

**GREAT BASIN UNIFIED
AIR POLLUTION CONTROL DISTRICT**

**Air Toxics Hot Spots Program
Annual Report for 2021**



Great Basin Unified Air Pollution Control District
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Introduction

The Great Basin Unified Air Pollution Control District (Great Basin, GBUAPCD, or District) is a California regional government agency that works to protect the people and the environment of Alpine, Mono and Inyo Counties from the harmful effects of air pollution. Great Basin's purpose is to enforce federal, state, and local air quality regulations and to ensure air quality standards are met in Alpine, Mono, and Inyo Counties.

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (Assembly Bill 2588 or AB 2588) is a State of California public right-to-know law requiring local 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 Air Toxics Hot Spots Act Program Annual Report is published to provide the public with information regarding the District's AB 2588 Program. The enabling statutes in the *California Health and Safety Code* (CH&SC) Sections 44300-44394 require the California Air Resources Board (CARB) and local air districts to implement AB 2588. This report describes the current reporting and evaluation status for facilities being tracked under this program. This annual report is required by CH&SC Section 44363 and addresses the following as required:

1. Describes the priorities and categories designated per CH&SC Section 44360.
2. Summarizes the results and progress of the HRA program.
3. Ranks and identifies facilities according to degree of cancer risk posed both to individuals and to the exposed population.
4. Identifies facilities which expose individuals or populations to any noncancer health risks.
5. Describes the status of development of control measures to reduce emissions of toxic air contaminants, if any.

The goals of the GBUAPCD Air Toxics Hot Spots Program are to:

- Quantify and assess air toxic emission information from facilities.
- Evaluate and assess the possible health risk from the emissions.
- Notify the public in cases where significant risks are likely posed by nearby facilities and require facilities to develop strategies to mitigate or reduce the risks to below significant levels.

To achieve these goals, GBUAPCD collects information from facilities including information about the location, type, and quantity of toxic compounds emitted into the air from facilities. The District uses this information to analyze these site-specific emissions to assess the risk to public health from exposure. To inform the public, GBUAPCD has published this report as required.

This annual report covers facility operations in the calendar year 2021 in the GBUAPCD jurisdiction of Alpine, Mono and Inyo counties. The report will be presented to the District Governing Board at the July 10, 2024, Governing Board Meeting where a public hearing will be held to discuss the content and significance. Additionally, the District will disseminate the annual report to county boards of supervisors, city councils, and local public health officers.

Section 1. Air Toxics Hot Spots Act Priorities and Categories

California Health and Safety Code Section 44360 requires an Air District to prioritize and categorize facilities based on potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, including, but not limited to, hospitals, schools, day care centers, worksites, and residences, and any other factors that the district finds and determines may indicate that the facility may pose a significant risk to receptors. The priority category (low, intermediate, or high) designates the relative level of health risk of a facility, and its need to meet certain reporting requirements or conduct a formal health risk assessment (HRA).

GBUAPCD calculates a “prioritization score” (PS) from a screening level risk assessment whenever a new facility is permitted or if there is a change to permitted equipment or operations at an existing facility that may result in a change in emissions. GBUAPCD uses guidelines and methodologies published by Office of Environmental Health Hazard Assessment (OEHHA) and California Air Pollution Control Officers Association (CAPCOA) for preparing prioritizations. The prioritization score reflects the highest score of three scores calculated for a facility: 1) cancer score, 2) non-cancer chronic health effects score, and 3) acute health effects score. A facility can be reprioritized, by having its priority score calculated again if there are updates that affect the emissions or health risks.

A cancer score of 1 at a facility means that there is a risk roughly equivalent to a one in a million chance of any cancer occurring as a result of pollution from that facility. A score below 1 is generally considered an acceptable risk, though other factors may need to be considered. The cancer score is calculated based on the screening level risk assessment which conservatively estimates the risk at the closest possible offsite receptor (usually a residence), assuming an individual will live there for a lifetime, and that all pollution will blow downwind directly to the closest receptor. The non-cancer chronic health effects score and acute effects score use the same conservative estimation techniques regarding wind direction, but evaluate non-cancer chronic health effects from a 1 year to lifetime exposure, and acute health effects from a 1 hour exposure. A score below 1 for either the chronic or acute health effects score means no chronic or acute health effects would be expected.

