



SB 673 Cumulative Impacts and Community Vulnerability Draft Regulatory Framework

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Department of
Toxic Substances
Control



CalEPA
California Environmental
Protection Agency

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Acronyms

AoA	Area of analysis
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CUPA	Certified Unified Program Agency
DTSC	Department of Toxic Substances Control
HSC	Health and Safety Code
OEHHA	Office of Environmental Health Hazard Assessment
RCRA	Resource Conservation and Recovery Act
VSP	Violations Scoring Procedure

Executive Summary

Introduction and Overview

Senate Bill No. 673 (SB 673, Lara, Chapter 611, Statutes of 2015) signed by Governor Brown in 2015, provides an important opportunity for the Department of Toxic Substances Control (the Department or DTSC) to address long-standing environmental justice concerns regarding the location, operation and expansion of facilities handling hazardous waste. This bill directed the Department to update its criteria to consider “the vulnerability of, and existing health risks to, nearby populations” when deciding whether to issue new or modified permits or permit renewals of hazardous waste facilities.¹ SB 673 also authorizes the Department to consider the use of “minimum setback distances from sensitive receptors” in making a permitting decision.²

This document is an informal proposal for regulations that enable the Department to “implement, interpret, or make specific” provisions of Health and Safety Code sections 25200.21(b) and (c). These provisions were enacted as part of SB 673 and provide, in relevant part, that:

“On or before January 1, 2018, the department shall adopt regulations establishing or updating criteria used for the issuance of a new or modified permit or renewal of a permit, which may include criteria for the denial or suspension of a permit. In addition to any other criteria the department may establish or update in these regulations, the department shall consider for inclusion as criteria all of the following... (b) the vulnerability of, and existing health risks to, nearby populations. Vulnerability and existing health risks shall be assessed using available tools, local and regional health risk assessments, the region’s federal Clean Air Act attainment status, and other indicators of community vulnerability, cumulative impact, and potential risks to health and well-being... (c) Minimum setback distances from sensitive receptors, such as schools, child care facilities, residences, hospitals, elder care facilities, and other sensitive locations.” (Emphasis added).

Combined environmental exposures from multiple pollution sources often burden communities living near California hazardous waste facilities. These communities are often highly vulnerable due to a combination of social, economic, and health disparities.

Over sixty percent (60%) of California’s operating hazardous waste facilities are in or near disadvantaged communities³ as reflected by overall California Communities Environmental Health

¹ Health and Safety Code section 25200.21(b).

² Health and Safety Code section 25200.21(c).

³ California Health and Safety Code section 39711.

Screening Tool (CalEnviroScreen) scores in the 75th percentile or higher. CalEnviroScreen is a mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects.⁴ Many low-income or people-of-color communities are adjacent to or within into areas that have manufacturing and industrial uses, resulting in multiple sources of potential threats to public health and the environment. While the historic origins of racial bias and resulting inequities vary, local planning and zoning authorities have the power to make decisions regarding the siting of hazardous waste facilities. Local municipalities make land use decisions that shape development and identify where industrial and residential areas may be located near each other. The Department makes decisions regarding whether facilities are permitted to operate, and issues permits that require facilities to operate safely and in compliance with relevant laws and regulations.

In order to strengthen health and community protection as well as respond to SB 673, the Department released in October 2018, the “SB 673 Cumulative Impacts and Community Vulnerability Draft Regulatory Framework Concepts”(2018 Draft Regulatory Concepts). The 2018 Draft Regulatory Concepts outlined a proposed regulatory approach to include consideration of community vulnerability and cumulative impacts in the permitting process for operating transfer, treatment, storage, and disposal hazardous waste facilities in California. The Department held a series of public outreach events between October 2018 and April 2019 to provide information about the ongoing regulatory development process and conceptual ideas and to gain valuable feedback.

In response to the feedback the Department received on the 2018 Draft Regulatory Concepts, the Department prepared this document, “SB 673 Cumulative Impacts and Community Vulnerability Draft Regulatory Framework”(2021 Draft Regulatory Framework). In this document, the Department provides a more detailed draft methodology for integrating potential facility impacts and community vulnerabilities into the Department’s permitting process for hazardous waste facilities and for determining facility actions to enhance community protection.

Since 2018, the Department has collaborated with California Air Resources Board, the Office of Environmental Health Hazard Assessment (OEHHA), and the University of California Berkeley. This 2021 Draft Regulatory Framework utilizes the CalEnviroScreen tool developed by OEHHA. The

⁴ CalEnviroScreen - CalEnviroScreen consists of many factors related to the pollution burden or population vulnerability of a community, which are aggregated into a final, relative cumulative impact score. Mapping tool and reports are available on the Office of Environmental Health Hazard Assessment’s webpage at <https://oehha.ca.gov/calenviroscreen>.

Department has also incorporated aspects of ongoing actions by the California Air Resources Board and local air pollution control and air quality management districts to implement Assembly Bill No. 617 (AB 617, Garcia, Chapter 136, Statutes of 2017). Of note, these air agencies are currently working with AB 617 communities in more intensive and collaborative ways than in the past. The 2021 Draft Regulatory Framework incorporates the results of research performed by the University of California under contract to both the Department and the California Air Resources Board. The purpose of the contract was to assist the Department by providing more information about community vulnerability and cumulative impacts near its permitted hazardous waste facilities, providing consultation assistance on the development of a regulatory framework, and providing guidance on methodologies for evaluating community vulnerabilities near individual hazardous waste facilities. See Figure 1 for a timeline for this proposal.

SB 673 Draft Regulatory Framework Elements

The Department has divided this 2021 Draft Regulatory Framework into fundamental parts that are labeled elements one through seven. These seven key elements described below constitute the proposed process for addressing community vulnerability and impacts for this informal regulatory proposal. DTSC is proposing to apply these elements when a facility submits an application for a hazardous waste permit. Opportunities for public engagement and input are integrated into many of these elements which are in addition to current public participation requirements for permit applications. See Figure 1 for an overview of the seven elements and how these elements apply the permit application process for a hazardous waste facility permit.

Element 1: Community and Facility Screening – The Department proposes to use community and facility characteristics to identify those facilities to be addressed in the requirements in Elements 2, 3, and 4.

This element describes two screening steps. First, the Department proposes to use CalEnviroScreen as an initial screening tool. For purposes of this document, a CalEnviroScreen score higher than the 60th percentile is considered a vulnerable community. See page 17 for a description of CalEnviroScreen 3.0. If a facility has a percentile that falls below this threshold, no further action listed in Element 3 is required.

If a facility has a CalEnviroScreen aggregate score higher than the 60th percentile, then the Department proceeds to the second screening. The Department proposes to differentiate the facilities into groupings for assigning a draft facility tiered pathway in Element 2. The following two key factors would be used to further screen hazardous waste facilities:

- Community vulnerability and combined or cumulative impacts in communities near facilities, using CalEnviroScreen and, in some cases, supplemental information; and

- Facility size, activities, and characteristics related to potential community impacts.

Element 2: Facility Tiered Pathway and Designation - This element describes a draft methodology to be used by the Department to determine whether a facility should be placed on one of three facility tiered pathways in the permitting process to address combined or cumulative impacts and vulnerabilities in the community. The facility tiered pathways are scaled to require the highest level of actions from the largest facilities with the greatest potential to have an adverse effect on health risks for vulnerable communities. The Department is proposing to establish a public engagement opportunity before a facility tiered pathway is finalized for a facility.

Element 3: Facility Action – If a facility is placed in one of the three pathways, the Department proposes that the facility would be required to take facility actions. This element includes a draft menu of facility actions (see page 38) that could be selected by a facility owner or operator to address combined or cumulative impacts and vulnerabilities in the community. The facility actions are listed under three headings in Element 3:

- Improvements to Facility Activities and Operations
- Monitoring or Other Evaluation of Community Concerns
- Public Engagement and Outreach Strategies

There are other facility actions that the Department is considering that would give a facility credit should they be voluntarily implemented prior to a permit application or major permit modification submittal or completion. This element also proposes a setback distances for new or existing hazardous waste facilities.

Element 4: Facility Action Workplan (Workplan)- The Department is proposing that facility owners and operators submit a Workplan as described in Element 4 as part of their permit application (or major permit modification application). Workplans would be required with a permit application to provide details as to how the facility plans to reduce community health risks and enhance community protections. This element describes the process for developing Workplans for facility actions to address community vulnerability and addresses how the Workplan commitments become permit conditions that can be enforced by the Department.

Element 5: Decision to Revoke or Deny a Permit - This element describes how certain criteria including the presence of environmental and health risks to nearby populations would be included in regulation as a basis for a decision to revoke a permit or deny a permit application or major permit modification or reduce the size or volume of hazardous waste handling or scope of hazardous waste activities authorized in a permit.

Element 6: Inspection Scoring Adjustment for Vulnerable Areas – This element describes a new

process for adjusting inspection violation scores⁵ for certain violations upward if the facility is located within an environmental justice area and in close proximity to sensitive land uses.

Element 7: Updates to data and tools – This element describes the Department’s commitment to use the most updated and quality assured data, tools, and information available in evaluating community and facility characteristics.

Next Steps in SB 673 Regulatory Development and Public Engagement

This 2021 Draft Regulatory Framework document refines the original regulatory concepts but is not the formal proposal for rulemaking. This framework has been drafted in response to both written and oral comments received in the last year and a half on the 2018 Draft Regulatory Concept. Please refer to Appendix 5 for a summary of comments that have made important contributions to advancing this proposal.

Given the great diversity of interested stakeholders, workshops will be scheduled to vet the elements presented in this 2021 Draft Regulatory Framework. However, the existing document does not clearly define all the standards that need to be specified to meet formal rulemaking criteria. The Department has provided questions at the end of sections I and II about specific areas where the Department is seeking input from its stakeholders.

The Department plans to use the 2021 Draft Regulatory Framework and the feedback it receives on it to develop the draft formal regulatory text to be submitted to the Office of Administrative Law next year. The Department has demonstrated an ongoing commitment to transparency and broad public outreach in SB 673 regulatory development. The Department will continue to prioritize public engagement as the process moves forward. Additional community workshops and public engagement events will occur in the spring of 2021 to gain additional feedback that will be carefully reviewed and incorporated into the final proposal. These tentative schedules are subject to change depending on the time needed to resolve issues as formal rulemaking proceeds. In addition, all comments and feedback are welcomed and encouraged and can be submitted online at permits_HWM@dtsc.ca.gov.

⁵ The inspection violation score is used in the Violations Scoring Procedure (VSP) regulations found at California Code of Regulations, title 22, sections 66271.50 through 66271.57, which took effect on January 1, 2019.

Figure 1- Timeline

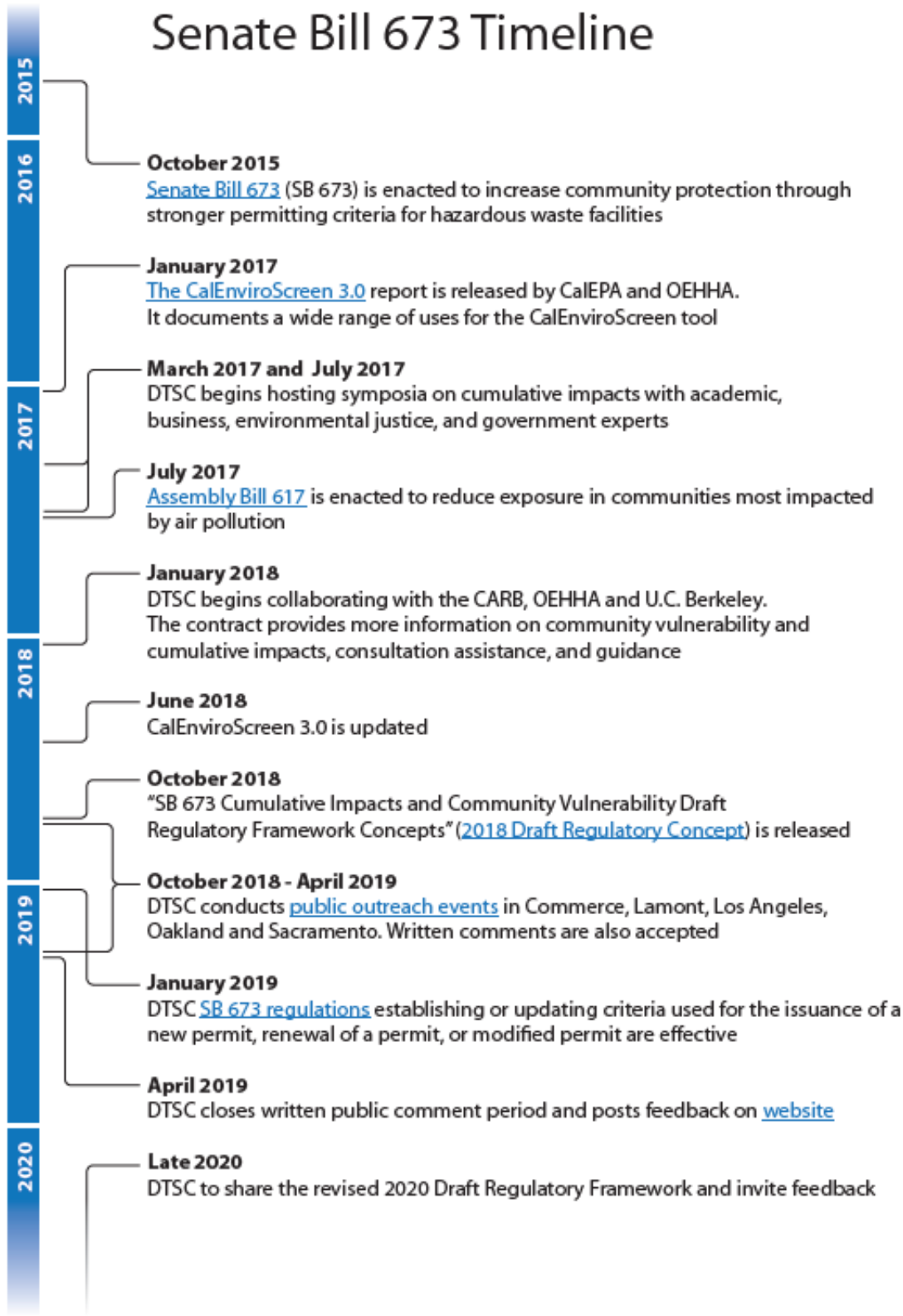
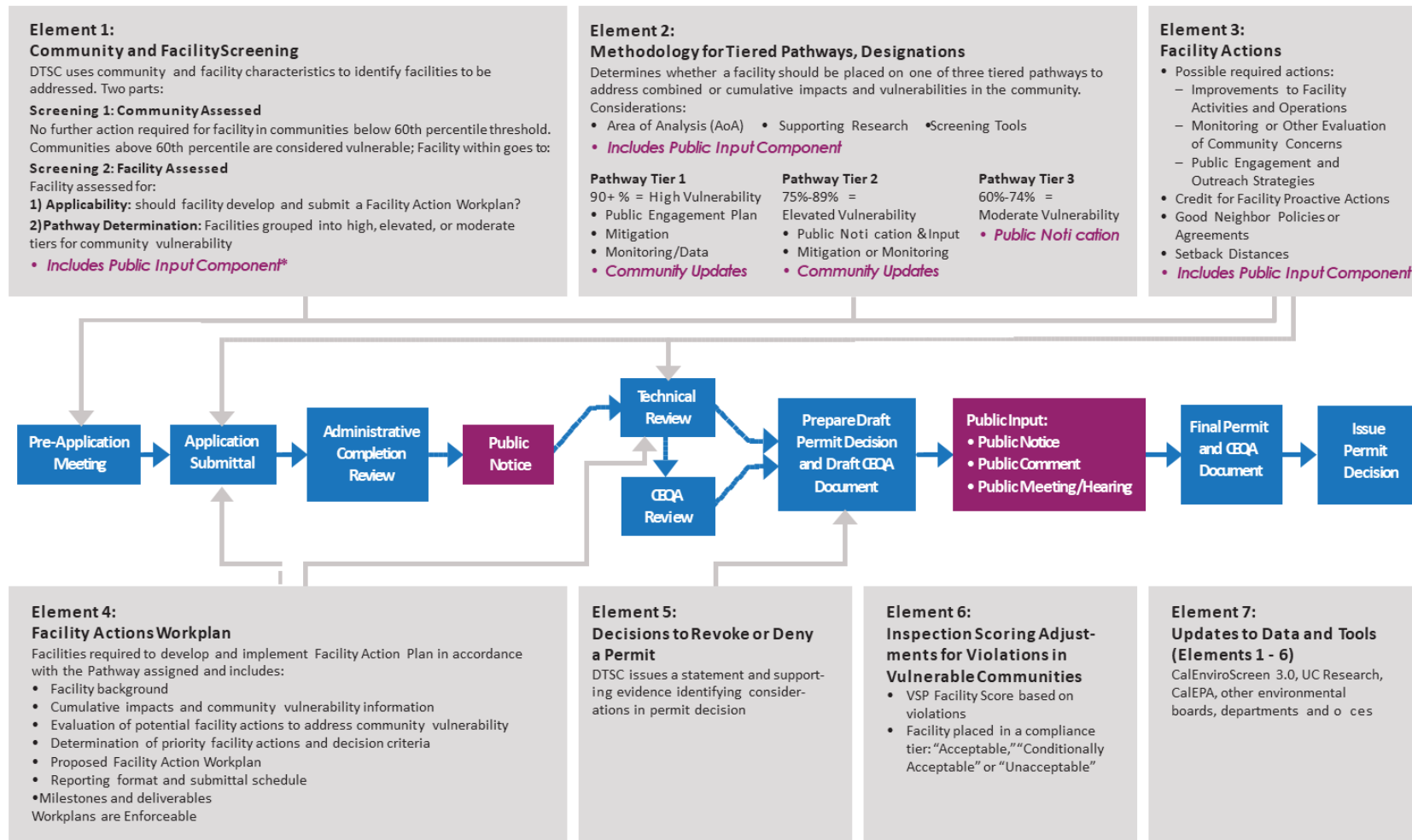


Figure 2 - Element and Process Flow Chart

SB 673 Element and Process Flow Chart



I. Introduction and Background

SB 673 signed by Governor Brown in 2015, provides an important opportunity for the Department to address long-standing environmental justice concerns regarding the location, operation, and expansion of facilities handling hazardous waste. This bill directs the Department to update its criteria to consider “the vulnerability of, and existing health risks to, nearby populations” when deciding whether to issue new or modified permits or permit renewals of hazardous waste facilities.⁶ SB 673 also authorizes the Department to consider the use of “minimum setback distances from sensitive receptors” in making a permitting decision.⁷

In order to strengthen health and community protection as well as respond to SB 673, the Department released the 2018 Draft Regulatory Concepts in October 2018. This document outlined a proposed regulatory approach to include consideration of community vulnerability and cumulative impacts in the permitting process for operating transfer, treatment, storage, and disposal hazardous waste facilities in California. Subsequently, the Department conducted a series of public engagement opportunities between October 2018 and April 2019 to explain the 2018 Draft Regulatory Concepts and seek public feedback, including a written comment period that ended on April 30, 2019. The Department has reviewed and considered the feedback it received on the 2018 Draft Regulatory Concepts through public workshops, working groups, letters, e-mails, and other communications. This revised 2021 Draft Regulatory Framework incorporates changes that were made in response to the input the Department received from stakeholders to date.

