchard Equipment	3453 Riviera Rd, Live Oak	9.64	N/A
Rice Dryer	6015	Sutter Rice Company	1421 Acacia Road, Sutter	7.5	N/A
Rice Dryer	6010	District 10 Dryers	8923 Hwy 70, Marysville	5.5	N/A
Coating	11065	Sweco Products	2455 Palm Street, Sutter	4.6	N/A
Welding/Fabrication	21041	Davis Machine Shop	15805 Central St, Meridian	4.1	N/A
Fiberglass	8001	ACE Composites	1394 Sky Harbor Drive, Olivehurst	3.9	N/A
Auto Body	11065	Miracle Auto Painting	871 Garden Hwy, Yuba City	3.6	N/A
Fumigation	33010	Judge Farm LLC	8540 Garden Hwy, Yuba City	3.4	N/A
Cremation	28005	Ullrey Memorial Chapel	817 Almond Street, Yuba City	3.3	N/A
Fumigation	33007	Sacramento Valley Walnut Growers	896 OBanion Road, Yuba City	3.2	N/A

^{*}HRA not required if priority score < 10

The top ten highest priority for non-cancer acute risk in the District based on 2021 emissions are:

Туре	Facility ID	Facility	Location	Priority Score	HRA Score*
Crematory	28010	Chapel of the Twin Cities	715 Shasta St, Yuba City	12.45	0.55
Crematory	28007	Lakeside Colonial Chapel	830 D Street, Yuba City	12.45	1.05
Fumigation	33007	Sacramento Valley Walnut Growers	896 OBanion Road, Yuba City	7.7	N/A
Rice Dryer	6017	Van Dyke's Rice Dryer	4036 Pleasant Grove Rd, Pleasant Grove	5.7	N/A
Gas Station	14051	Honeycutt Aviation	1489 A Sky Harbor Dr, Olivehurst	5.1	N/A
Bulk Gasoline	5004	Ramos Oil	429 12th Street, Marysville	5.1	N/A
Fumigation	33010	Judge Farm LLC	8540 Garden Hwy, Yuba City	4.8	N/A
Rice Dryer	6010	District 10 Dryers LLC	8923 Hwy 70, Marysville	4.5	N/A
Gas Station	14023	Collins Lake Recreation	Collins Lake Road, Oregon House	4.4	N/A
Welding/Fabrication	21041	Davis Machine Shop	15805 Central St, Meridian	4.3	N/A

^{*}HRA not required if priority score < 10

V. State AB 2588 Program Fees

CARB is required to adopt a fee recovery regulation to assess fees on facilities subject to the requirements to ensure that costs to implement and administer the AB 2588 Program.

Program costs are recovered by assessing a fee to subject facilities. For 2021 emissions the State AB 2588 Program fees totaled \$5,335.

VI. Control Measure Development

The District has not developed nor adopted any control measures to reduce emissions of toxic air contaminants in the past year.

VII. Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants (CTR)

The initial CTR regulation as adopted in 2018 required annual criteria and toxic emissions reporting for three types of facilities:

- 1. A facility that is required to report to the state board it's greenhouse gas emissions pursuant to Health and Safety Code section 38530.
- 2. A facility located in an air district designated as nonattainment for any NAAQS or CAAQS with a potential to emit of 250 or more tons per year of nonattainment pollutants.
- 3. A facility that is categorized by the air district as high priority for toxic air contaminant emissions pursuant to H&SC section 44360.

Facilities under the first two applicability's were required to report emissions for 2020 operations and facilities subject under the third applicability were required to report emissions for 2021 operations.

ARB has not provided districts with a reporting form to collect the information from facilities or an online database to allow facilities to fulfill CTR requirements online. The District has provided facilities information on the CTR requirements and has utilized grant funding to enter facility information into the current emissions reporting database that were subject under the initial CTR regulation.

The District reported 50 CTR applicable facilities 2020 and 2021 operations in accordance with the 2018 CTR requirements.

Facilities
21
0
29
50

VIII. 2020 Amendments to CTR

On November 19, 2020, ARB adopted amendments to the CTR regulation, greatly expanding the applicability of the reporting requirements. The amendments were effective January 1, 2022. The amended CTR regulation will expand applicability for enhanced annual emissions reporting to the types of facilities in Table x beginning with 2024 operations:

Permitted Process	SIC Code	Activity Level Reporting Threshold
Industrial machinery manufacturing	353x, 356x	Any activity level
Misc plastics products manufacturing if styrene is used	3011 through 3089, 3293, 3555	Any activity level
Processes emitting 1,4-dioxane	13xx, 22xx, 26xx, 27xx, 28xx, 29xx, 30xx, 35xx, 36xx, 37xx, 38xx, 49xx, 50xx, 51xx, 73xx, 75xx, 76xx, 97xx	10 pounds of 1,4-dioxane emitted per year
Any facility that uses a diesel engine, any tier, except agricultural operations or medical related industry (delayed reporting until 2027 and 2026)	Any	5 hours per year of any diesel engine
Methylene chloride use for paint or coating removal	Any	1 gallon of methylene chloride used per year
Paint stripping and varnish stripping	Any	Any activity level

Dry cleaning facilities, except those that use water or carbon dioxide based cleaning systems	Any	Any activity level
Tert-butyl acetate use in aerospace manufacturing and maintenance	97xx, others	20 pounds per year of tert-butyl acetate
Solvent cleaning and degreasing	Various	Any activity level of a solvent that contains a listed substance of human carcinogen. 55 gallons of solvents per month of solvents containing no carcinogens.
Release of fumigants or fumigation of crops for market including sulfuryl fluoride and phosphine	0723, others	Any activity level

The amended CTR regulation further expands applicability for enhanced annual emissions reporting to most permitted facilities in the District between 2026 and 2028. The exemptions may be facilities that have a private gasoline tank, a small natural gas boiler, or a propane/natural gas fired backup generator. The District does not have staff or resources to prepare the CTR report on behalf of all applicable facilities under the amended CTR regulation and facilities are recommended to contact ARB directly to report their 2024 emissions to comply with CTR beginning in 2025 or use the online reporting system ARB is developing for CTR reporting.

Appendix A: Facility List

Appendix A includes a list of all facilities currently holding a permit to operate, their location, whether they are subject to AB 2588, whether they are an industrywide source, their priority score and risk information.

The facility list is sorted by permit number.

Abbreviations:

IWD-ICE Industrywide facility with internal combustion engine

AB Autobody facility

DC Dry cleaner

GS Gas station