Based on the score calculated during the screening risk assessment conducted by the District, a facility is assigned to a category of low, intermediate, or high priority. In addition, the District may consider other factors and use its discretion to classify a facility. The categories and requirements are as follows:

Table 1. Prioritization Score Categories and Requirements		
Prioritization Score	Category	Reporting Requirements
PS ≤ 1	Low	Exempt from further reporting for AB 2588 due to low risk
1 < PS ≤ 10	Intermediate	Subject to quadrennial update reporting (every 4 years); may be reclassified based on update reporting
PS > 10	High	Requires a Health Risk Assessment (unless already done recently) be submitted; further reporting, notification, and risk reduction requirements dependent on HRA results

Section 2. Health Risk Assessment Program

GBUAPCD has had its Toxic Risk Assessment Policy in place since December 9, 1987. It requires all sources that emit toxic air contaminants to apply for a permit. The policy then directs the District to perform a screening risk assessment which evaluates cancer and non-cancer health effects. If the lifetime cancer risk is determined to be between 1 and 10 in a million, the applicant must incorporate mitigations. In some cases, the policy can also require the permit applicant to perform a formal health risk assessment using air dispersion modeling, site specific meteorological data, and detailed emission information. Typically, the formal health risk assessment would be expected to predict a lower health risk than the conservative, health protective estimates from the screening level assessment. Lastly, the policy directs the District to deny a permit application if a formal health risk assessment shows a cancer risk greater than 10 in a million. Because of this policy, the District calculates the priority score of every facility with the potential to release toxic air contaminants during initial permitting and whenever a permit is modified that will result in a change or increase in toxic emissions.

As of the end of 2021, there were 455 active permits to operate at 158 facilities within the District. All 158 facilities have had a screening level health risk assessment performed and priority score calculated. Additional health risks and priority scores have also been calculated for many pieces of permitted equipment that have since closed or been superseded by new equipment. The District evaluated the health risk for 17 applications for new or modified equipment in 2021.

Section 3. Air Toxics Hot Spots Act Facilities and Cancer Risk Ranking

In 2021, GBUAPCD had 7 core facilities in the AB 2588 Program. The facilities are listed in Table 2 and ranked in order of cancer score. Typically, only facilities with a prioritization category of “intermediate” or “high” are in the program, though other factors may keep a facility in. For 2021, four facilities have a cancer score between 1 and 10 and are classified as intermediate facilities. There are no high priority facilities in the District.

The District has had in place a Toxic Risk Assessment Policy since 1989 that requires a risk assessment for any new facility with toxic emissions. If that risk assessment results in a cancer score between 1 and 10, mitigations are required, and permits are denied if the score exceeds 10. This policy has prevented any high priority AB 2588 facility from being permitted within Great Basin. As a result of this policy, the rural nature of the District, and the relatively low amount of toxic emissions generated from permitted facilities, the number of facilities subject to AB 2588 has historically remained low and is expected to remain so.

Facilities subject to the District’s AB 2588 program have varied since the program was implemented. There were at least 5 additional core facilities subject to AB 2588 in the past that have since been removed between 2011 and 2020. Four were removed from the program because the facilities closed, and one was removed due to reprioritizations that determined the risk based on actual emissions and source testing were low, with a priority score below 1. The most recent removal of facilities from the list occurred in 2020 and 2021. In September 2020, Northern Inyo Hospital, an intermediate source, was removed because the equipment with potential toxic emissions, a medical waste incinerator, was

decommissioned and the permit was canceled. Northern Inyo Hospital is not included in this annual report for 2021 as all equipment was decommissioned prior to the start of the calendar year. In February 2021, Coso Geothermal was removed after a reprioritization request that resulted in a new priority score calculation of less than 1, though it is still reflected in the 2021 reporting year and is included in this annual report.