The Department is seeking public comment on this 2021 Draft Regulatory Framework prior to initiating a formal regulatory process. The Department will again host community workshops and working group meetings to continue the conversation on how community vulnerability and cumulative impact assessment should inform permit decisions for hazardous waste facilities. After these public workshops, the Department will prepare draft regulatory text and supporting documentation to initiate the formal Administrative Procedure Act rulemaking process.

Hazardous Waste Management and Environmental Justice

Many communities in the state are burdened by a disproportionate share of environmental pollution from hazardous waste, air pollutants, and other contaminants, while also facing

⁶ California Health and Safety Code section 25200.21(b).

⁷ California Health and Safety Code section 25200.21(c).

socioeconomic and health disparities.⁸ Communities living near industrial facilities, trade corridors, and other sources of pollution, for example, are often predominantly low-income communities, often with a high percentage of non-English speakers, and they also demonstrate higher vulnerability to health impacts. This is often the result of discriminatory practices such as redlining⁹. Factors such as limited health care access, poor housing quality, linguistic isolation, and lack of access to parks and open spaces can increase their vulnerability. The combined environmental exposures faced by communities together with socioeconomic stressors increase community vulnerability and worsen health outcomes.

The siting, location, and expansion of hazardous waste sites in communities have long been an environmental justice concern in California.¹⁰ Sixty percent (60%) of permitted hazardous waste facilities are located in areas designated as disadvantaged according to criteria established by Senate Bill No. 535 (SB 535, De León, Chapter 830, Statutes of 2012). The potential health effects that come from living near hazardous waste disposal and contaminated sites have been examined in a number of studies.¹¹ While there is often limited assessment of exposures that occur in populations near permitted hazardous waste facilities, there are studies that have found health effects, including diabetes and cardiovascular disease, associated with living in proximity to hazardous waste sites.^{12,13} In addition to being less well off financially, disadvantaged communities are also exposed to higher levels of many environmental hazards. For example, statewide emissions from diesel sources are sixty-two percent (62%) higher in disadvantaged communities compared to other communities in California.¹⁴

⁸ Cushing LJ, J Faust, LM August, R Cendak, W Wieland, G Alexeeff (2015) "Racial/ethnic disparities in cumulative environmental health impacts in California: evidence from a statewide environmental justice screening tool (CalEnviroScreen 1.1)" *American Journal of Public Health* 105 (11), 2341-2348.

⁹ Redlining refers to lending (or insurance) discrimination that bases credit decisions on the location of a property to the exclusion of characteristics of the borrower or property. (Nardone A, Chiang J, and Corburn.J, *Environmental Justice*, Aug 2020, 109-119, <http://doi.org/10.1089/env.2020.0011>).

¹⁰ Morello-Frosch RA, Pastor M, Sadd J (2002): "Integrating Environmental Justice and the Precautionary Principle in Research and Policy-Making: The Case of Ambient Air Toxics Exposures and Health Risks among School Children in Los Angeles." *Annals of the American Academy of Political and Social Science*, 2002, 584: 47-68.

¹¹ Vrijheid M (2000). Health effects of residence near hazardous waste landfill sites: a review of epidemiologic literature. *Environmental health perspectives* 108 (Suppl 1):101.

¹² Kouznetsova M, Huang X, Ma J, Lessner L, Carpenter DO (2007). Increased rate of hospitalization for diabetes and residential proximity of hazardous waste sites. *Environ Health Perspect* 115(1):75-9.

¹³ Sergeev AV, Carpenter DO (2005). Hospitalization rates for coronary heart disease in relation to residence near areas contaminated with persistent organic pollutants and other pollutants. *Environ Health Perspect* 113(6):756-61.

¹⁴ Roland-Holst D, Evans S, Heft-Neal S, Behnke D, Shim ML, (2018). Exploring Economic Impacts in Long-Term California Energy Scenarios, California Energy Commission. Publication Number: CEC-500-2018-013.

California law defines “environmental justice” to mean “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” (Ca. Govt. Code, § 65040.12 (e)). Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations states, “...no segment of the population should bear a disproportionate amount of environmental pollution.”¹⁵ Communities living near hazardous waste facilities in California have voiced concerns about their exposure to a disproportionate amount of pollution.

One of the goals in the Department’s Draft Strategic Plan 2020-2024¹⁶ is to promote environmental justice principles and take action to achieve a more equitable California where no single community bears an unfair burden of pollution and all communities have access to healthy places to live, work, and play. Furthermore, a number of activities are currently underway within the Department to address some of the issues previously identified by stakeholders related to improving public participation. In particular, efforts are being focused on how to improve public involvement in the permitting process for hazardous waste facilities involved in the transfer, treatment, storage, or disposal of hazardous waste. This 2021 Draft Regulatory Framework complements the following current public participation efforts:

- Ensure early outreach to impacted communities;
- Ensure public participation plans are developed and implemented to provide the opportunity to influence permitting decisions;
- Ensure that communities have access to relevant information upon which decisions will be made;
- Enhance public involvement in the permitting process;
- Ensuring appropriate language access to facilitate meaningful community involvement;
- Support for community reporting platforms for environmental monitoring; and
- Develop and convene community trainings and workshops.

¹⁵ United States, Executive Office of the President [William J. Clinton], [Executive Order 12898](https://www.federalregister.gov/documents/1994-02-16/1994-02-16-federal-actions-to-address-environmental-justice-for-low-income-and-minority-populations): Federal Actions to Address Environmental Justice for Low Income & Minority Populations. 11 Feb. 1994, *Federal Register* vol. 59, no. 32, 16 Feb. 1994, pp. 7629 – 7633 available at https://www.epa.gov/sites/production/files/2015-02/documents/clinton_memo_12898.pdf.

¹⁶ Available at <https://dtsc.ca.gov/wp-content/uploads/sites/31/2019/06/DTSC-Strategic-Plan-Draft-MASTER-COPY-6-13-19.pdf>.

Background on SB 673 (Lara, Chapter 611, Statutes of 2015)

The Department has been taking important steps to strengthen the permitting process to provide greater protections to all communities near operating hazardous waste facilities. In response to SB 673, the Department developed two tracks to implement stronger permitting criteria for hazardous waste facilities. First, the Department developed and adopted a rulemaking package which took effect January 2019. These new regulations strengthen the protectiveness of the Department's permitting decisions using several of SB 673's suggested criteria, such as stronger financial assurance requirements and a more transparent and accountable consideration of facility compliance history, known as the Violations Scoring Procedure.

Concurrently, the Department also began developing a proposal to address SB 673's suggested permitting criteria on community vulnerability and setbacks or buffer zones. In 2017, the Department began by hosting symposia on cumulative impacts with academic, business, community, environmental justice, and government experts. The Department then reviewed information collected through the symposia and established a Department-led work group to develop the 2018 Draft Regulatory Concept proposing a method to implement SB 673's permitting criteria.

In addition to the recent legislative direction established by SB 673, Senate Bill No. 828 (SB 828, Alarcón, Chapter 765, Statutes of 2001) directs each board, Department, and office in the California Environmental Protection Agency (CalEPA) to review its programs, policies, and activities to identify and address gaps that may impede the achievement of environmental justice.¹⁷ The legislature adopted Assembly Bill No. 1628 (AB 1628, Rivas, Chapter 360, Statutes of 2019) to ensure that the populations and communities disproportionately impacted by pollution have equitable access to, and can meaningfully contribute to, environmental and land use decision-making, and can enjoy the equitable distribution of environmental benefits.

The Department carefully considered these legislative directives, as well as recent advances in science and technology, in the development of the 2021 Draft Regulatory Framework. The Department also explored opportunities to collaborate with universities and other state, local, and federal partners in assessing and addressing cumulative impacts and community vulnerability.

¹⁷ Senate Bill 828 (Chapter 765, Statutes of 2001), section 71114.1 of the Public Resources Code.

Other Relevant Federal and State Programs

Several state and federal efforts developed to assess environmental justice impacts or cumulative impacts in regulations and programs have informed the SB 673 regulatory development process. This document does not include a comprehensive listing of all these programs but does include a few examples to demonstrate a range of approaches to this issue.

The U.S. Environmental Protection Agency (US EPA) has developed guidance on evaluating disproportionate health and environmental impacts in overburdened communities and integrating these considerations into federal programs since the signing of [Executive Order 12898 – “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”](#)¹⁸ in 1994. The U.S. EPA issued several important documents that stress the importance of including environmental justice in regulatory and permitting actions and explore different tools and approaches that are available including both quantitative and qualitative tools. These documents include: [Plan EJ 2014: Considering Environmental Justice in Permitting Actions](#),¹⁹ [Guidance on Considering Environmental Justice During the Development of Regulatory Actions](#),²⁰ and [Technical Guidance for Assessing Environmental Justice in Regulatory Actions](#).²¹ The U.S. EPA has also developed its own environmental justice screening and mapping tool, [EJScreen](#).²²

In 2004, CalEPA developed the Intra-agency Environmental Justice Strategy to identify and address any gaps in existing programs, policies, and activities that may impede the achievement of environmental justice. The strategy is the overarching environmental justice vision document for all CalEPA boards, departments, and office and provides the foundation for addressing environmental justice issues. It sets forth the CalEPA’s environmental justice vision, mission, core values, goals, and objectives that guide the integration of environmental justice into programs, policies, and activities. This work is the product of a multi-year collaboration between the CalEPA Interagency Working Group on Environmental Justice, the CalEPA Advisory Committee on Environmental Justice, and other EJ stakeholders.

¹⁸ Available at <https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice>.

¹⁹ Available at <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100ETRR.PDF?Dockey=P100ETRR.PDF>.

²⁰ Available at <https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf>.

²¹ Available at https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf.

²² Available at <https://www.epa.gov/ejscreen>.

On September 18, 2020, New Jersey Governor Phil Murphy signed into law S232.²³ This law requires the New Jersey Department of Environmental Protection (NJDEP) to consider the cumulative impacts of locating new power plants or major manufacturing facilities in certain lower-income areas. The law is intended to tackle the complex issue of assuring a healthy environment in certain urban communities by requiring NJDEP to evaluate the cumulative environmental and public health impacts when reviewing certain permit applications. New Jersey is the first state in the nation to require mandatory permit denials if an environmental justice analysis determines a new facility will have a disproportionately negative impact on overburdened communities.

NJDEP is required to adopt a list of these overburdened communities and to update the list periodically. An overburdened community is defined as low-income, minority, or households having limited English proficiency. When evaluating an application for a permit, NJDEP would be required to assess community support for the proposed new or expanded facility, and be required to consider such support, or the lack thereof, in its decision to grant or deny a permit.

The Connecticut Department of the Environment is implementing important environmental justice and public participation requirements in the permitting process for certain large facilities including hazardous waste facilities based on the state's Environmental Justice Policy and a 2009 state law.²⁴ The state requires every facility owner or operator applying for a new permit or permit expansion (renewal or permit modification application) to develop and submit a meaningful public participation plan to identify and respond to community issues and concerns. Facility owners or operators must receive written department approval of plans prior to filing permit applications. Each plan must include a public noticed pre-application meeting. In addition, applicants may want consult with local elected officials to evaluate the need for a community environmental benefit agreement.

The California Air Resources Board's [Community Air Protection Program](#)²⁵ initiated by legislation AB 617 provides for annual selection of communities across the state for expanded monitoring and emission reduction programs to address local air pollution problems. The first round of

²³ Overburdened Communities, Title 13. Chapter 1D. Part XI. (§§ C.13:1D-157 to 13:1D-161) available at https://legiscan.com/NJ/text/S232/id/2213004/New_Jersey-2020-S232-Chaptered.html

²⁴ 2012 Connecticut General Statutes, Title 22a - Environmental Protection, Chapter 439 - Department of Energy and Environmental Protection. State Policy, Section 22a-20a - Environmental justice community. Definitions. Meaningful Public Participation Plan. Community Environmental Benefit Agreement (CT Gen Stat § 22a-20a (2012), formerly Public Act No. 08-94.

²⁵ Available at <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program>.

communities designated by the state board in 2018 included ten communities and three more were added in the second round of community selection in 2019. Community selection is based on consideration of a range of state and local tools and information about community burdens and impacts as outlined in the [AB 617 Blueprint](#).²⁶ Communities are designated for community air monitoring or community emissions reduction program or both. All designated communities have activated local community steering committees to work with state and local agencies on development of monitoring and mitigation efforts that address community priorities. The steering committees help develop local emission reduction plans and provide an important communication channel about local pollution issues and community concerns. The California Air Resources Board has been able to provide community air protection grants to engaged stakeholders working on outreach, education, monitoring, and mitigation of local pollution impacts with funding provided through state greenhouse gas mitigation funds. The development of the AB 617 program provides important models for community engagement and evaluation of cumulative impacts and community vulnerability that are informing the SB 673 regulatory development process.

Unlike the California Air Resources Board, the Department did not receive additional resources or authority to award grants for the development of the SB 673 regulations or their implementation. This creates a challenge for the Department when communities compare their participation in AB 617 to participation in the rulemaking for the 2021 Draft Regulatory Framework. Under AB 617, grants provide support for participation in implementing emission reduction plans and monitoring. Grants may be seen as showing respect for diverse forms of knowledge including local knowledge about people's own experiences and bodies.²⁷ This sentiment has been expressed many times by community groups and advocacy groups.

Permitted Facilities in California

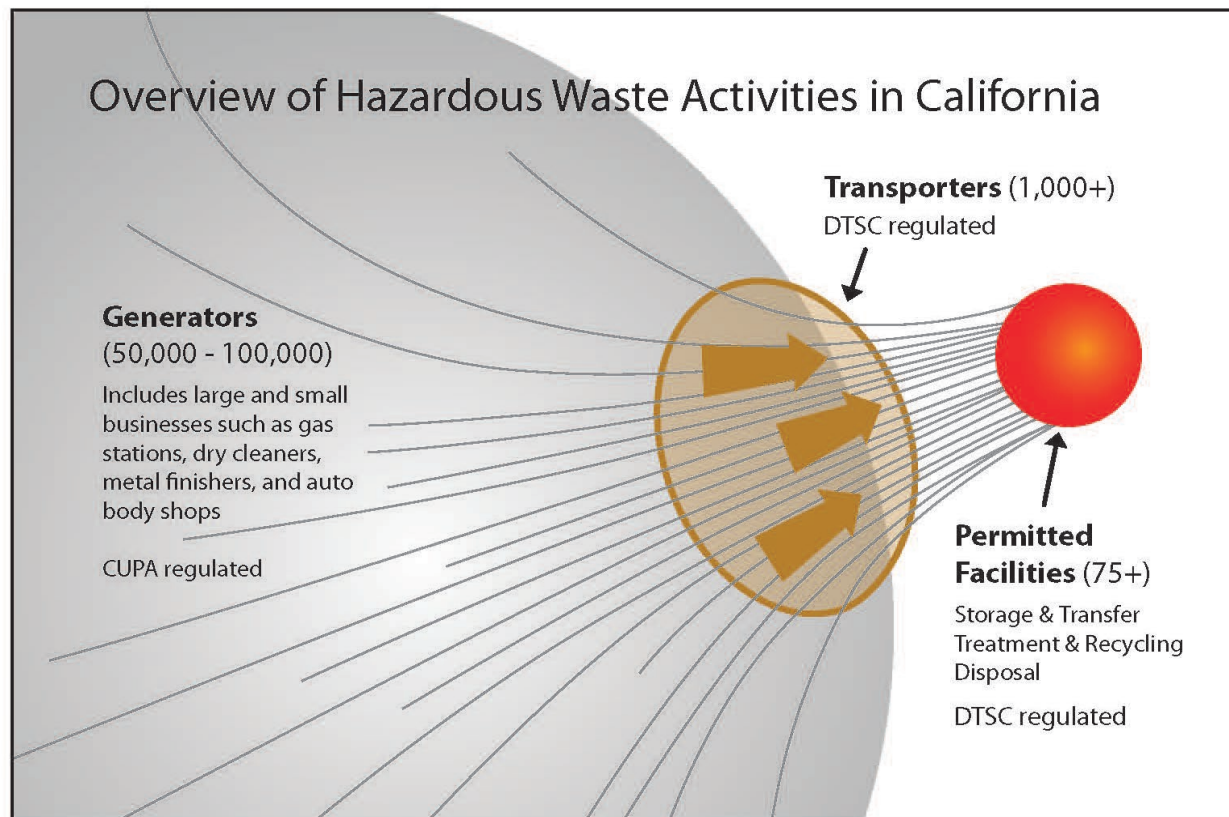
The universe of facilities that would be covered under this 2021 Draft Regulatory Framework are permitted hazardous waste facilities in California. This is a subset of the thousands of facilities that generate, transport, treat, or store waste in California as indicated in the diagram below. Hazardous waste facilities are regulated by the state or local agencies depending on the type and quantity of hazardous waste handled, the type and duration of hazardous waste activities at the facility. Local agencies called Certified Unified Program Agencies (CUPAs) generally regulate

²⁶ The Community Air Protection Blueprint (Blueprint) is available at <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/community-air-protection-blueprint>.

²⁷ Nguyen P, Dawson M, Manrique K, AB 617: Challenges, Successes, Lessons Learned and Recommendations for the Future, UC Davis 2020

hazardous waste generators and the Department regulates permitted facilities that manage hazardous waste. The Department uses shipping documents (hazardous waste manifests) to track hazardous waste shipments from generators to facilities. There is great year-to-year variability in hazardous waste generation totals, so we are presenting ranges for the number of generators, transporters, and facilities. In any given year, there are 50,000 to about 100,000 entities that generate hazardous waste in California, including large and small businesses such as gas stations, dry cleaners, metal finishers, and auto body shops. There are also over 1,000 transporters of hazardous waste. However, the 2021 Draft Regulatory Framework is focused on the approximately 75 existing facilities that are operating and hold hazardous waste permits to transfer, treat, store, or dispose of hazardous waste, including any facilities that apply for a new permit. See Figure 3.

Figure 3 - Overview of Hazardous Waste Activities



Please note that post-closure facilities are excluded from the count of 75+ permitted facilities.