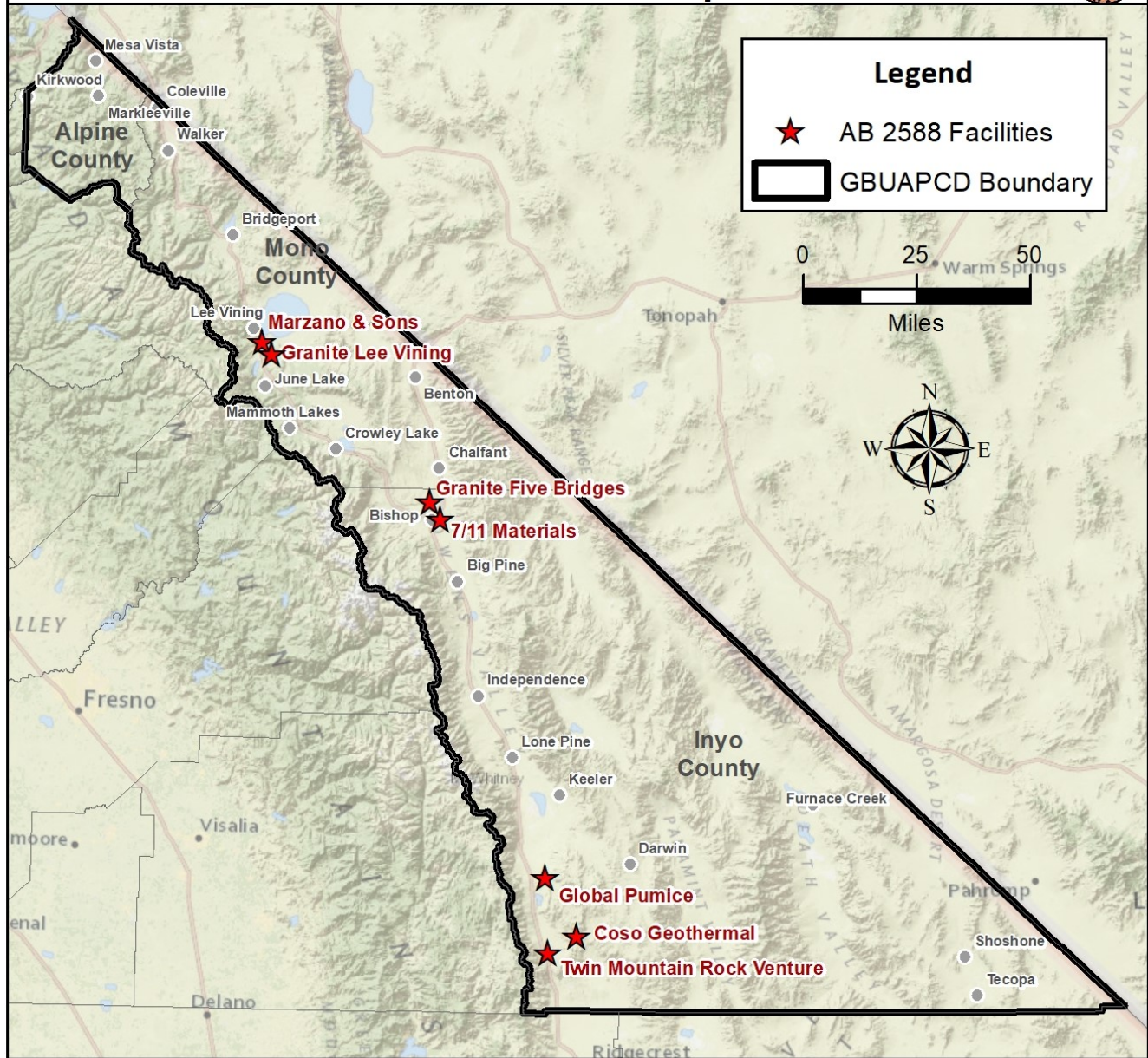
In addition, there were 9 “industrywide” facilities, including autobody shops and dry cleaners, that were at one time in the AB 2588 program, but have since been removed due to low prioritization scores, or because the facilities closed. For 2021, there were no industry wide facilities in the program. As updated emissions reporting comes in, priority scores may be recalculated, and some facilities’ priority scores and categories may change; and as a result facilities may be added to the program or may be removed.