Hazardous Waste Facility Permitting Process

The Department implements California’s hazardous waste facility permitting program. Under this program, the Permitting Division establishes permit conditions regarding the transfer, treatment, storage and disposal of hazardous wastes that may be toxic, corrosive, reactive, or ignitable. The permitting program ensures the prevention of dangerous releases and avoidance of costly cleanups. State permitted hazardous waste facilities include a number of facilities that receive waste from generators around the state and others that manage waste generated on site. Permits are generally issued for 10 years. Facility owners or operators must submit applications to the Department for new permits, renewals, or modifications of existing hazardous waste facility permits. The Department reviews these applications, requires facilities to address deficiencies, invites public comment, establishes facility specific permit conditions, and makes decisions to approve or deny applications. The permit application review process is described in chapter 21 of title 22 of the California Code of Regulations and in fact sheets available on the Department’s permitting website. See Figure 4.

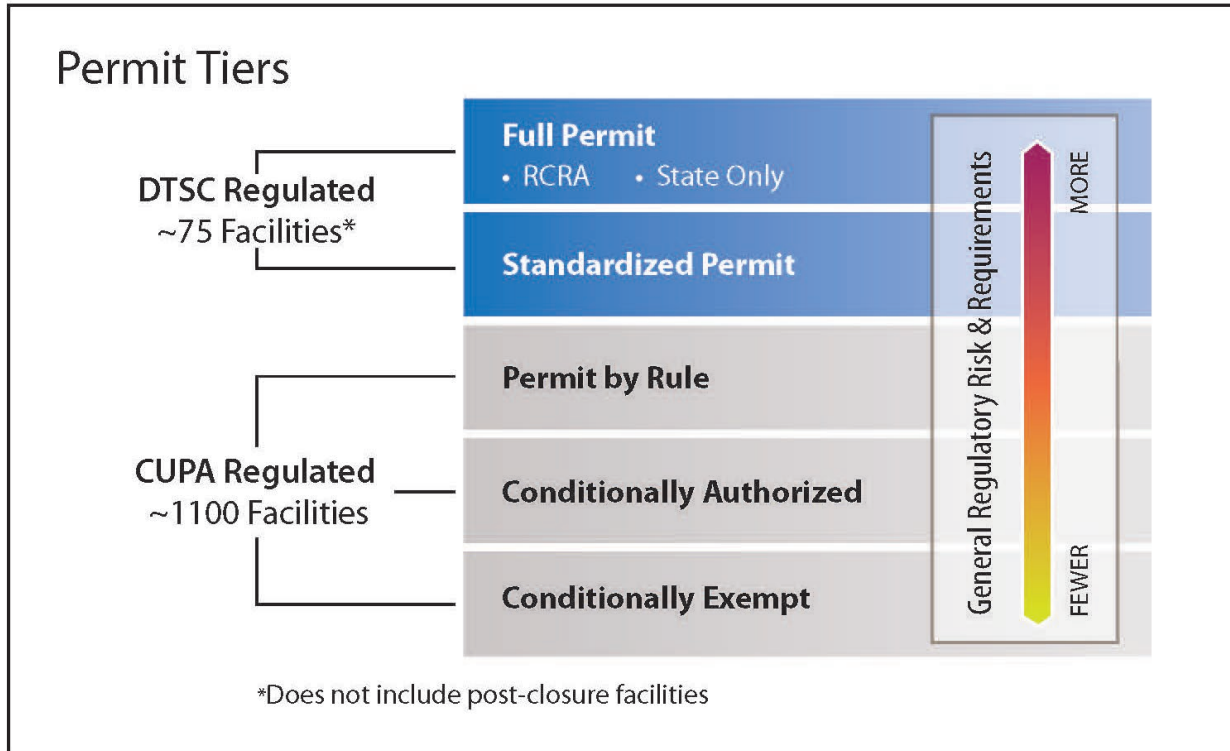
Figure 4 – Permitting Process



The Department authorizes hazardous waste transfer, treatment, storage, and disposal activities under two of the five permitting tiers including: full permits (usually Resource Conservation and Recovery Act or RCRA permits), and standardized permits. The other three permit tiers for onsite hazardous waste treatment authorization—permit by rule, conditional authorization, and or conditional exemption—are under the authority of the CUPAs. See Figure 5.

To date, the decision-making process for permit applications or major permit modification applications has not specifically included consideration of both cumulative impacts and vulnerabilities around a facility as criteria for making permit decisions. This regulatory framework would incorporate new criteria addressing cumulative impacts and community vulnerability for all future applications or major permit modifications for full permits or standardized permits.

Figure 5 - Permitting Tiers



II. Overview of Stakeholder Input

Prior to the release of the 2018 Draft Regulatory Concepts, the Department held three stakeholder consultation meetings with community members, business representatives, and state and local agency representatives in Sacramento and Commerce. After the release of the 2018 Draft Regulatory Concepts, the Department collaborated with California State University - Sacramento Consensus and Collaboration Program (formerly the Center for Collaborative Policy) under contract to plan, organize, and facilitate three community workshops and record the resulting input.

The workshops, which the Department and California State University - Sacramento organized in coordination with community stakeholders, took place in Commerce, Lamont, and Oakland in October of 2018. All of the materials from the public workshops including presentations and

summaries of feedback are available on the SB 673 webpage.²⁸ The Department also held three stakeholder working groups in Oakland, Sacramento and Los Angeles, each focused-on stakeholders representing different sectors: community advocates, governmental agencies, and industry representatives from January 2019 through April 2019. Working group participants reviewed the 2018 Draft Regulatory Concepts document and provided additional feedback. In spring 2019, following the working groups, the Department also requested written public input and posted all feedback letters and electronic communications that were submitted on the SB 673 webpage.

The following is a summary of some of the major themes raised by community, business, and local government stakeholders in workshops, working groups, and written feedback. A longer, more comprehensive overview of feedback is included in Appendix 5.

Community

- The state must tackle the historic burdens of hazardous waste facilities on low-income communities and communities of color.
- The Department should be looking at this process as a way to level the playing field for areas that simply cannot sustain current levels of pollution due to population vulnerability or multiple sources of local pollution.
- The Department should clearly define conditions for permit denial in cases where community burdens and vulnerabilities are too high.
- Transparency and public input during all stages of the Department's process to make permitting decisions is critical, including decisions on facility responses to community impacts and vulnerabilities
- Cumulative impacts are problems now. Address the immediacy of this issue.

Business

- The Framework appears to go beyond the Department's authority to regulate hazardous waste facilities.
- The public needs to understand the extent of a facility's contribution to cumulative impacts in a community.
- The Department should focus on environmental exposures and mitigations over which it

²⁸ <https://dtsc.ca.gov/sb-673-permit-criteria-for-community-protection/>

has direct authority, recognizing that other outside impacts, including issues related to land use, are overseen and mitigated through other agencies and jurisdictions.

- The framework could, if not well designed, inadvertently cause permitted hazardous waste facilities to close, whether due to excessive administrative burden or through permit denials. This would run counter to state goals to treat and manage hazardous materials.
- Many gaps in concepts need to be addressed.

Local Governments

- In a few large urban counties, local agencies are pursuing their own initiatives to address disproportionate impacts and integrate environmental justice (EJ) into their programs.
- Examples include local air district AB 617 steering committees; community monitoring and emission reduction plans; Certified Unified Program Agencies work to enhance enforcement authority against bad actors and increase coordination on EJ issues; local health department shift to community perspective on regulations; policy and outreach; LA County Green Zones program; and development of US EPA's EJScreen Tool, among others.
- Cumulative impacts require a higher level of vigilance by state and local agencies.

III. Community Cumulative Impacts and Vulnerability

Definitions

Under the direction of CalEPA, OEHHA developed a tool to evaluate the cumulative impacts of multiple sources of pollution in specific communities or geographic areas. CalEPA and OEHHA developed CalEnviroScreen for evaluating multiple pollutants and stressors in communities. CalEPA intended the eventual use of this tool by its boards, departments and office. As part of the scientific foundation for this tool and "community vulnerability" and "cumulative impacts" were defined. In order to align with CalEPA approach on cumulative impacts and community vulnerability and support the use CalEnviroScreen, the Department is proposing the following definitions:

Community vulnerability refers to the aggregated effect of socioeconomic factors and chronic stressors or biomarkers of stress response (poverty, unemployment, linguistic isolation, housing burdened low income households, and educational attainment) and high rates of underlying chronic health conditions in the community (such as high prevalence of asthma or cardiovascular illnesses, poor birth outcomes) that amplify the vulnerability of residents to impacts from

environmental pollution.^{29,30,31,32,33}

Cumulative impact refers to exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socio-economic factors, where applicable and to the extent data are available.³⁴

For example, a community may have industries that produce air pollution or water discharges combined with hazardous waste cleanup sites and high levels of freight traffic. Cumulative impacts would also include other indicators of vulnerability including public health factors that cause the community to be more vulnerable to pollution impacts.

Comparison of Cumulative Impacts to Other Analysis Tools

Under SB 673, the Department plans to look more broadly at the combined health and environmental impacts (including air pollution impacts) in a community around a hazardous waste facility. The factors that increase the communities' potential to experience pollution impacts will also be considered. The intended outcome is a set of pathways for facilities to contribute to improving conditions in the community. The SB 673 requirements would overlay and enhance existing state, regional, or local requirements. Specifically, the requirements would provide additional protections beyond those measures that may be required through the California Environmental Quality Act process and beyond protections already provided through

²⁹ McHale CM, Osborne G, Morello-Frosch R, Salmon AG, Sandy MS, Solomon G, Zhang L, Smith MT, Zeise L (2017) Assessing Health Risks from Multiple Environmental Stressors: Moving from G×E to I×E, Mutation Research/Reviews in Mutation Research <https://doi.org/10.1016/j.mrrev.2017.11.003>.

³⁰ Solomon GM, Morello-Frosch R, Zeise L, Faust J (2016) Cumulative Environmental Impacts: Science and Policy to Protect Communities. Annual Review of Public Health. 37:83–96.

³¹ Zota A, Shenassa E, Morello-Frosch R. (2013) Does allostatic load modify the association between lead exposure and risk of hypertension? Environmental Health 2(1):64 doi:10.1186/1476-069X-12-64.

³² Morello-Frosch R, Jesdale B, Sadd J, Pastor M (2010) "Ambient Air Pollution Exposure and Risk of Low Birth Weight in California." Environmental Health. 9: 44 doi:10.1186/1476-069X-9- 44.

³³ Morello-Frosch R, Zuk M, Jerrett M, Shamasunder B, Kyle AD. (2011) "Understanding the cumulative impacts of inequalities in environmental health." Health Affairs, 30(5):879-887.

³⁴ The Office of Environmental Health Hazard Assessment working definition of "cumulative impacts" adopted by Cal/EPA's Interagency Working Group on Environmental Justice was used in the development of CalEnviroScreen. Refer to California Environmental Protection Agency's Final report: Cumulative Impacts: Building a Scientific Foundation dated Dec 31, 2010 available at <https://oehha.ca.gov/media/downloads/calenviroscreen/report/cireport123110.pdf>

other state and local laws, regulations, or environmental requirements. The 2021 Draft Regulatory Framework would stipulate that actions taken by facilities must be actions that are supplemental to all other requirements in law and regulation.

California Environmental Quality Act (CEQA)

CEQA is a California law that generally requires state and local government agencies to follow a protocol of analysis, public disclosure of environmental impacts of proposed projects, and adopt all feasible measures to mitigate those impacts. Although CEQA does require consideration of cumulative impacts, the scope of SB 673 is different from that considered under CEQA. A new definition of cumulative impacts will be required for purposes of this SB 673 proposal. A CEQA analysis could only consider impacts created by the proposed project in combination with other projects causing related impacts.³⁵ CEQA does not require a broader look at all the conditions in a community contributing to environmental and health effects around a specific project. The SB 673 process would, in contrast, require such a consideration. By incorporating use of the CalEnviroScreen tool and possibly other indicators of community vulnerability and burdens, the SB 673 process is incorporating review and analysis of over twenty factors that impact community and environmental health.

Health Risk Assessment for a Hazardous Waste Facility Permit

The Department's permitting regulations in Title 22 of the California Code of Regulations require development of a health risk assessment for some facilities as part of a permit application. This assessment of potential risk to human health includes the evaluation of chemical releases to air, water, and soil. The Department's approach to the health risk assessment is to identify activities associated with a facility that may have potential health risk impacts. Owners and operators of facilities applying for a permit must summarize facility operations and site conditions. Based on this information, the Department determines the need for one of two assessments which have different levels of complexity. The first tier is a screening level assessment, and the second is a detailed quantitative risk assessment needed to identify specific thresholds that are protective of human health.

These health risk assessments for a hazardous waste facility by themselves do not address cumulative impacts as required by SB 673. Health risk assessments provide critical information on known or potential releases of hazardous waste or chemicals of concern from a facility and potential pathways for human exposure to those wastes or chemicals. This information is vital to ensure that a facility is implementing measures needed to protect nearby communities by

³⁵ CEQA Guidelines, Section 15310 of the Public Resources Code.

reducing or eliminating known or possible exposures. However, SB 673 requires the Department to conduct a broader analysis including consideration of other indicators of community burden and impact in the area surrounding a hazardous waste facility.

SB 673's requirement to consider cumulative impacts and community vulnerability requires a new set of tools to be incorporated into the permitting process for hazardous waste facilities.

CalEnviroScreen 3.0 and CalEnviroScreen 4.0

The CalEnviroScreen tool provides an important foundation for this 2021 Draft Regulatory Framework to address combined or cumulative impacts and vulnerable communities near hazardous waste facilities. CalEnviroScreen is the science-based mapping tool developed by OEHHA over the past decade. It is used by CalEPA to inform implementation of many statewide policies and activities including allocation of resources for local investments and clean up and compliance efforts. CalEnviroScreen informs CalEPA's identification of disadvantaged communities pursuant to Health and Safety Code section 37911.

SB 673 requires the Department to consider permitting criteria to address vulnerability of and existing health risks to nearby populations. SB 673 also requires the Department to consider developing permitting criteria for minimum setback distances from sensitive receptors. In doing so, the Department is directed to use available tools, local and regional health risk assessments, Clean Air Act attainment status and other indicators of community vulnerability, cumulative impacts, and potential risks to health and well-being. CalEnviroScreen — developed and updated by OEHHA and CalEPA — represents an existing tool for measuring community vulnerability and impact, that has undergone robust engagement and review over the last decade.

The importance of combining the effects of community vulnerabilities and burdens has been a core principle that has guided initial development and subsequent versions of CalEnviroScreen. It is a core principle behind this regulatory framework. For this reason, the Department is using the overall CalEnviroScreen scores that reflect both pollution burden and vulnerability rather than choosing to focus on one or more individual indicators in the CalEnviroScreen tool in determining facility tiered pathways. In addition, this framework provides an opportunity to introduce supplemental data and tools to fill gaps in knowledge about community conditions and better evaluate community vulnerability for the purposes of determining facility tiered pathways and prioritizing facility actions.

CalEnviroScreen 3.0, the current version available, provides a statewide ranking of all 8,000

census tracts in California for environmental burdens and population vulnerability. CalEnviroScreen 3.0 scores 20 individual indicators of pollution burden and community vulnerability for each census tract in California and combines the indicator scores into overall scores and a ranking for each tract. See the list of CalEnviroScreen 3.0 indicators below. Communities with high overall CalEnviroScreen scores have high cumulative pollution burdens and highly vulnerable population characteristics.

In 2012, the Legislature passed Senate Bill No. 535 (SB 535, de Leon, statutes of 2012), directing that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. The legislation gave CalEPA responsibility for identifying those communities and, consequently, CalEPA used the CalEnviroScreen 3.0 to inform the results. CalEPA has identified the most overburdened census tracts — the 25 percent of tracts with the highest overall scores — as "disadvantaged communities." This covers a broad range of geographic areas in the state. Now in its third version, the tool has undergone extensive public and peer review since the first draft of CalEnviroScreen 1.0 was released in July 2012.

Most permitted hazardous waste facilities are in communities that rank among the most vulnerable and cumulatively impacted communities in the state according to CalEnviroScreen 3.0 indicators. For example, sixty percent (60%) of permitted hazardous waste facilities are in areas with CalEnviroScreen 3.0 aggregate scores in the seventy-fifth (75th) percentile or higher (based on CalEnviroScreen 3.0 scores for census tracts within 0.5 mile of facilities). Facilities in this category generally have a majority of population and pollution indicators that are elevated (60th percentile or higher) and several indicators that are high (75th percentile or higher) compared to other areas of the state.

Seventy four percent (74%) of permitted hazardous waste facilities are in areas with CalEnviroScreen 3.0 scores in the 60th percentile or higher (based on CalEnviroScreen 3.0 scores for census tracts within 0.5 mile of facilities). Facilities in this category generally have a large number of population and pollution indicators that are elevated (60th percentile or higher) compared to other areas of the state and some population and pollution indicators are high (75th percentile or higher) compared to other areas of the state.

The CalEnviroScreen 3.0 report released by CalEPA and OEHHA in 2017 documents a wide range of uses for the CalEnviroScreen tool. CalEnviroScreen aggregate scores are used by state and local agencies in prioritizing compliance inspections, enforcement and resource allocations and informing the siting, zoning, and development of general plans and other long-term plans. California Air Resources Board uses CalEnviroScreen to prioritize the most disadvantaged communities for the AB 617 program. OEHHA explains that the tool is not a substitute for a

cumulative impact analysis under CEQA and is not intended to restrict the authority of government agencies in permitting and land use decisions. However, over the past three years, CalEnviroScreen has been successfully used to inform the implementation of many policies, programs and activities throughout the state.

Based on the research, peer review, and public engagement that has gone into the development and ongoing revision of the CalEnviroScreen tool by OEHHA in coordination with CalEPA, the Department is proposing to use CalEnviroScreen as the primary tool to measure community vulnerability and cumulative impacts. Another advantage of using CalEnviroScreen as the primary tool is that it provides a process that is clear, transparent, and understandable to the Department and all public, business, and community stakeholders.

The selection of specific CalEnviroScreen indicators requires consideration of both the type of information that will best represent statewide pollution burden and population characteristics, and the availability and quality of such information at the necessary geographic scale statewide. CalEnviroScreen is made up of multiple indicators contributors to cumulative impacts. A set of indicators represent pollution burden (exposures and environmental effects) and another set represents population characteristics (sensitive populations and socioeconomic factors). Below are the specific indicators included.

CalEnviroScreen 3.0 Pollution Burden Indicators - Exposures

- Ozone Concentrations
- PM 2.5 Concentrations
- Diesel PM Emissions
- Drinking Water Contaminants
- Pesticide Use
- Toxic Releases from Facilities
- Traffic Density

CalEnviroScreen 3.0 Pollution Burden Indicators - Environmental Effects

- Cleanup Sites
- Hazardous Waste
- Solid Waste Sites and Facilities
- Impaired Water Bodies
- Groundwater Threats

CalEnviroScreen 3.0 Population Characteristic - Sensitive Populations

- Asthma (Emergency Department Visits)
- Cardiovascular Disease (Emergency Department Visits for Heart Attacks)
- Low Birth Weight Infants

CalEnviroScreen 3.0 Population Characteristic - Demographic and Socioeconomic Factors

- Educational Attainment
- Poverty
- Housing Burdened Low Income Households
- Linguistic Isolation
- Unemployment

OEHHA released a draft version of CalEnviroScreen 4.0 on February 22, 2021. The revised tool may include additional pollution indicators and updates to existing indicators to reflect the latest data. The most current version of CalEnviroScreen will be incorporated into the proposed regulations when adopted.

University of California Research

Under contract with the Department and the California Air Resources Board, the University of California researchers (UC research team³⁶) led by Principal Investigator Rachel Morello-Frosch compiled data to characterize communities near currently operating hazardous waste facilities. The communities were characterized with respect to their proximity to multiple environmental hazards and to their vulnerability to health impacts of pollution. Their analysis utilized environmental health impact and community disadvantage. The analysis also developed five new community metrics — additional indicators of community vulnerability — that are not included in CalEnviroScreen 3.0. The Department is proposing to use these new indicators as supplemental information to inform the assignment of the appropriate facility tiered pathway for each facility.

The UC research team provided data for these new metrics in communities surrounding permitted hazardous waste facilities. Metrics were compiled from a distance of 0.1-mile radius to 7.0-mile radius from hazardous waste facilities. The CalEnviroScreen 3.0 indicators and additional indicators developed by the UC research team are listed below. Additional information compiled by the UC research team under contract to the Department such as the methodology, metrics, underlying data and results of the analysis will be posted on the Department's website. Appendix 2 is an excerpt from the UC research team report titled, "Cumulative Impacts near California Hazardous Waste Operating Facilities: Data Analysis and Methods" prepared for the Department by Nicholas Depsky, Lara Cushing, and Rachel Morello-Frosch. This appendix contains the

³⁶ University of California research team includes: Rachel Morello-Frosch, University of California, Berkeley, Department of Environmental Science; Manuel Pastor, University of Southern California, Departments of American Studies and Ethnicity & Sociology; James Sadd, Department of Geology, Occidental College; Lara Cushing, San Francisco State University, Department of Health Education; Jonathan London, University of California, Davis, Department of Human Ecology, Center for Regional Change; Paul English, California Environmental Health Tracking Program.

rationale behind including additional indicators developed by the UC research team as supplemental data in the 2021 Draft Regulatory Framework.

Below are the indicators compiled by the UC research team. Indicators are categorized as either representing pollution burden or population characteristics. Below are the specific indicators developed by the UC research team.

UC Research Team indicators for Pollution Burden – Environmental Effects

- Domestic Drinking Water Wells (number)
- Oil and Gas Wells (number)

UC Research Team Indicators for Population Characteristic - Sensitive Land Uses

- Schools and Daycare Centers, Healthcare, Senior Care Facilities, Parks, and Prisons

UC Research Team Indicators for Population Characteristic - Demographic and Socioeconomic Factors

- Racial Composition (percentage)
- Voter Turnout (percentage)

A sensitivity analysis of CalEnviroScreen 3.0 scores surrounding hazardous waste facilities was performed by the UC research team included scores. It was calculated by two distinct methods: 1) the maximum CalEnviroScreen 3.0 score in a census tract within a set distance surrounding a facility and 2) the population weighted CalEnviroScreen 3.0 score within a set distance surrounding a hazardous waste facility. Further detail on the methodology and the metrics provided in these supplemental indicators is provided in Appendix 2 and in the report prepared by the UC research team. The Department is proposing to use the maximum CalEnviroScreen 3.0 score within a set distance surrounding a facility as the metric for the initial screening to determine which facilities to include under this framework and to determine facility tiered pathways because this is the most health protective approach. However, the Department will also provide to the public the UC research data that shows the population weighted scores for layers around hazardous waste facilities. The population weighted CalEnviroScreen 3.0 data calculated by the UC research team for layers from 0.1 mile to 7.0 miles away from each hazardous waste facility confirms that communities living closest to the facilities are the most highly impacted.

Supplemental Information

The Department is planning to consider certain supplemental data and tools in the framework to support the facility's inclusion in the SB 673 permit requirements and the draft tiered pathway designation. Supplemental information may in some cases serve as a basis for adjustments. Supplemental information could include data generated by researchers, information, data, and tools submitted by the public or local agencies. The regulation would allow the Department to use supplemental information to determine whether a facility should be subject to SB 673 requirements and whether to adjust a facility tiered pathway to a different tier than initially indicated. For example, a facility with a CalEnviroScreen score below but close to the 60th percentile could be considered for inclusion in the SB 673 permitting requirements based on supplemental information. The Department would consult and collaborate with scientific experts within the Department and across CalEPA in the review of supplemental information and in deciding whether the information merits an adjustment in the draft tiered pathway for a facility. Health and Safety Code Section 57004 requires the Department and other CalEPA organizations to submit to an outside party for external scientific peer review all proposed rules that have a scientific basis. Depending on how supplemental information is used, a scientific peer review may be necessary to proceed to formal rulemaking.

Examples of Supplemental data and tools could include:

- Community vulnerability and impact indicator data developed by the UC research team and attached in Appendix 2 to this framework.
- Air or water (surface or groundwater) monitoring data generated by governmental or community monitoring networks implemented pursuant to AB 617, or other data of similar quality.
- Cumulative impacts and/or community vulnerability data collected pursuant to this framework, or as part of a study approved or accepted by the Department.
- Data on emissions and health risks from diesel truck trips generated to and from the facility and diesel equipment operated at the facility.
- Data on health risks generated pursuant to hazardous waste facility risk assessment or a facility risk assessment pursuant to the AB 2588 Hot Spots Information and Assessment Act.
- Community science including locally generated information that may not be available on a regional or statewide level.
- Emerging health assessment or toxicological evaluation methodologies.

Quality assurance and control criteria for supplemental information: The Department would include quality assurance/quality control standards in the regulation to ensure that any data, information, or tools submitted to the Department by the public meet scientific standards and is well documented and verifiable by multiple sources. Standards applied would vary depending on the type of research, study, or monitoring program. The Department's criteria needs be flexible enough to include a range of research types from community science efforts to the analysis of large complex data sets to determine the correlation between vulnerabilities and health outcomes.

For air monitoring data, The Department would use the criteria included in California Air Resources Board's [AB 617 Community Air Protection Blueprint](#) developed in 2017. For other data collected by a community, the Department criteria may require the community to show involvement or oversight by academic institutions or government agency(s) at the state or local level in the collection and analysis of the data. This oversight should ensure that data quality objectives are being met for any data collection effort in the absence of defined criteria. In other words, the right data will be collected to support a decision within the desired confidence. The Department may also request information on the scientific context of the data, where available, to understand the relative importance of the results. For example, is there any basis to compare community level data to similar data for other parts of the state or to make comparisons to regional or statewide data? Review or validation of the data by a state agency or a local health or regulator agency may also be requested by the Department.

The Department is proposing that the standards for scientific information could include one or more of the of the following:

- Published in a scientifically peer reviewed report or other literature;
- Published in a report of the United States National Academy of Sciences;
- Published in a report by an international, federal, state, or local agency that implements environmental laws; and/or
- Conducted, developed, submitted, prepared for, or reviewed and accepted by an international, federal, state, or local health or regulatory agency.

Key Questions for Section III

The Department is soliciting input and recommendations from interested members of the public on all aspects of the approach presented and on the following questions.

1. In addition to the examples provided for supplemental information, what additional types of supplemental data and tools should be considered in making decisions on which facilities should be subject to this proposal?
2. When should other environmental or local agencies, or community experts be involved in reviews of supplemental data and tools for purposes of determining potential facility impacts? What agencies or experts should be involved?
3. What data or tools should be used to determine facility actions and how could the Department measure their effectiveness on reducing existing health risks?
4. What additional criteria should be used for quality control and assurance to validate the scientific work behind supplemental data, tools, and information?
5. What other standards should the Department consider for scientific information submitted to the Department?
6. What type of data, studies, or information should owners or operators of facilities include with a permit application to evaluate potential facility impacts and community vulnerability?
7. When should owners and operators be required to generate data, produce studies, or pay for information prepared by third-party consultants?

IV. Draft Regulatory Framework Elements

Summary of Permitting Process Proposed Update

The Department is proposing the following changes to the existing hazardous waste facility permitting process:

- The Department would include standards for screening communities and facilities to determine applicability (Element 1);
- The proposed regulations would include standards to determine the facility tiered pathway (Element 2);
- A facility would determine which facility actions are appropriate based on its draft facility tiered pathway, and the potential effects of its operations (Element 3);
- A facility would have to prepare a Workplan and submit it with its permit application (Element 4);
- Facility would host a pre-application meeting to request comments on the draft facility

tiered pathways, supplemental information, and the draft Workplan submitted with the application (Element 4);

- The Department would host a meeting to occur during the technical review to request comments on the final facility tiered pathway and the final Workplan (Element 4);
- The Department would include additional criteria for permit decisions in the regulatory proposal (Element 5);
- The Department would amend the Violation Scoring Procedure (VSP) score for violations that occur near vulnerable communities and sensitive receptors (Element 6);
- The Department would commit to using the most current and updated data, tools and information to evaluate community and facility characteristics (Element 7).

In general, under this proposed framework, the Department would review hazardous waste facility characteristics, as well as the cumulative impacts and community vulnerability tools and data for nearby communities to place facilities on one of three pathways, if the facility is located in or near a vulnerable community. For each facility, the applicable pathways identify the scale of facility actions, monitoring, and/or community outreach required to address health and environmental hazards through the permitting process. If assigned a pathway, the Department is proposing to require facilities to submit a Workplan as part of a facility permit application (or major permit modification). The Workplan would include facility actions, monitoring and/or community engagement to address health and environmental hazards in the area around a hazardous waste facility. The Department would also incorporate facility actions as permit conditions and hold facilities accountable for successful and timely implementation. This section describes how the Department would carry out these steps and how public input would be incorporated into each step in the process.

Element 1: Community and Facility Screening

The Department proposes to use community and facility characteristics to identify those facilities to be addressed in Elements 2, 3, and 4 of this 2021 Draft Regulatory Framework. Element 1 includes two screening steps. First, the Department proposes to use CalEnviroScreen as an initial screening tool to determine applicability of the regulations. The Department would then use a second screening to determine the facility tiered pathways. These pathways would apply to hazardous waste facilities applying for a permit renewal, new permit, or certain Class 3 permit modifications. This section describes the steps that the Department would take in conducting these screenings.

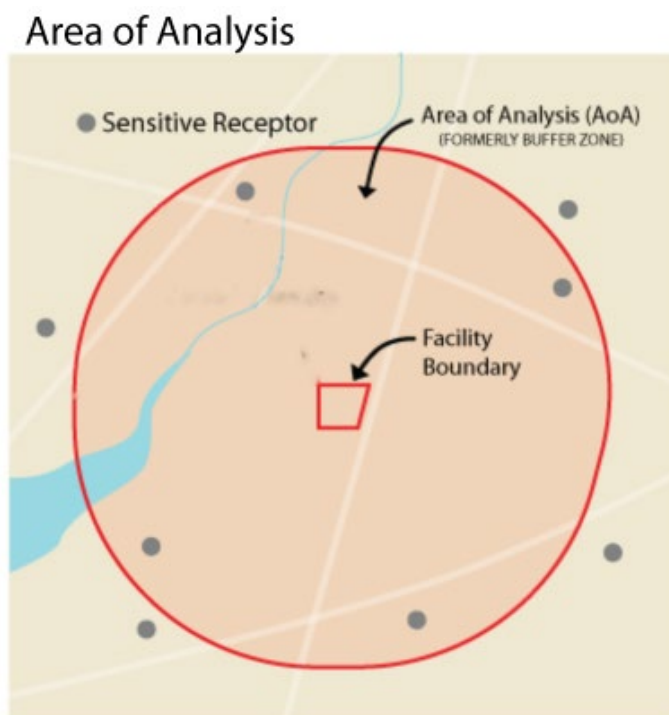
Community Screening – Initial and Secondary Screening

As part of the 2021 Draft Regulatory Framework, the Department would assess the community around each facility. To set the geographical boundaries for this community assessment around each facility, regulations would establish the area of analysis for determining the CalEnviroScreen percentile score.

Area of Analysis (AoA)

This framework is proposing to define Area of Analysis or AoA as a set distance around a facility's boundary or a permitted hazardous waste unit boundary. The Department would use the AoA to describe the study area for the evaluation of community impacts and community vulnerability. See Figure 6 below.

Figure 6 -Area of Analysis - *The distance would vary based on the type of hazardous waste facility.*



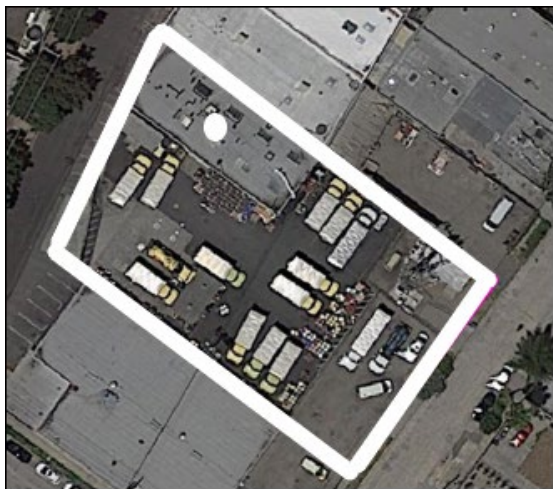
The AoA would be used in the methodology for establishing the pathway and determining options for facility actions. In the 2018 Draft Regulatory Concept, the Department referred to this distance as a buffer zone. Since then, the Department has decided that AoA provides a clearer description of this distance. Communities guide their physical growth and development through local planning. A buffer zone for local land use planning purposes is typically associated with a transitional area of land between two distinct or incompatible land uses to lessen the impact of

one land use type on another. For the 2021 Draft Regulatory Framework, the Department would use “setback distance,” to describe a distance established to protect sensitive receptors, including residents, from potential impacts of a hazardous waste facility.

For clarity and consistency, the Department has determined that the AoA distance should be set based on the type of hazardous waste facility, with special considerations for extremely large facilities. The acreage of hazardous waste facilities can vary from a quarter of an acre to over 2,000 acres. The Department proposes that the AoA distance would be determined using the following:

- a facility boundary represented by a polygon determined by the UC research team under contract to the Department, rather than a single point that is typically associated with a specific address (See Figure 6 for an example); and
- for extremely large facility boundaries, the AoA distance would be measured from the boundary representing the permitted hazardous waste unit boundary, instead of the entire facility boundary (See Figure 7 for an example).

Figure 7 - Facility Boundary



The point represents the facility address.

The facility boundary represents the entire facility which occupies about a third of an acre.

Figure 8 - Hazardous Waste Unit boundary



The point represents the facility address.

The facility boundary represents about 2,500 acres.

The circle represents the hazardous waste unit boundary permitted for hazardous waste activities.

The Department would define a range of AoA distances for categories of facilities based on the hazardous waste operations of the facility that would include the type of hazardous waste facility permit—federal or state—authorization, the volume of waste handled, and the type of hazardous waste activity authorized by the permit—transfer, treatment, storage, or disposal (i.e., landfills). These factors are shown in the list below. For example, the AoA distances from the facility could range from 0.5 miles for a small standardized permit facility to 6.0 miles for a large offsite RCRA landfill facility. This range is based on research provided by the UC research team.³⁷ The AoA distances would be set in regulation as a distance around the facility boundaries based on these factors. The range of distances being proposed here are as follows:

- Standardized Permit facilities: 0.5 – 1.0-mile AoA
- Storage RCRA facilities or small RCRA treatment facilities: 1.0 – 2.0-mile AoA
- Large RCRA treatment facilities: 2.0 – 3.0-mile AoA
- RCRA Disposal facilities (Landfills): 4.0 – 6.0-mile AoA

For the initial screening, the Department would be conservative and use the greater distance in the above range to determine applicability. For the second screening, using a range of distances in the regulations, would allow the Department to adjust the final AoA distances based on the community knowledge, staff knowledge of the facility history, information on sensitive land uses and residences near the facility, and other criteria to be defined in the formal regulatory proposal. The Department would use a site-specific analysis of sensitive land uses, residents and possibly other vulnerability indicators near the facility to help make the final decision about the appropriate AoA distance.

Another option would be to set a fixed AoA for each facility type in the formal regulatory proposal and use the type of facility-specific information listed above to adjust the draft facility tiered pathway.

Supporting Research for AoA Distances

Research on a wide range of facilities across the country, including permitted hazardous waste

³⁷ University of California, Berkeley’s scientific review of the Department’s SB 673 Cumulative Impacts and Community Vulnerability Draft Regulatory Framework Concepts, dated October 2018 available at https://dtsc.ca.gov/wp-content/uploads/sites/31/2019/05/UCB_Comments_Scientific-Review-of-DTSC-SB-673-Draft-regulatory-concepts-Jan-2019-SENT.pdf.

facilities, has shown evidence of health effects at varying distances from facility boundaries. Several studies^{38,39,40,41,42,43} have found evidence of adverse health effects associated with residences more than 0.25 miles and up to 6 miles from facilities and hazardous waste sites. Specifically, research found evidence of adverse health effects associated with residence within a ZIP code containing a hazardous waste site in New York State. ZIP codes cover on average about 90 square miles or equivalent to a roughly 5.0-mile radius. Studies have found evidence of elevated risks of birth defects within 1.2 miles and within 5.0 miles of hazardous waste sites.^{44,45,46} The Department data show evidence of lead contaminated soil more than 1.7 miles from the former Exide lead-acid battery recycling facility site in Los Angeles.⁴⁷ In addition, recent studies of the health benefits associated with power plant closures in California showed reductions in preterm birth rates and increases in fertility rates within a radius of 3.1 to 6.2 miles (or 5.0 to 10.0 kilometers).^{48,49}

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- ³⁸ Kouznetsova M, Huang X, Ma J, Lessner L, Carpenter DO (2007). Increased rate of hospitalization for diabetes and residential proximity of hazardous waste sites. *Environ Health Perspect* 115(1):75-9.
- ³⁹ Sergeev AV, Carpenter DO (2005). Hospitalization rates for coronary heart disease in relation to residence near areas contaminated with persistent organic pollutants and other pollutants. *Environ Health Perspect* 113(6):756-61.
- ⁴⁰ Lu X, L Lessner, DO Carpenter (2014) Association between hospital discharge rate for female breast cancer and residence in a zip code containing hazardous waste sites *Environmental Research* 134: 375-381.
- ⁴¹ Boberg E, L Lessner, DO Carpenter (2011) The role of residence near hazardous waste sites containing benzene in the development of hematologic cancers in upstate New York. *Int J Occup Med Environ Health* 2011;24(4):327–338.
- ⁴² Carpenter DO1, Ma J, Lessner L.(2008) Asthma and infectious respiratory disease in relation to residence near hazardous waste sites. *Ann N Y Acad Sci.* 1140:201-8. doi: 10.1196/annals.1454.000.
- ⁴³ Huang, L Lessner, DO Carpenter (2006) Exposure to persistent organic pollutants and hypertensive disease. *Environmental Research* 102:1, 101-106.
- ⁴⁴ Elliott P, Briggs D, Morris S, de Hoogh C, Hurt C, Jensen TK, Maitland I, Richardson S, Wakefield J, Jarup L (2001), Risk of adverse birth outcomes in populations living near landfill sites. *BMJ.* 323(7309): 363–368.
- ⁴⁵ Elliott P, Richardson S, Abellan JJ, et al. Geographic density of landfill sites and risk of congenital anomalies in England. *Occup Environ Med.* 2009;66(2):81-89. doi:10.1136/oem.2007.038497
- ⁴⁶ Kuehn CM, Mueller BA, Checkoway H, Williams M (2007) Risk of malformations associated with residential proximity to hazardous waste sites in Washington State, *Environmental Research* 103:3, 405-412.
- ⁴⁷ <https://www.dtsc.ca.gov/HazardousWaste/Projects/pia-sampling-data.cfm>.
- ⁴⁸ Casey JA, Karasek, D, Ogburn, EK, Goin D, Dang K, Braveman, PA, Morello-Frosch R (2018) Coal and oil power plant retirements in California associated with reduced preterm birth among populations nearby. *American Journal of Epidemiology*, doi: 10.1093/aje/kwy110.
- ⁴⁹ Casey JA, Karasek D, Gemmill A, Ogburn EK, Goin D, Morello-Frosch R (2018) Increase in fertility following coal and oil power plant retirements in California. *Environmental Health.* 2018; 17: 44. doi: 10.1186/s12940-018-0388-8.