The District’s Core AB 2588 facilities are listed in the table below and shown on the map on the following page.

Table 2. AB 2588 Facilities Ranked by Cancer Score				
Facility Name, Type, and Location	Cancer Score	Non-Cancer Chronic Health Effects Score	Non-Cancer Acute Health Effects Score	Prioritization Score Category
7/11 Materials <i>Concrete Batch Plant, Diesel Engines</i> 906 E Line St. Bishop, CA	2.098	0.925	0.477	Intermediate
Twin Mountain Rock Venture <i>Aggregate Crushing Plant</i> Hwy 395 and Cinder Road 3 miles north of Little Lake, CA	2.083	0.162	0.012	Intermediate
Granite Construction Company <i>Aggregate Crushing, Lime Slurry, Asphalt, Recycled Asphalt Crusher Plant</i> Hwy 120 near Lee Vining, CA	1.199	0.491	0.095	Intermediate
Marzano & Sons Engineering Contractors <i>Aggregate Crushing Plant, Diesel Engines</i> Rock Plant Road, Lee Vining, CA	1.143	0.028	0.002	Intermediate
Granite Construction Company <i>Lime Slurry, Asphalt, Crumb Rubber, Aggregate Crushing Plant</i> Five Bridges Road, Bishop, CA	0.847	1.097	0.587	Intermediate
Global Pumice <i>Aggregate Crushing Plant</i> Cactus Flat Road, Olancho, CA	0.824	0.038	0.002	Low
Coso Operating Company <i>Geothermal Power Plant</i> 2 Gill Station Road, Little Lake, CA	0.076	0.011	0.031	Low



2021 GBUAPCD AB 2588 Toxic Hot Spot Act Facilities



In December, 2020, Coso Operating Company requested their geothermal facility be removed from the AB 2588 program. Its priority score was recalculated based on recent reported emissions, and its score changed from high to low. It was removed from the program in February 2021 and will not be included in future reporting.

Table 3: Coso Geothermal Reprioritization Results				
Date of Analysis	Cancer Score	Non-Cancer Chronic Health Effects Score	Non-Cancer Acute Health Effects Score	Prioritization Score Category
8/22/1991	1.59	0.21	28.60	High
12/23/2020	0.08	0.01	0.03	Low

Section 4. Air Toxics Hot Spots Act Facilities Noncancer Health Risks

There have been very few non-cancer health risks identified in the District, because of its rural nature and the low number of polluting industrial facilities present. The Granite Five Bridges facility is the only facility currently in the program evaluated to have a non-cancer health risk with a score above 1 (see Table 2 above). This facility has a chronic non-cancer health effects score of 1.097. This score is driven mainly by silica from dust from the asphalt plants. Chronic exposure to silica can cause silicosis, characterized by scarring of the lungs. Due to the low number of residents living near this facility, the low actual operating hours relative to the permitted hours, and the relatively low chronic health score, this facility is not likely to expose individuals or populations to any noncancer health risks.

Section 5. Toxic Air Contaminants Control Measures

The District enforces federal, state and local rules and regulations. To reduce emissions of toxic air contaminants, the District enforces California’s Airborne Toxic Control Measures (ATCM) and the Federal EPA’s National Emission Standards for Hazardous Air Pollutants (NESHAPs). The District works with sources to comply with applicable ATCMs and NESHAPs.