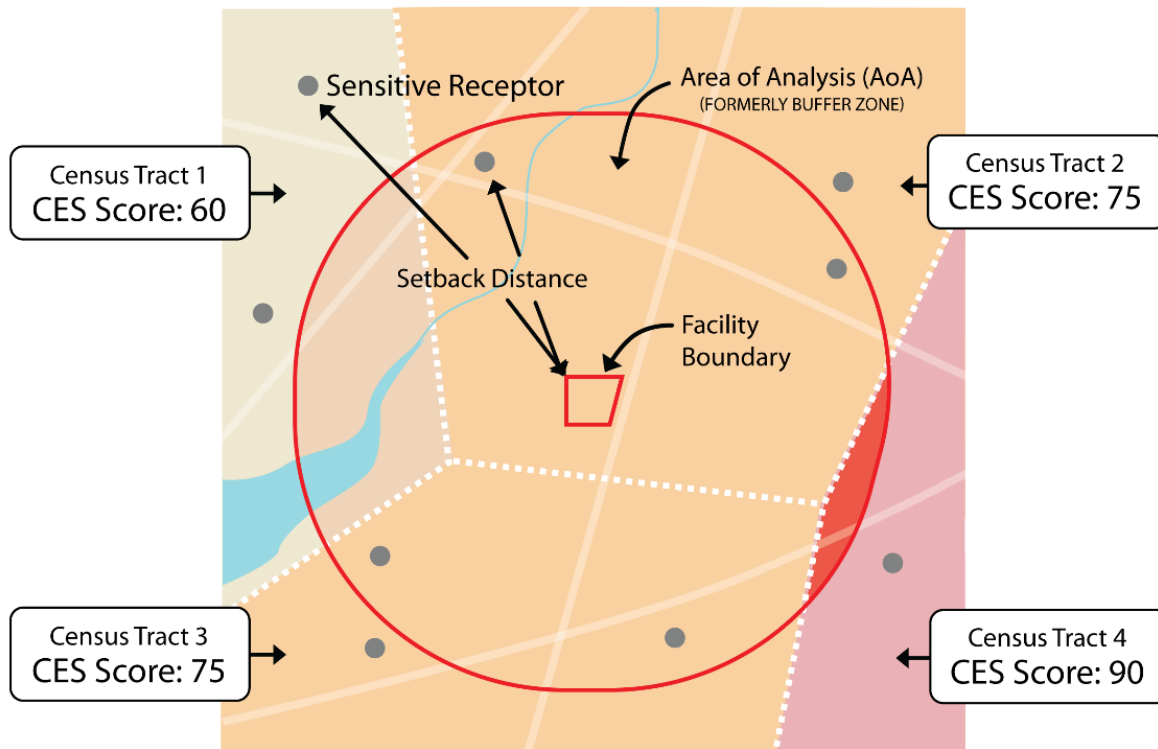
Use of Screening Tools

1. Initial community screening:

The Department is proposing to set a CalEnviroScreen score in the AoA higher than the 60th percentile as the threshold for facilities to be included in the 2021 Draft Regulatory Framework’s permit protections for vulnerable communities. The CalEnviroScreen score would not be based simply on the census tract in which the facility is located. The Department would take a more conservative approach. The CalEnviroScreen percentile for the facility would be established as the maximum CalEnviroScreen percentile found within the AoA around the facility and this percentile score would, in turn, be compared to the threshold. See Figure 9 below. The Department proposes to use the maximum CalEnviroScreen percentile in the AoA in order to be most protective of communities. Facilities with a maximum CalEnviroScreen score for the AoA around a facility in the 60th percentile or higher would be subject to the regulations and would be required to submit a Workplan with their application whenever the facility applies for a permit or major permit modification.

Figure 9 - Maximum CalEnviroScreen (CES) Percentile in AoA

Maximum CalEnviroScreen Score in the AoA



Since the AoA extends into Census Tract 4, Maximum CES Score is 90.

If a surrounding community has a maximum CalEnviroScreen percentile in the AoA of less than 60, it would not be considered a vulnerable community for purposes of this proposal. If the surrounding community has a CalEnviroScreen percentile that falls below this threshold, the Department is proposing that no further action listed in Element 3 would be required.

2. Secondary community screening:

The Department would use the maximum CalEnviroScreen percentiles in the AoA around a facility, in combination with an evaluation of the facility characteristics, to help determine the appropriate facility tiered pathway. Facilities would be grouped into high, elevated, or moderate tiers for community vulnerability as listed below:

- High: AoA maximum CalEnviroScreen percentile of 90th or higher
- Elevated: AoA maximum CalEnviroScreen percentile of 75th to 89th
- Moderate: AoA maximum CalEnviroScreen percentile is 60th to 74th

Supplemental tools, data, and information (as discussed earlier) may be used by the Department in cases where CalEnviroScreen scores are close to threshold, to support the initial screening or to adjust the tiered pathway up or down. Supplemental data could include additional vulnerability indicators for a community. These indicators could include medical health data not available on a statewide basis, regional environmental or fence line monitoring data, etc. Where an additional indicator or indicators show high community vulnerability that is not already integrated into the CalEnviroScreen scores, the indicator(s) could be used by the Department to adjust a facility tiered pathway. Supplemental indicators would also include indicators developed by the UC research team for drinking water wells, oil and gas wells, voter turnout, and sensitive land uses. The Department is proposing to provide an opportunity for external community and public input before deciding that supplemental data should be used to adjust the facility's pathway tier for the initial or secondary screening.

Facility Screening - Evaluation of Facility Characteristics

The Department would use a facility scoring tool to conduct the facility screening for assigning facility tiered pathways. The tool would use facility characteristics that indicate the complexity of the facility and the potential for the facility to contribute to health, environmental, or societal impacts in the community.

In the 2018 Draft Regulatory Concepts, the Department proposed a facility scoring matrix based on the models used by OEHHA for the hazardous waste indicator in CalEnviroScreen 3.0. In the

OEHHA matrix, a 10-point scale is used to score on-site facilities activities, with landfills scoring highest based on complexity and potential hazards and storage and post closure facilities scoring the lowest. The Department initially considered using a similar facility scoring tool to evaluate facilities by activity, but with additional points for “footprint indicators.” For purposes of this document, a footprint indicator is an assessment describing how negative offsite environmental impacts—facility emissions, releases, discharges, and other offsite consequences—can potentially impose burdens on communities.

While the Department is now proposing a scoring tool that includes a mix of facility operations and footprint indicators as included in Table 1 below, it is still considering whether to assign numerical scores for each of the individual scoring criteria or whether to assign “high,” “medium” and “low” scores or some other measure that can account for varying relevance, weight factors, opposing values, or absence of data.

In the example presented in the Table 1 below, facility characteristic indicators are grouped into high, medium or low tiers based on potential impact on the community. For new facilities, the Department would consider potential impacts of planned operations at the hazardous waste facility.

Facility indicators currently proposed are facility activities, permit type, facility proximity to populated census blocks (including sensitive receptors), compliance history, hazardous waste transporter traffic, corrective action status, and other major environmental permits. The chart of facility screening factors below lists the scoring criteria from highest to lowest based on facility complexity and potential impacts.

The proposed facility indicators are intended to assess the hazardous waste facility complexity and potential to contribute to impacts in surrounding communities. The indicators are intended to be based on available data and information about the facility and the hazardous waste unit. For example, a landfill with a permit to accept RCRA waste located less than a half mile from a populated census block which has an unacceptable compliance history would be classified as having a high facility characteristic score. Conversely, a small hazardous facility that stores only its own waste that is located greater than one mile from a populated census block would be classified as having a low facility characteristic score. These scores would be evaluated together with the CalEnviroScreen 3.0 data to determine a pathway designation. Please refer to the case studies in Appendix 4 for a more detailed example of how these factors are being considered in the 2021 Draft Regulatory Framework.

TABLE 1. Evaluation of Facility Characteristics

Facility Indicators (proposed ratings of high, medium, or low)	Scoring Criteria (listed from highest to lowest impact)
Facility Activity	Landfill Offsite treatment Offsite storage Onsite treatment Onsite storage
Permit Type and Size	RCRA small or large treatment or storage RCRA minitreatment or ministorage State only (all mini, small or large) Standardized Permits A, B, or C Standardized Permits Small Quantity C
Proximity to Populated Census Block	Less than 0.5 mile 0.5 mile to 1.0 mile Greater than 1.0 mile
Compliance History for hazardous waste management units and in accordance with Sections 66271.50 - 66271.57 of Title 22, the Violations Scoring Procedure (VSP).	VSP Facility VSP score greater or equal to 40 VSP score greater or equal to 20 and less than 40 Major air or water violations
Transporter Traffic (for hazardous waste unit)	> 100 truck trips daily > 50 truck trips daily > 10 truck trips daily Rail transport connection
Corrective Action (for facility)	Imminent and Substantial Endangerment Failure to meet corrective action goals Remedy selected Remedy in place
Other Environmental Requirements (for facility)	Subject to the Risk Management Plan Rule ⁵⁰ Subject to Title V air permit (Clean Air Act) Subject to National Pollutant Discharge Elimination System (NPDES) permit

⁵⁰ Risk Management Plan rule in accordance with section 112(r) of the Clean Air Act.

Element 2: Facility Tiered Pathway and Designation

Facility Tiered Pathways

The Department intends to establish in regulation at least three facility tiered pathways for identifying appropriate facility actions to address cumulative impacts and community vulnerability and the criteria for placing facilities in each pathway.

In general, the pathways would be assigned to address the combination of community vulnerability and the evaluation of the facility’s characteristics. This would result as follows:

- Tiered Pathway 1 would require the highest level of facility upgrades, monitoring, environmental improvements, and community outreach to address community impacts and burdens.
- Tiered Pathway 2 would require some facility upgrades, monitoring or environmental improvements, and community outreach to address community impacts and burdens.
- Tiered Pathway 3 would only require public engagement or outreach to address community impacts and burdens.

If a facility has a maximum CalEnviroScreen score of higher than the 60th percentile, the Department would designate a *draft* facility tiered pathway for each facility using a matrix like the one below in Table 2 and invite public input. The Department is proposing to consider public comments and supplemental information before finalizing the facility tiered pathway.

TABLE 2. Pathway Designations

Maximum CalEnviroScreen Score for Community Near a Facility	High Potential Facility Impacts	Medium Potential Facility Impacts	Low Potential Facility Impacts
High Community Vulnerability: 90 th percentile or higher	1	1	2
Elevated Community Vulnerability: 75 th to 89 th percentile	1	2	2
Moderate Community Vulnerability: 60 th to 74 th percentile	2	2	3
Pathway Designations Not Applicable: Below the 60 th Percentile	Not Evaluated	Not Evaluated	Not Evaluated

Case Studies Summary

The Department has developed a few case studies. Case studies presented below are intended to clarify how the Department would integrate consideration of facility characteristics and community vulnerability indicators in making a pathway determination. The guiding principles for designating facility tiered pathways would be to ensure that the most complex facilities with the greatest potential for health or environmental impacts in a vulnerable community are placed on Pathway 1. In addition, the Department would place a high priority on selecting the most health protective facility tiered pathway for a community.

TABLE 3. Summary of Case Studies Found in Appendix 4

Scenario	Case Study 1 Offsite Large Treatment	Case Study 2 Used Oil Transfer	Case Study 3 Onsite Public Utility
CalEnviroScreen (Max for AoA)	95 = High AoA is 3 miles	95= High AoA is 1 mile	60= Moderate AoA is 1 mile
Facility Characteristics	RCRA treatment Large offsite Residents at ½ mile High truck traffic Other major environmental permits VSP: Conditionally acceptable	Standardized permit-Offsite storage Residents at 1 mile Medium truck traffic No Corrective action VSP: Acceptable	Standardized Permit-Onsite Storage Residents greater than 1 mile away Low truck traffic No Corrective action VSP: Acceptable
FACILITY SCORE	High	Medium	Low
Supplemental Data	Low voter turnout High sensitive uses	Low voter turnout High gas & oil wells High drinking wells	No additional indicators
Local government or community data	Elevates concern	Elevates concern	No additional concerns or elevated indicators
DRAFT FACILITY PATHWAY	1	2	3

In the case of hazardous waste landfills, the regulation would require landfill facilities to be placed on Pathway 1 due to the size and complexity of the facility operations and community impacts generated, such as truck traffic.

The case studies are examples three types of facilities to illustrate how the facility tiered pathways might be assigned. The examples provided in Table 3 include a very brief description of each example facility, the community's CalEnviroScreen score, facility information, and potential supplemental data that would be reviewed in making a facility tiered pathway designation and the rationale for the designation. Below is a summary of the case studies including key facility and community indicators and the resulting pathway decision. A more complete description of each type of facility and the factors included in the pathway decision can be found in Appendix 4.

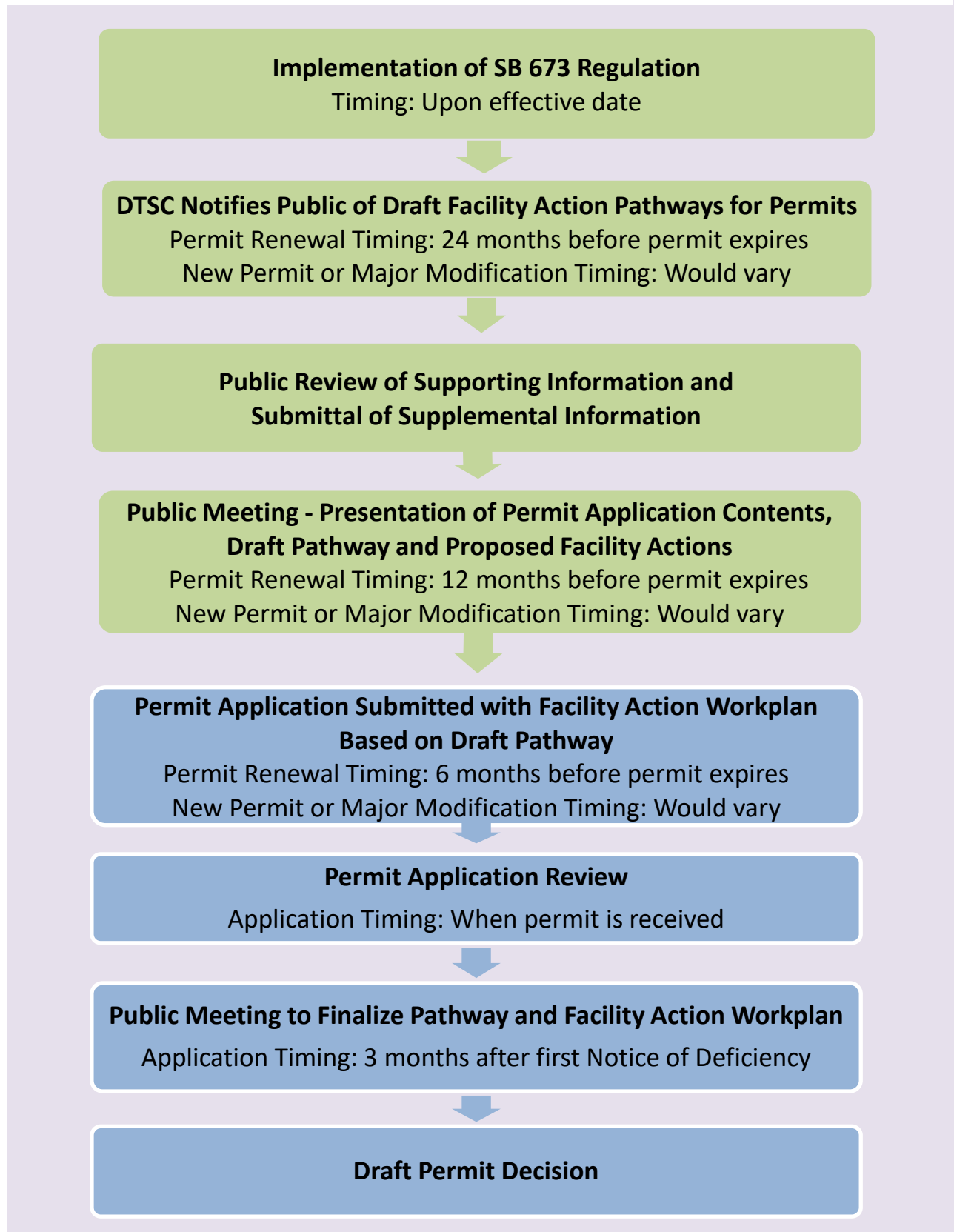
Public Engagement – Draft Facility Tiered Pathway Designation

The Department would establish public engagement opportunities before a permit is submitted. The Department would hold meetings for each facility going through the permitting process to review a proposed draft pathway designation. These facility action meetings would be located near the facility and would include diverse stakeholders (community, local government, and public stakeholders) as well as facility representatives and Department staff. Facilities with a designated draft facility tiered pathway would be required to undertake at least the following outreach activities.

Public Notification Prior to Application – Draft Facility Tiered Pathway and Supplemental Data

The Department notifies the public of a pending permit application and the facility's draft facility tiered pathway. The Department would request any readily available supplemental data that the public could provide. These local data or indicators would help inform the Department's tiered pathway decision or address needed facility actions. The Department plans to provide this notification at least 18 months prior to a renewal permit application (or 24 months before the permit expires). For a new permit application or major permit modification, providing this notification 24 months before the submittal of an application may not be possible. The timing for the occurrence of the notification, submittal of supplemental information, and the pre-application meeting will depend on when the Department receives notification of the new permit or the modification application. The Department is proposing not to accept a permit application until the applicant holds a public meeting with the community on the permit application, and the draft pathway designation.

FIGURE 10 - Simplified Process Flow Chart for Permitting and Proposed Outreach



Public Engagement Meeting Prior to Application

There would be a pre-application facility action meeting scheduled six (6) months prior to a renewal permit application submittal (12 months before the permit expires). This meeting would cover the following topics:

- Facility Permit Application – The facility would make a presentation regarding the contents of the application. The facility and the Department would accept any public feedback on the facility’s permit application submittal.
- Draft facility tier pathway designation – The public would be given an opportunity to review the Department’s draft pathway designation and provide public comments.
- Supplemental Data - The Department would make available any supplemental information received. These local data or indicators would help inform the Departments tiered pathway decision or address needed facility actions.
- Draft Workplan – Public would review and comment on the potential facility actions and the draft Workplan to address pathway requirements that the facility has developed. The community, government agencies, and other interested parties would address the potential actions, assess how facility actions address indicators of community vulnerability and cumulative impacts, and the adequacy of Workplan contents.

Public Engagement During Permit Review–Final Tiered Pathway

The Department would host an application review facility action meeting –The facility action meetings would occur about six to nine months after the application submittal. This meeting would take place after the Department issues an applicant a first notice of deficiency.⁵¹ The Department would have to establish an alternate timeframe if it does not issue a notice of deficiency for the technical review of the application. The public would be given an opportunity to review and provide comments on the Department’s final pathway designation and another draft of the Workplan. See Figure 10 for a graphic representation of this proposed outreach and the permitting process.

The Department would consider all public input provided in the pre-application facility action meeting and incorporate input raised during the technical review phase of the permit review

⁵¹ Notice of deficiency – After reviewing a permit application, the Department may issue a notice of deficiency when a permit application is not complete, is missing information, or has not demonstrated compliance with hazardous facility standards. The notice of deficiency will typically be sent to a facility six to nine months after the application has been received.

process. Specifically, in the administrative completeness review phase of the permit process, the Department would address whether the applicant submitted a complete package addressing any adopted proposed regulatory requirements. The Department would communicate any proposed changes to the facility tiered pathway in the first notice of deficiency for the application or early in the technical review phase of the permit application review if the Department does not issue a notice of deficiency. At that time, the Department would also provide information to the public about any updates in the pathway designation. If the facility tiered pathway is updated, then the facility would be required to modify the application to meet the new pathway requirements and any modifications to Workplans.

The Department is currently updating its public participation practices during permit application review. It is currently reviewing its policy in order to help project managers and public participation specialists customize a public engagement approach based on the level of community interest for any permit or project. The Department is working on a workflow process to involve communities earlier in permitting decisions, and to provide information on the Department, its processes, and available resources.

Element 3: Facility Action

The proposed 2021 Draft Regulatory Framework would require facilities that meet criteria specified in the regulation for community vulnerability and facility impacts—to submit a Workplan with a permit application (or major permit modification application). The workplan would outline facility actions to reduce community impacts and vulnerability according to the pathway requirements.

Facilities in Pathways 1 and 2 would evaluate and prioritize all the types of measures listed in the menu of facility actions described in this section, if applicable, and determine whether they meet specific criteria. For example, the facility must analyze whether the measures are feasible, cost-effective, and reliable. Furthermore, the actions should provide community benefits and address community vulnerability and potential impacts caused by the facility. The Department would expect that a facility on Pathway 1 would be required to complete more facility actions than a facility on Pathway 2. The Department would review the facility actions in the permit review process and determine if the actions meet regulatory requirements and provide a sufficient level of health and environmental protection. The Department is still reviewing proposed criteria for distinguishing the types of facility actions that should be required for a facility designated as Pathway 1 versus Pathway 2.

Potential Facility Actions

The regulations would establish a list of facility actions that both relate to facility hazardous waste operations and can potentially address cumulative impacts and community vulnerability. Listed actions may not be applicable to all facilities. Following is the proposed menu of facility actions organized by three categories.

Improvements to Facility Activities and Operations

- Truck traffic emission and exposure reductions: Replacement of older trucks with cleaner or zero emission trucks, truck routing and tracking of routes, emissions control equipment upgrades, enforcement of truck idling requirements.
- Nuisance control measures: Measures to reduce nuisances beyond those included in CEQA mitigation including changing facility hours of operation or timing of activities, reducing odors or other nuisances.
- Noise reduction or reduction of light pollution: Measures to reduce noise or light pollution impacts beyond those included in CEQA mitigation.
- Enhanced air pollution controls: Upgrading air pollution control equipment to most health-protective technology (may include best available control technology, lowest achievable emission rate, and/or the maximum achievable control technology standards).
- Pollution prevention: Inclusion of pollution prevention measures or waste minimization efforts in the facility permit.
- Innovative or alternative technologies: Implementation of process or technology improvements that enhance public safety and environmental protection. Examples include installing new tanks with improvements above and beyond minimum state requirements such as double walls, auto shut offs, and higher quality and longer lasting tanks.
- Waste handling activities: Changes in location/buffers for waste handling activities to increase community protection.
- Enhanced accident prevention activities: Actions to enhance facility risk management and prevention measures to improve community safety that are beyond current requirements.
- More robust financial assurance: Additional financial assurance to ensure actions included in the facility-specific plan are implemented, thereby increasing community

protection. This would be in addition to current financial assurance requirements for facility closure, post-closure, and corrective action.

Monitoring or Other Evaluation of Community Concerns

- Air or water quality monitoring: Monitoring data provided to the Department and the community on a schedule specified in the permit.
- Community monitoring network: Implementing a network pursuant to AB 617, or another similar program, subject to approval by the Department in consultation with other state and local environmental agencies with applicable jurisdiction (e.g., a Regional Water Quality Control Board or local air pollution control or air quality management district).
- Other monitoring: Implementing other medical, environmental, or fence line monitoring that may assist in evaluating community concerns.

Facility Public Engagement and Outreach Strategies

- Community Engagement Plan: The facility would prepare a community engagement plan that describes the steps the facility would take to inform the community about facility operations, its contribution to cumulative impacts and community vulnerability, its compliance history, and other relevant information. The community engagement plan should outline facility commitments to enhance its communication and relationship with the community. Such communication would include familiarizing the community with the facility operations and, if applicable, sharing the actions the facility would take to address cumulative impacts or enhance community resiliency to those impacts.
- The community engagement plan could include financial or technical assistance to community advisory or technical advisory groups related to the facility's hazardous waste operations.
- Community advisory group: Establish and support the meetings of a community advisory group similar to the use of advisory groups for site mitigation projects.
- Community meetings: Implement community meetings to inform the community about operations at the facility, including information about cumulative impacts and community vulnerability, and provide updates to the community on implementation of required Workplan measures.
- Community updates: Prepare and distribute community updates informing the community about operations at the facility, including information about cumulative impacts and community vulnerability, and progress in implementing required Workplan measures.

Facility Proactive Actions and Allowable Credit

The regulations could provide that the Department can give credit to a facility for proactive actions initiated prior to a permit application (or major permit modification application) submittal. These actions would be measures specifically initiated to address community vulnerability and cumulative impacts in the community around a facility.

Facility proactive actions are supplemental actions implemented above and beyond existing statutory and regulatory requirements. Proactive actions are recently initiated measures included in the categories of facility actions listed above that reduce community impacts and/or vulnerability and are tied to high CalEnviroScreen indicators for the community. Any supplemental environmental projects (SEPs) would not be considered a proactive action. The Department proposes to give credit for proactive actions in two ways as will be defined in the regulatory text in the future:

- Credit for some types of proactive actions addressing community vulnerability would be reflected in the facility scoring tool that generates a score based on facility characteristics and activities. Specifically, credit for measures that have been undertaken by a facility prior to a facility permit application (or major permit modification application) could be included in this way. The total facility score based on the factors listed in the facility scoring chart would be adjusted downward based on the credit. For example, upgrading of trucks from diesel to electric drive could reduce the score for mobile emissions.
- Credit for recent proactive actions addressing community vulnerability actions adopted prior to the submittal of a permit application (or major permit modification application) would be available through the Workplan. The Department would allow the facility to reduce the measures proposed during the term of the permit to reflect the facility's ongoing work to address community vulnerability. In order to receive credit, the facility must include a justification showing how the ongoing measure is tied to a high indicator of community vulnerability and cumulative impacts for the community. Credit for such actions would be subject to Department approval. In addition, the Department may retain the discretion to extend credit for actions based on the extent to which the action is having continuing positive or beneficial effects.

Good Neighbor Policies or Agreements

A facility may engage in actions agreed to by a community as part of a community benefits agreement or good neighbor agreement. These actions would be voluntary and outside the scope of this proposed framework. Following are suggested community or environmental improvements for such an agreement:

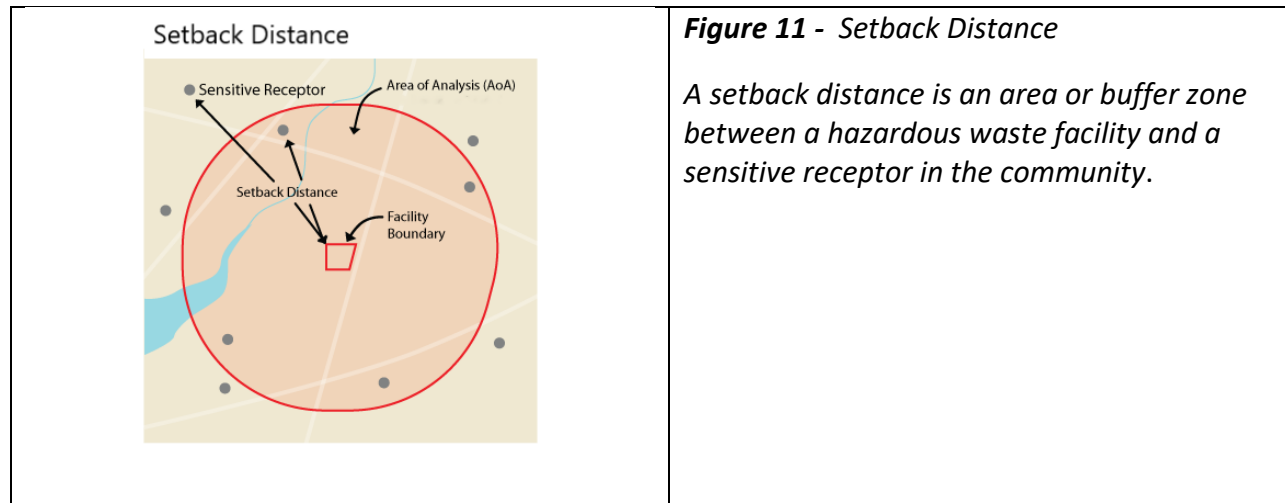
- Community infrastructure improvement: Improvements to community infrastructure near the facility, including energy efficiency, renewable energy improvements, reducing carbon footprint; the installation of electric vehicle charging stations.
- Water quality improvements: New measures or acceleration of existing measures to improve community drinking water sources.
- Habitat creation or preservation.
- Creation or enhancement of parks and green spaces or improvements in community access to green spaces.
- Wildfire prevention.
- Other community improvement measures: This category could include improved facility landscaping, cooling efforts – tree planting or shade structures, blight reduction and community benefit agreements.
- Other actions proposed by the facility: Measures to address community needs and approved by the Department to meet some or all the pathway requirements.

If the community or environmental improvements are related to the facility's hazardous waste activities or operations, the Department may determine which of the measures qualify as facility actions.

Setback Distances

Facilities applying for a permit for a new hazardous waste facility or a major permit modification of a hazardous waste facility must incorporate a setback distance of 0.25 to 0.5 mile depending on the type of facility and the maximum CalEnviroScreen score in the AoA around the facility. Facilities that may be subject to the setback distance would be required to notify the Department in advance of applying so the Department can determine the applicable setback distance. Under this proposal, the Department would not permit any new facility or expansion of an existing facility, if the proposed hazardous waste management activity violates the setback distance for a specified maximum CalEnviroScreen percentile. See Figure 11.

Setback distances may not apply to existing facilities that are subject to new permitting requirements, such as a new hazardous waste classification or a new regulation for an existing hazardous waste activity.



Element 4: Facility Action Workplan

Facilities designated on Pathways 1 through 3 would be required to include a Workplan with the permit application (or major permit modification application) submittal to address community impacts and vulnerabilities. The workplan would be required to propose actions that are scaled to the level of community vulnerability and the type and level of operations at the facility. The Department is proposing that Workplans would require different levels of action based on the pathway as included in Table 4 below.

TABLE 4 – Workplan Strategies

Proposed Requirements	Pathway 1	Pathway 2	Pathway 3
<p>Evaluate applicable actions for feasibility, cost-effectiveness, reliability, benefits and prioritize strategies in each of the three categories:</p> <ul style="list-style-type: none"> - Facility Activities and Operations Improvements - Monitoring or Evaluations of Community Issues - Public Engagement and Outreach 	✓	✓	Only Public Engagement and Outreach applies to Pathway 3
Implement community engagement or outreach strategy	✓	✓	✓
Address minimum setback distance if new permit or major modification	✓	✓	✓
Include Workplan with application for implementation of facility actions	✓	✓	✓

Public Engagement – Draft Facility Action Workplan

Public Engagement Prior to Application – Draft Workplan

For the Workplan, the outreach may include a notification and public meetings for the draft facility tiered pathway as discussed under public engagement on page 34. At least six (6) months prior to the submittal of a permit application (12 months before a permit expires), the Department would notify the public and the facility of the anticipated permit renewal application, the draft designation of a facility tiered pathway, and the draft Workplan.

This pre-application meeting allows for the community to provide input on the draft facility tiered pathway and offers an opportunity for the public or governmental agencies to review additional information that may alter the designation of the tiered pathway or scope of the Workplan. The facility would be required to invite public input on the Workplan before submitting the workplan with the permit application. See Figure 4 for the process flow chart for a permit renewal and Figure 10 for this outreach process and the permitting process combined.

For a new permit or major permit modification, a 24-month advance notification of a pending permit application may not be possible. The facility would have to notify the Department prior to the submittal of the permit application (or major permit modification application). The Department would then provide the draft facility tiered pathway so that the applicant could develop their Workplan specific for that pathway. The Department is proposing not to accept a permit application until the applicant holds a public meeting with the community on the following:

- Permit application presentation
- Draft facility tier pathway designation;
- Supplemental data; and
- Draft Workplan.

The Workplan presented during this meeting would include the details or descriptions of following key sections (see a more detailed list in Appendix 3):

- Facility background
 - Operations, wastes handled, and health and safety measures
- Cumulative impacts and community vulnerability information
 - Evaluation of data for community indicators in the AoA
- Evaluation of potential facility actions to address community vulnerability

- Evaluation of all applicable specific actions listed under the broad categories of facility actions included in the regulation
- Review of feasibility, cost-effectiveness, reliability, potential community benefit, and whether facility actions address potential facility impacts of vulnerability
- Determination of priority facility actions and decision criteria
 - Prioritization of facility actions and rationale for ranking
- Proposed Workplan details and timelines
 - Proposed actions with detailed discussion of each proposed action
 - Approach to fulfill pathway requirements and address community impacts and vulnerabilities in the AoA
- Reporting format and submittal schedule
 - Tracking and verification of facility actions, metrics for evaluation of benefits, submittal dates for delivering tracking results to the Department
 - Public meeting summary
- Milestones and deliverables
 - Expected community benefits

Public Engagement During Permit Review – Draft Workplan and Final Facility Tiered Pathway

The Department plans to invite and consider public input on final Facility Tiered Pathway designations and the draft Workplans and would do so as part of the public review process for each permit. Public input and recommendations would also be included in the facility's process for deciding on Workplan measures. At this point in the process, the facility would have considered public input received during the pre-application meeting for their workplan proposal and responded to comments. Furthermore, the Department would have the primary responsibility to determine the adequacy of the workplans during the technical review phase of the application.

After the facility submits the permit application (or major permit modification application), including the Workplan, the Department would develop a public participation plan for the number and type of public engagement opportunities that will be provided for input on the entire permit application during the permit review process. The public participation plan would be based on the type of permit, community impact and vulnerability factors, and the level of public interest in the permit application. This opportunity for public review and comment will be conducted during the technical review stage of the permit. The Department would make the public engagement and outreach plan for each facility available publicly through the Department's website and outreach to affected residents. Language access requirements will be considered. The Department's feedback on public input submitted during the technical review phase will be

provided in the draft permit decision documents. The Department expects to require the highest level of public engagement for facilities that are designated as Pathway 1 facilities and may conduct additional meetings with the community.

All timely public input submitted to the Department would be carefully considered in making decisions on Workplans and the overall merits of the permit application (or the major permit modification application).

Evaluation of Workplan During Permit Review

The Department would evaluate Workplans based on the evaluation criteria below:

- The workplan must demonstrate compliance with pathway requirements.
- The workplan must address an indicator or indicators of community vulnerability and cumulative impacts that have a high score in the AoA for the facility either (1) in CalEnviroScreen or (2) that has been submitted by the public as supplemental data on cumulative impacts or community vulnerability for the facility and that meets the criteria for supplemental information
- Development of the workplan will be subject to community outreach and engagement strategies and outcomes must be included in the plan.
- The facility must propose monitoring or performance evaluation actions over the course of the permit term to measure the effectiveness of the proposed workplan actions in improving conditions in the community. The facility may propose an alternative method of determining the degree of effectiveness for a facility action.
- The facility must submit information to substantiate that the proposed facility actions would reduce emissions or releases from sources related to facility activities in a year to be determined in the regulation or would provide an improvement to community health or the environment compared to the baseline year.
- Setback distances for new permits (or major permit modification applications, such as Class 3): If the application is for a new hazardous waste facility or a major permit modification of the facility as defined in regulation, the application must include the setback distance from sensitive receptors set for the facility. The Department is proposing that the definition of sensitive receptors include schools, hospitals, day care centers, elder care facilities, and residences.