The District has a set of local rules and regulations that have been in place since 1974, with some rules being added or revised since then. District Regulation II contains the set of rules which dictate permit requirements to regulate and reduce emissions of general air pollutants including criteria air pollutants as well as hazardous air pollutants. District Regulation IV contains the set of rules which set requirements for specific pollutants and source types, further limiting emissions of toxic air contaminants. The list of District rules in Regulation II – Permits, and Regulation IV – Prohibitions, are presented in Tables 3 and 4 below. All District rules and regulations are available online at <https://gbuapcd.org/rules>. The District works with all facilities to ensure compliance with federal, state, and local rules and regulations. When necessary, the District may utilize enforcement action, including but not limited to Notices to Comply, Notices of Violation, or Abatement Orders to ensure compliance. There are currently no additional District rules or control currently in development to reduce emissions of toxic air contaminants.

Table 3. GBUAPCD Regulation II - Permits

Rule	Title	Rule	Title
200	Permits Required	211	Denial of Applications
201	Exemptions	212	State Ambient Air Quality Standards
202	Transfer	213	Implementation Plans
203	Applications	214	Appeals
204	Cancellation of Applications	215	Public Availability of Emission Data
205	Action and Applications	216	New Source Review Requirements for Determining Impact on Air Quality
206	Monitoring Facilities	216-A	New Source Review Requirements for Determining Impact on Air Quality - Secondary Sources
207	Instack Monitoring - 100 TPY Source	217	Additional Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal Clean Air Act Amendments of 1990
208	[N/A]	218	Limiting Potential to Emit
209-A	Standards for Authorities to Construct	219	Request for Synthetic Minor Source Status
209-B	Standards for Permits to Operate	220	Construction or Reconstruction of Major Sources of Hazardous Air Pollutants
209-C	Temporary Permits to Operate	221	Prevention of Significant Deterioration (PSD) Permit Requirements for New Major Facilities or Major Modifications in Attainment or Unclassifiable Areas
210	Conditional Approval		

Table 4. GBUAPCD Regulation IV - Prohibitions

Rule	Title	Rule	Title
400	Ringelmann Chart	417	Organic Solvents
401	Fugitive Dust	418	[N/A]
402	Nuisance	419	Gasoline Loading Into Stationary Tanks
403	Breakdown	420	Organic Liquid Loading
404-A	Particulate Matter	421	Intended Application of Rules and Regulations
404-B	Oxides of Nitrogen	422	[N/A]
405	Exceptions	423	Research Operations
406	Open Outdoor Fires	424	Geothermal Emissions Standards
407	Incinerator and Burn Barrel Burning	425	Gasoline Vapor Recovery
408	Open Burning In Agricultural Operations or Disease or Pest Prevention	426	Chrome Plating and Chromic Acid Anodizing
409	Range Improvement Burning	427	Chromate Treated Cooling Towers
410	Forest Management Burning	428	Sterilizers and Aerators Using Ethylene Oxide
411	Wildland Vegetation Management Burning in Wildland and Wildland/Urban Interface Areas	429	Medical Waste Incinerators
412	Open Burning of Non-Industrial Wood Waste at City or County Disposal Sites	430	Asbestos-Containing Serpentine Material
413	Reduction of Animal Matter	431	Particulate Emissions
414	[N/A]	432	Open Burn/Open Detonation Operations on Military Bases
415	[N/A]	433	Control of Particulate Emissions at Owens Lake
416	Sulfur Compounds and Nitrogen Oxides		

Section 7. References

- California Air Pollution Control Officers Association Air Toxic “Hot Spots” Program Facility Prioritization Guidelines. August 2016.
- California Air Resources Board. AB 2588 Air Toxics “Hot Spots”. <https://ww2.arb.ca.gov/our-work/programs/ab-2588-air-toxics-hot-spots>.
- California Health and Safety Code Sections 44300-44394. Air Toxics “Hot Spots” Information and Assessment.
- Office of Environmental Health Hazard Assessment. February 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments. <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>.