Facility Actions as Enforceable Permit Conditions or Compliance Schedules

Workplans would be submitted as part of a permit application. When the Department issues a permit, the permit application is included by reference and therefore, the Workplans would be enforceable. Consequently, the owner or operator of a hazardous waste facility would have to comply with all terms and conditions identified in the permit, those found in the permit application, including specifics of the Workplans, along with all applicable statutes and regulations. The current requirements for a permit application include various plans that would be implemented throughout the life of the permit. The Workplans would be part of the permit and would be treated similar to the facility's other plans for closure, waste analysis, security, inspection, personnel training, contingency, and emergency preparedness.

If certain requirements in the Workplan are to be completed during the permit term but cannot be completed before the permit is issued, the Department could include a compliance schedule in the permit to allow for an extended compliance period. In general, compliance schedules in permits should not be used to allow a facility to be granted a permit without complying with standards for permitted hazardous waste facilities found in chapter 14 of title 22 of the California Code of Regulations. The Department has not determined how the proposed regulations would be included in title 22, so compliance schedules may be an option to authorize some of the facility actions where the facility action cannot be completed prior to permit issuance. Compliance schedules must be specific, enforceable, allow for public notice and comment, and allow the applicant additional time only where it is legitimately needed. The schedules should include any applicable design and construction specifications, interim milestones, and a date for completion.

Element 5: Decision to Revoke or Deny a Permit

Existing law provides the Department authority to deny, revoke or suspend a hazardous waste permit under several provisions of the Health and Safety Code.⁵² The Department would amend regulations to include additional factors to be considered in revoking or denying all or some activities in a permit. A decision to deny or revoke could be initiated by the Department in response to a permit application (or could be initiated as a permit modification application) under sections 66270.41 and 66270.43 of Title 22, California Code of Regulations. The Department is proposing a "weight of evidence" determination for permit decisions. The consideration of weight of evidence would include a finding that several factors, including the vulnerability of, and health risks to, nearby populations have been considered in deciding that a permit should be denied, suspended, or revoked.

⁵² Health and Safety Code sections 25186, 25186.05, 25186.2, 25186.2.5, 25189.3, and 25200.8.

The Department would issue either a statement of basis or a statement of findings to identify the specific factors that were considered in the permit decision and provide evidence to support those factors as a basis for denial or revocation. The additional factors would include the following criteria listed in Health and Safety Code section 25200.21:

- Number and types of past hazardous waste violations;
- The vulnerability of, and existing health risks to, nearby populations (Assessed using “available tools, local and regional health risk assessments, the region’s federal Clean Air Act attainment status and other indicators of community vulnerability, cumulative impact and potential risks to health and well-being” as listed in statute);
- Minimum setback distance;
- Evidence of financial responsibility;
- Provision of financial assurances;
- Training of personnel; and
- Completion of a health risk assessment.

The Department is proposing to amend the existing statement of basis found in section 66271.6 of Title 22, California Code of Regulations. Alternately, the Department could propose a new statement of findings would be in addition to the existing requirement for the statement of basis. This documentation would highlight evidence supporting the Department’s determination that community vulnerability indicators and health risks could not be avoided or substantially lessened through facility actions compared to a specific baseline, and state the specific economic, social, technological, or other considerations that are barriers to reducing the identified community vulnerability indicators and health risks.

The Department reserves the right to require a facility to reduce its size, scope, or footprint through the permit process to protect community and environmental health. The Department also reserves the right to request information from a facility to assist in determining the cumulative impacts and community vulnerability of a community around a facility.

Element 6: Violations Scoring Procedure Inspection Scoring Adjustment for Violations in Vulnerable Communities

Each year a VSP Facility score is determined for each facility by dividing the total inspections scores for all Class I⁵³ violations by the number of inspections occurring over a ten-year period to determine the annual VSP Facility Score. Depending on the VSP Facility Score, facilities are placed in a compliance tier as “acceptable,” “conditionally acceptable” or “unacceptable.” The criteria for each compliance tier and the enforcement procedures that accompany that tier are outlined in the VSP regulation. The proposed regulatory framework would amend California Code of Regulations, Title 22, section 66271.52.

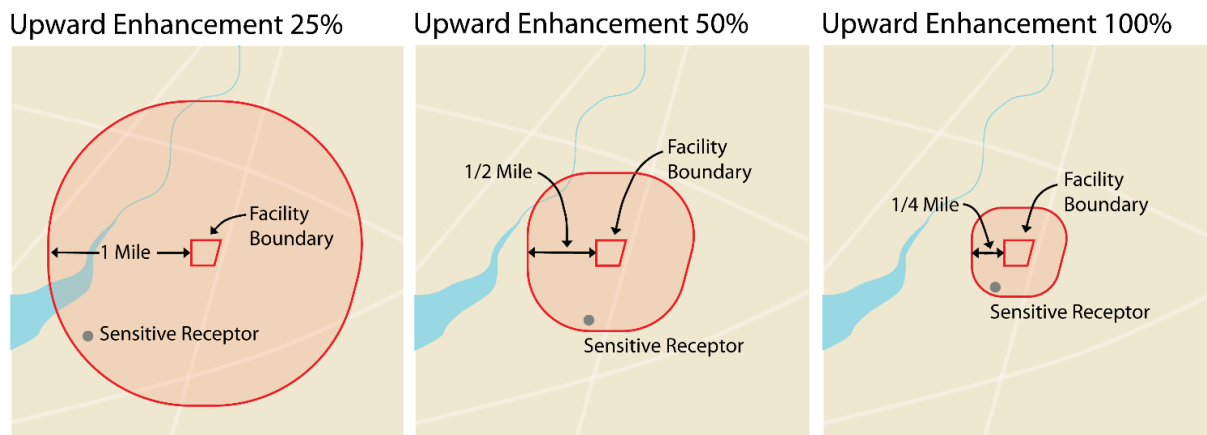
Vulnerable communities that are impacted by multiple pollution sources need additional safeguards against hazardous waste rules violations, especially when the facilities are in close proximity to sensitive receptors. The regulatory framework would establish a schedule for an upward adjustment for inspection scores under the violations scoring procedure (VSP) regulations as found in sections 66271.50 et seq. of Title 22, California Code of Regulations. The upward adjustments would apply to certain Class I violations based on occurrence at a facility in close proximity to a vulnerable community and to sensitive receptors including schools, hospitals, day care centers, elder care facilities, and residences. The Department would define in regulation the types of violations that would result in an inspection score adjustment. Class I violations include those actions that have the potential for moderate or major harm. Community vulnerability would be determined by a census tract within 1 mile of the facility with a maximum CalEnviroScreen score in the 75th percentile or higher. Following are the proposed inspection score adjustments for vulnerable communities. See Figure 12. For facilities subject to the enhanced scoring for vulnerable communities, the increase in inspection scores could lead to an increased VSP Facility Score for a facility depending on the frequency and severity of violations cited by an inspector.

- Increase VSP inspection score for certain Class I violation by 25% when the vulnerable community is located up to one mile from a facility and one or more sensitive receptors are located within that distance.

⁵³ Class I violations are defined in California Health and Safety Code section 25110.8.5 and in section 66260.10 of Title 22 of the California Code of Regulations.

- Increase VSP inspection score for certain Class I violation by 50% when the vulnerable community is located up to one-half mile from the facility and one or more sensitive receptors are located within that distance.
- Increase VSP inspection score for certain Class I violation by 100% when the vulnerable community is located up to one-quarter mile from the facility and a one or more sensitive receptors are located within that distance.

Figure 12 –VSP inspection scores would vary depending on distance to sensitive receptors.



Element 7: Updates to Data and Tools

The Department would utilize, in each analysis of a facility tiered pathway the most updated version of CalEnviroScreen, and other cumulative impact or community vulnerability data.

An important goal of the Department’s work on SB 673 is to incorporate advances in science and technology to ensure that the most current and accurate data and information are used to assess cumulative impacts and community vulnerability. In addition to incorporating CalEnviroScreen updates, the Department would evaluate the frequency of updates needed for information generated by the UC research team on additional indicators of community vulnerability and impacts. Also, on a periodic basis, the Department would coordinate with CalEPA and other environmental boards, departments and offices to conduct a review of data and tools to determine whether additional tools or datasets need to be incorporated into regulation.

Key Questions for Section IV

The Department is soliciting input and recommendations from interested members of the public on all aspects of the approach presented and on the following questions.

1. What additional factors should be considered by the Department in refining the AoA distances for different types of facilities?
2. When should supplemental tools and information be used to adjust the draft facility tiered pathway designation?
3. Although the indicators used in CalEnviroScreen and for the evaluation of facility characteristics serve as proxies for potential pollution burdens, what specific data should be required to establish facility actions? Can you provide examples, when these indicators are or are not sufficient?
4. What additional indicators should be considered when evaluating facility characteristics to reflect the complexity of facilities and their potential to contribute to impacts in a community?
5. For the evaluation of facility characteristics, what system should the Department use to score individual facility criteria? What are the pros and cons of (1) using numerical scores, (2) assigning “high,” “medium,” or “low,” or (3) using some other type of evaluation?
6. What additional facility actions should be included in the menu starting on page 38?
7. What are the characteristics of successful community advisory or technical advisory groups?
8. What metrics or frequency of reporting would be reasonable to judge progress on the Workplans for facility actions?
9. What is the best way to differentiate between the action required to address community vulnerability and impacts in the highest pathway or Tiered Pathway 1 and the action required for Tiered Pathway 2?
10. The setback distance is set in the regulatory framework as a range from 0.25 to 0.5 mile for new or modified facilities. Are there specific situations when the setback distance should be farther?
11. Which violations with the potential to cause moderate or major harm should be included in the enhanced inspection scoring requirements for vulnerable and impacted areas?
12. What additional information would be important to use when designating the draft tiered pathway, especially for new facilities?

V. Conclusion and Next Steps

This proposed regulatory framework implements the requirements in SB 673 to consider “the vulnerability of, and existing health risks to, nearby populations” when deciding whether to issue new or modified permits or permit renewals of hazardous waste facilities.⁵⁴ The framework also addresses the criteria for “minimum setback distances from sensitive receptors” in making a permitting decision.⁵⁵

The Department is embarking on the second round on public engagement on this revised 2021 Draft Regulatory Framework to address community vulnerability and impacts. In 2018 and 2019, the Department participated in extensive dialogue through public workshops and working groups on the 2018 Draft Regulatory Concepts, receiving many comment letters and e-mail communications. Now that the Department has released the 2021 Draft Regulatory Framework, the Department will continue working in partnership with the Sacramento State Center for Collaborative Policy to plan and facilitate public engagement. The Department will hold series of public workshops and a joint summit to share the revised 2021 Draft Regulatory Framework and invite feedback. The Department will discuss how stakeholder involvement has influenced the revised framework document so far and continue to invite feedback on key elements of the framework.

The Department will take measures to ensure public participation during the COVID-19 pandemic. Until further notice, the Department is not planning to host in-person public workshops. Instead, we will hold virtual workshops and meetings to maintain the health and safety of citizens. A virtual workshop or meeting involves using a web-based platform, such as Zoom. Special accommodations will be available for all workshops and meetings, consistent with California Government Code section 7296.2, including interpreter services, document translation and reasonable accommodations for persons with disabilities.

Feedback and comments are welcomed and invited on the 2021 Draft Regulatory Framework and can be sent to: permits_HWM@dtsc.ca.gov. All public comments regarding this regulatory proposal will reviewed and considered for the ongoing development of the draft formal regulatory text to be submitted to the Office of Administrative Law. The Department will continue to post all public comments received on the SB 673 webpage.

⁵⁴ California Health and Safety Code section 25200.21(b).

⁵⁵ California Health and Safety Code section 25200.21(c).

VI. Appendices

Appendix 1 – Glossary of Terms

The glossary in is intended to clarify the terms used in the 2021 Draft Regulatory Framework; it does not contain official definitions to be used for other purposes. Official definitions can be found in section 66260.10 of Title 22 of the California Code of Regulations. The Department has a Glossary of Environmental Terms webpage (available at <https://dtsc.ca.gov/glossary-of-environmental-terms/>) to provide commonly used terms throughout our webpages and documents. This glossary may be used for additional terms not included in the list below.

2021 Draft Regulatory Framework

The 2021 Draft Regulatory Framework is the Department’s proposed informal regulatory framework for the implementation of SB 673. This document is titled “SB 673 Cumulative Impacts and Community Vulnerability Draft Regulatory Framework.” The 2021 Draft Regulatory Framework outlines seven key elements as part of the informal regulatory proposal to implement hazardous waste permitting criteria for cumulative impacts and vulnerable communities.

Area of Analysis

The area of analysis or AoA means a set distance around a facility boundary. The area of analysis defines the study area that the Department would use to evaluate community cumulative impacts and community vulnerability for purposes of designating a pathway.

Assembly Bill 617

Assembly Bill 617 (AB 617, Garcia, Chapter 136, Statutes of 2017) means the law that was enacted to reduce exposure in communities most impacted by air pollution. AB 617 includes: community air monitoring; community emissions reduction programs; new requirements for accelerated retrofit of pollution controls; increased penalty fees; and greater transparency; and availability of air quality and emissions data.

Buffer Zone

“Buffer zone” means an area of land which surrounds a hazardous waste facility and on which certain land uses and activities are restricted to protect the public health and safety and the environment from existing or potential hazards caused by the migration of hazardous waste. Buffer zone is defined in section 25110.3 of the Health and & Safety Code.

Cumulative Impacts – CEQA

The legal definition for CEQA purposes is section 15355 of Title 14 of the California Code of Regulations:

“Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

Cumulative impacts – 2021 Regulatory Framework

Cumulative impacts refers to exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socio-economic factors, where applicable and to the extent data are available.

Department of Toxics Substances Control

The Department of Toxics Substances Control means part of CalEPA. The Department’s mission is to protect California's people and environment from harmful effects of toxic substances by restoring contaminated resources, enforcing hazardous waste laws, reducing hazardous waste generation, and encouraging the manufacture of chemically safer products.

Disadvantaged Community

Disadvantaged community means any community identified as the highest 25 percent of census tracts based on CalEnviroScreen scores. The CalEnviroScreen score indicate criteria for a community’s geographic, socioeconomic, public health, and environmental hazard conditions.

Environmental Justice

Environmental justice means the fair treatment of people of all races and incomes with respect to development, implementation and enforcement of environmental laws, regulations, and policies.

Facility – See hazardous waste facility

Facility Tiered Pathway

A facility tiered pathway means the proposed concept to require hazardous waste facilities to develop plans to in order to address cumulative impacts and community vulnerability.

The requirements for each pathway will vary and may include:

1. Improvements to Facility Activities and Operations;
2. Monitoring or other evaluation of community concerns; and
3. Public engagement and outreach strategies.

Facility Action Workplan or Workplan

The Workplan means the proposed concept to require hazardous waste facilities to develop a plan to implement the facility actions and engage the community.

Hazardous Waste

A hazardous waste means a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste is generated from many sources, ranging from industrial manufacturing process wastes to batteries and may come in many forms, including liquids, solids gases, and sludges.

Hazardous waste includes acutely hazardous waste, extremely hazardous waste, non-RCRA hazardous waste, RCRA hazardous waste, special waste and universal waste. Hazardous waste is defined in section 66260.10 of Title 22 of the California Code of Regulations and section 25117 of the Health and & Safety Code.

Hazardous Waste Facility

A hazardous waste facility means any facility that treats, transfers, stores, or disposes of hazardous wastes. The terms “facility,” “treat,” “store,” and “dispose” all have specific definitions found in sections 66260.10 of Title 22, California Code of Regulations and in the Health and Safety Code.

- Treatment is defined as any method, technique, or process designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.
- Transfer is defined as the loading, unloading, pumping or packaging of hazardous

waste. Transfer does not include loading, unloading, pumping or packaging of hazardous waste on the site where the hazardous waste was generated.

- Storage is defined as holding hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.
- Disposal is the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid or hazardous waste on or in the land or water. A disposal facility is any site where hazardous waste is intentionally placed and at which the waste will remain after closure. For example, a landfill is a disposal facility.

Hazardous Waste Facility – 2021 Draft Regulatory Proposal Applicability

A hazardous waste facility means any facility that is seeking a new permit, a renewal permit or major Class 3 permit modification from the Department and is subject to this proposed framework. For purposes of the 2021 Draft Regulatory Proposal, hazardous waste post-closure facilities are not included.

Hazardous Waste Facility Permitting

Hazardous waste facility permitting means the California Department of Toxic Substances Control's hazardous waste permitting program that ensures the safe management of hazardous wastes. Under this program, the Department establishes requirements regarding the transfer, treatment, storage, and disposal of hazardous wastes. A permit issued by the Department is a legally binding document that establishes the hazardous waste management activities a facility can conduct and the conditions under which it can conduct them.

Monitoring

Monitoring means taking measurements of pollutants in environmental media to which air, water, or soil environmental protection standard apply.

Permit Application or Application

Permit application or application means either the federal or standardized permit application for new permits, permit renewals, or major permit modifications.

- For full permits (RCRA or State), applicants are required to submit to the Department both a Part A (Form EPA 8700-23, Revised 1/90) and a Part B (the information required by the Department under sections 66270.14 through 66270.29).
- For standardized permits, applicants are required to submit a simplified application (DTSC Form 1093) and must comply with most of the operational requirements

applicable to a full-permit facility.

- For a major permit modification (Class 3), an applicant must submit a description of the exact change to be made to the permit, an explanation of why the modification is needed, all the applicable information of the Part A and Part B requested to be modified, and all other required information.

Pollution Burden Indicator

Pollution burden indicator means any indicator that represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution.

Population Characteristics Indicators

Population Characteristics means any indicator that represents biological traits, health status, or community characteristics that can result in increased vulnerability to pollution.

Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act means the federal law that creates the framework for the proper management of hazardous and non-hazardous solid waste. The law describes the waste management program mandated by Congress that gave EPA authority to develop the RCRA program. In California, the Department implements the Hazardous Waste Control Law in lieu of RCRA.

SB 673

Senate Bill No. 673 (SB 673, Lara, Chapter 611, Statutes of 2015) means the key law in the development of stronger regulatory and permit protections in communities near hazardous waste facilities. This law is codified in section 25200.21 of the Health and Safety Code.

Sensitive Receptor

Sensitive receptor means any hospital, school, day care center, elderly care facility, resident, and any such other locations.

Setback Distance

The setback distance for purposes of this framework means to a distance established to separate sensitive receptors, such as residents, from potential impacts of a hazardous waste facility. In general, the degree of potential impacts from hazardous waste facilities reduces with increasing distance.

Truck Trip

Truck trip means any trip made by a hazardous waste transporter to or from a hazardous waste facility. A trip may include any truck or rail traffic.

UC Research Indicator

The University of California research team indicator means any indicator developed by the UC Research team regarding data on racial composition, voter turnout, gas and oil wells, drinking wells, and sensitive land uses. The data compiled for sensitive land use was further broken down by healthcare and senior care facilities, parks, prisons, schools, and daycare centers. The data was by either percentages or counts and compiled for distances ranging from 0.1-mile to 7.0-mile radiuses.

Violations Scoring Procedure (VSP)

The Violations Scoring Procedure (VSP) means the regulations that became effective January 1, 2019 in sections section 66271.50 through 66271.57 of Title 22, California Code of Regulations. The VSP regulations establish a systematic process for evaluating and characterizing a hazardous waste facility's compliance with substantive hazardous waste management requirements. The Department is required to comprehensively evaluate each hazardous waste facility's compliance history as part of the permit decision-making process.

Workplan see Facility Action Workplan

Appendix 2 – Supplemental Information provided by the University of California Research Team (UC research team)

The Department Community Vulnerability Metrics Explanations and Justifications for Inclusion

The following is an excerpt from the document titled, Cumulative Impacts near California Hazardous Waste Operating Facilities: Data Analysis and Methods, prepared for the Department by Nicholas Depsky, Lara Cushing, and Rachel Morello-Frosch from the Sustainability and Health Equity Lab, University of California Berkeley dated February 3. Nicholas Depsky, Lara Cushing, and Rachel Morello-Frosch (members of the UC research team) were the principal contributors of this methodology document that explains terms and indicators used in the team’s analysis of communities near operating hazardous waste facilities.

The Department is making the UC research team supplemental data set available upon request. Any reference to analysis in this appendix refers to the UC research team supplemental data set.

CalEnviroScreen 3.0

This statewide tool provides information regarding environmental health indicators at the census-tract levels across the entire state. Commissioned and maintained by the California Environmental Protection Agency (CalEPA) and, more specifically, the Office of Environmental Health Hazard Assessment (OEHHA), this database serves as a tool for information transfer and environmental screening at the community level. The newest iteration of this product, version 3.0, incorporates a wide array of pollution, demographic and socioeconomic metrics to estimate cumulative environmental burdens facing communities. This product is widely used both by policymakers, practitioners, academics and community organizations in order to identify and implement policies that are sensitive and responsive to environmental inequities.^{1,2,3,4}

Cumulative burdens are reported in terms of raw scores (ranging from roughly 0 to 95.0), which are calculated via a multi-step algorithm that incorporates the multiple factors considered, as well as in percentile terms (ranging from 0 - 100), which provides a relative measure of burden experienced by a given community compared to the rest of the state. Both the raw scores and percentiles were provided in this analysis and may each be appropriate for use in assessing community vulnerability, depending on the context of the research being done or questions being asked. Using the raw scores will provide a true reflection of the actual cumulative burden experienced by each census tract, while using percentiles will only provide a relative measure.

Using a simplified example, suppose there are only ten tracts in the state, three of which have a score of 30.0, one of which has a raw score of 80.0, and the remaining six with scores of 95.0. Analyzing these raw scores will tell the observer that most of the tracts have a very high level of burden, with 7 out of 10 experiencing a score of 80 or higher. However, using the percentile

analysis, could distort this understanding to some extent. In our simple example above, given the high proportion of scores equal to 95.0, the tract with the score of 80.0 would be placed in the 40th percentile. In other words, the percentile value of 40% for the tract with a score of 80.0 would indicate that 60% of the state has a higher score than this tract, which may make it seem like the tract has a low level of burden, but in reality is only saying that its level of burden is lower *relative* to the remainder of the state's tracts. However, if the analysis at hand is specifically oriented towards identifying the *relative* level of burden experienced by each tract relative to the rest of the state, then using percentiles would be appropriate. It is up to the investigator to decide the most appropriate metric to utilize.

When studying the CalEnviroScreen 3.0 scores and percentile values to assess the level of environmental health burden in a given area of analysis (AoA) that encompasses multiple tracts, it is also prudent to consider whether the tract-averaged values are the best metric to consider, or simply the maximum score or percentile present within the AoA. Using a simple maximum will highlight the *most* burdened tract in the AoA, a value that is probabilistically expected to increase if the AoA grows in size and more tracts are included. This is valuable if the analysis at hand is aimed at identifying the presence of *any* particularly high-burdened tracts rather than assessing the average level of burden across the AoA. However, if multiple AoAs are being assessed and compared, using a simple maximum score/percentile metric could be inadequate to truly assess the relative differences in burdens experienced between different AoAs as a whole.

For example, it is possible that one AoA could have a low-level of burden overall, with most of its tracts having low CalEnviroScreen scores, but perhaps has one small tract with a high CalEnviroScreen score. Perhaps a neighboring AoA has a much higher level of burden overall, with all of its tracts with higher CalEnviroScreen scores. However, suppose that none of the tracts in the more-burdened AoA individually have a score equal to or higher than that of the single high-score tract in the first AoA. Using a simple maximum CalEnviroScreen score as the metric of analysis would identify the first AoA as being more highly burdened as compared to the second AoA, even though on average, the level of burden across the second AoA as a whole is much higher than in the first. Using instead an average CalEnviroScreen score or percentile metric would identify the second AoA as more burdened than the first, though it would mask the presence of the single high value in the first. Therefore, it is likely always appropriate to consider both the mean and maximum metrics when conducting analyses of multiple AoAs and is again up to the investigator to choose the priorities of their analysis in order to inform the way in which they interpret these metrics.

Racial Composition

Analysis of racial and ethnicity-based metrics is commonly done when assessing issues of community vulnerability and environmental equity/justice more broadly. Given the legacy of

segregation, inequality and marginalization of communities of color in the United States, they are often disproportionately exposed to hazards, environmental and otherwise. There is a very strong precedent for including such metrics in environmental health and community vulnerability studies, especially in the last three to four decades.^{5,6,7,8,9}

Sensitive Land Uses

There are data for five different types of sensitive land uses included in this analysis to assess the proximity of such land uses to the hazardous waste facilities studied.

Healthcare & Senior Care Facilities

Senior centers and medical facilities such as hospitals, health clinics, and nursing homes, are all considered sensitive land uses, as individuals within these types of facilities are the most vulnerable to health risks from exposure to poor air quality. Individuals older than 65 years of age are more susceptible to air pollution-related illnesses such as stroke, asthma, heart disease, lung cancer, and other respiratory diseases. Similarly, those individuals with pre-existing medical conditions, such as those people admitted in hospitals and other healthcare facilities, are more prone to developing air pollution-related illnesses.¹⁰

Schools and Daycare Centers

Children are sensitive to pollution given their small size, high metabolic rates, and developing lung structure and immune systems. In addition to health consequences, air pollution may cause some students to be absent from school, leading to other social cost (e.g., school dropout, parents missing work, and cut in attendance-based school funding). For children with respiratory issues, not going to school on a heavily polluted day is either a result of respiratory problems triggered by air pollution or a preventive measure. Since children spend more time indoors, their exposures are strongly correlated with pollution concentration in schools and home environments and during transportation.^{11,12}

Parks

Park are sensitive land uses in which populations uniquely susceptible to environmental hazard exposures, including children and older adults, are likely to spend time.¹³ While parks bring health benefits through facilitating outdoor physical activities, performing physical activities in polluted environments also has adverse health effects.¹⁴ Therefore, reducing potentially hazardous exposures to pollution in parks can ensure their net health benefits.

Prisons

Compared with the general population, prisoners tend to have higher rates of underlying health conditions, including higher odds of chronic (e.g., asthma, cardiovascular disease, arthritis, and

cancer)¹⁵ and infectious diseases (e.g., human immunodeficiency virus, hepatitis, and tuberculosis), and mental disorders.¹⁶ By virtue of being incarcerated, prisoners have little to no control over their living conditions and are also likely to have inadequate access to health care.¹⁷ Furthermore, prisoners are faced with worse living conditions such as overcrowding, which in turn leads to the prevalence of infectious diseases and mental disorders.¹⁸ These conditions can make this community uniquely susceptible to the adverse health effects of environmental hazard exposures.

Oil and Gas Wells

Oil and gas well development (OGD) involves the development of oil/gas sites and wells (production and injection for enhanced recovery), transport of materials to and from well sites, drilling, operation of equipment to recover oil/gas, and collection and disposal of chemicals and waste separated from the raw oil and gas.^{19,20} These activities are associated with diverse environmental hazards including air and water pollutants, noise, odors, excessive and inappropriate lighting, and undesired land use changes.^{21,39} As of 2017, California was one of the top five producers of crude oil in the country.²² Four of the ten largest US oil fields are in San Joaquin and Los Angeles Basins^{39,40} and unlike newer shale gas plays, most of California's natural gas is extracted from reservoirs also producing oil.^{39,40} Stimulation techniques, such as water and steam injection and hydraulic fracturing, are used at established sites rather than newly drilled wells. Oil recovered via water flooding and steam injection (conventional enhanced oil recovery methods) accounted for 76% of the state's oil production in 2009 while hydraulic fracturing accounted for 20% of California's oil production in the last decade.^{39,40} The application of unconventional techniques can enhance environmental burdens as additional toxic chemicals are used that can potentially be released into air, water, and soil.^{41,39,40,23,24,25}

Air pollutants associated with OGD include particulate matter (PM) with an aerodynamic diameter of < 2.5 micrometers (PM 2.5), diesel PM, nitrogen oxides (NOx), secondary ozone formation, mercury, and volatile organic compounds (VOCs) like benzene, toluene, ethylbenzene and xylene (BTEX) from truck traffic, drilling, hydraulic fracturing, production and flaring.^{26,27,28,29,30,31,32,33,34,42,35,36,37,43,38} Additionally, fugitive toxic air contaminants can escape at the wellhead^{39,57} that might impact health of communities living near points of release. Water contaminants associated with OGD include gas-phase hydrocarbons, chemicals mixed in drilling fluids, and naturally occurring salts, and metals and radioactive elements within shale that surface with wastewater along with recovered oil and gas and can contaminate potable water via leaks and spills or evaporation.^{41,40,39,40} Noise pollution is associated with well pad construction, truck traffic, drilling, pumps, flaring of gases, and other processes.^{45,41} Drilling and production activities occur both during the daytime and nighttime, and light pollution has been previously reported as a nuisance in communities undergoing OGD,^{39,40} suggesting OGD may impact the health of nearby

communities via increased psychosocial stress.

To date, most epidemiological studies on the impacts of OGD have focused on populations in Pennsylvania, Colorado, and Texas. For example, several recent studies have found associations between OGD and various adverse birth outcomes, including reductions in term birth weight^{42,43} and increased odds or incidence of low birth weight,^{44,61} preterm birth^{45,46,47} and small for gestational age birth^{61,62}. One study indicates that asthma exacerbation is also of concern in relation to OGD.⁴⁸

Drinking Water Wells

Communities served by water with elevated contaminant levels are disproportionately poor and Latino, raising environmental justice concerns.^{49,50} In 2012, California passed Assembly Bill (AB) 685,⁵¹ known as the Human Right to Water law, which recognizes the universal right to clean, safe, affordable water among all Californians including disadvantaged communities in rural and urban areas served by community water systems (with at least 15 service connections or serving at least 25 year-round residents), small water systems (i.e., <15 service connections) and private domestic wells. Several state and regional agencies tasked with implementing California's Human Right to Water law include the State Regional Water Boards, the Department of Water Resources, and CalEPA's Office of Environmental Health Hazard Assessment. A major barrier to achieving universal access to clean drinking water is a lack of regulatory oversight and data on untreated drinking water sources, including small water systems and private wells. Little water quality information about these water sources exists because they fall outside the purview of state and federal drinking water regulations. Nevertheless, it is estimated that as many as 1.5 – 2.5 million Californians^{52,53} rely on small water systems or private wells (referred to herein as "domestic wells"), which may face even more significant water quality challenges compared to regulated community water systems. Previous studies have sought to characterize the extent to which Californians rely on domestic wells and estimate their water quality and suggest that domestic well users are uniquely vulnerable to potential contamination from diverse agricultural, industrial and other sources with significant environmental justice concerns.^{54,55,56,57,58,59}

Voter Turnout

Studies in the economic, social science, and environmental health literature suggest key linkages between voter turnout, an indicator of community and local civic engagement capacity, and environmental quality indicators.^{60,61} Boyce et al. (1994, 1999) examined variations among US states using a composite index of environmental stress that incorporated 167 indicators of air and water pollution, toxic chemical releases, pesticide use, and other measures, as well as an index of state-level environmental policy related to these aspects of environmental quality.^{62,63} Utilizing a cross-sectional study design, the authors found that an index of power equality that combined

voter turnout, educational attainment, tax fairness, and access to Medicaid was associated with stronger environmental policies, which were, in turn, associated with less environmental stress.

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Appendix 3 – Proposed Workplan Requirements

Following is an outline of Workplan requirements under consideration by the Department.

Section I: Description of Current Conditions:

- A. Facility Background
 - a. Facility operations
 - b. Onsite and Offsite Impacts
- B. Cumulative Indicators:
 - a. CalEnviroScreen and Supplemental data
 - b. Preliminary Assessment of Pollution Burden
 - c. Preliminary Assessment of Community Vulnerability (demographic data)
 - d. Health Risk Assessment Findings, if applicable
 - e. CEQA Initial Study, Negative Declaration or Environmental Impact Report findings

Section II Facility Actions: Actions that reduce or eliminate potential negative environmental impacts related to particular HW facility operations, including environmental limiting factors that constrain development.

- A. Evaluation of Facility Actions
- B. Prioritization of Facility Actions
 - a. Public health and safety;
 - b. Environmental soundness;
 - c. Technical feasibility;
 - d. Community acceptability; and
 - e. Administrative capability.
- C. Decision Factors
 - a. Long-term reliability and effectiveness;
 - b. Reduction of Pollution Burdens or Improvements of Public Health (indicators)
 - c. Short-term effectiveness;
 - d. Feasibility; and
 - e. Cost-effectiveness of measures
- D. Selection of Facility Actions

Section III: Facility Action Implementation (for each action)

- A. Purpose and Objectives for each
- B. Major Milestones

Section IV: Work Plan (for each action)

- A. Introduction
- B. Purpose and Objectives
- C. Project Management (schedule, budget, personnel, etc.)
- D. Data Collection and Quality Assurance (existing data and future monitoring)
- E. Data Management and Reporting
- F. Public Involvement Plan

Section V: Reporting Format and Submittal Schedule for All Facility Actions

- A. Monitoring indicators: Documentation of the work plan and demonstration whether facility actions are suitable and the plan for implementation is effective.
- B. Monitoring and Reporting Frequency: Timeframes for appropriately monitoring the effectiveness of each specific action.
- C. Summary of all Facility Action Meetings: Identify the following:
 - a. Time and Place
 - b. Communication Methods Used
 - c. Meeting Materials (meeting announcement, agenda, handouts, etc.)
 - d. Other Outreach Efforts, if applicable

Section VI: Schedule for All Milestones and Deliverables

Appendix 4 – Case Studies

The Department has developed the following case studies as examples to illustrate the decision-making process for placing facilities into the three different pathways. These examples include a description of the facility and its location, the CalEnviroScreen percentile for the area of analysis (AoA) indicating possible community vulnerabilities and additional information that would be reviewed in making a facility tiered pathway designation. We have included a discussion of possible supplemental information and the rationale for the facility designation.

Under this proposed framework, the Department would review hazardous waste facility characteristics, as well as the cumulative impacts and community vulnerability tools and data for nearby communities to place facilities on one of three pathways, if the facility is located in or near a vulnerable community. Facility actions will be based both on evaluations of the community and facility characteristics. The designated pathways in Table 5 are based mainly on CalEnviroScreen and supplemental information that may be readily available. Final pathway designations will into account more specific evaluations of the surrounding communities and the facilities. Below is a summary of the case studies including key facility and community indicators and the potential resulting draft pathway decision. A longer description of each type of facility and the factors included in the pathway decision are included below.

TABLE 5 - Summary of Case Studies (Same as Table 3)

Scenario	Case Study 1	Case Study 2	Case Study 3
	Offsite Large Treatment	Used Oil Transfer	Onsite Public Utility
CalEnviroScreen Percentile (Max for AoA)	95 = High AoA is 3 miles	95= High AoA is 1 mile	60= Moderate AoA is 1 mile
Facility Characteristics	-RCRA treatment -Large offsite -Residents at ½ mile -High truck traffic -Other major environmental permits -VSP: Conditionally acceptable	-Standardized permit -Offsite storage -Residents at 1 mile -Medium truck traffic -No Corrective action -VSP: Acceptable	-Standardized Permit -Onsite Storage -Residents greater than 1 mile away -Low truck traffic -No Corrective action -VSP: Acceptable
FACILITY SCORE	High	Medium	Low
Supplemental Data	Low voter turnout High sensitive uses	Low voter turnout High gas & oil wells High drinking wells	No additional indicators
Local government or community information	Elevates concern	Elevates concern	Does not indicate additional concerns or elevated indicators
DRAFT FACILITY PATHWAY	1	2	3

Case Study 1 – Offsite Large Treatment Facility

USA Treatment Recycling Company is located in the County of Los Angeles. It is bordered on the north by an industrial park, on the east by a major freeway, and on the west by a commercial strip mall. The Facility occupies approximately 4 acres in an area zoned for heavy industrial uses. The closest residences are located approximately less than one-half mile of the facility.

The facility is a treatment and storage facility. It accepts hazardous waste with high fuel value and blends them into an alternative fuel for an out of state cement kiln. There are ten 20,000-gallon tanks used for both storage and treatment. The hazardous waste facilities permit authorizes storage in a separate building that is allowed to hold up to 200 drums (11,000 gallons) and up to ten larger freight shipping containers called intermodal bulk containers that range from 250 gallons to 325 gallons each. The maximum total storage capacity is 217,000 gallons of hazardous waste.

The hazardous waste originates from industries such as pharmaceutical, refining, petrochemical, and industrial coatings manufacturers are combined to produce in excess of 1 million gallons yearly of alternate fuels.

Maximum CalEnviroScreen Percentile in the Area of Analysis = 95 (High)

Area of Analysis = 2.0 to 3.0 miles for large treatment facilities. Based on the type of facility, the Department will use 3.0 miles as a conservative estimate for this example.

Facility Score = High

Facility Activity = Large Treatment Facility

Permit = RCRA

Proximity to populated census blocks = less than ½ mile

Violation Scoring Procedure (VSP) Compliance Tier = Conditionally Acceptable based on the most current Facility VSP Score. This is based on the compliance history and the Facility VSP Score for the previous calendar year.

Truck Trips = Number of truck trips are greater than 100 round trips per day. Based on the average number of hazardous waste manifests per day, this is considered high.

Corrective Action = The current status of corrective action indicates that both the current human exposures have been documented as being under control. The migration of

contaminated groundwater beneath the facility is also under control based on similar criteria used for these two environmental indicators established in accordance the Government Performance Results Act (GPRA) of 1993. However, the remedy for the contamination has not been selected or implemented.

Supplemental Data = Supports a Pathway 1 designation due to additional vulnerability indicators such as the following factors:

The percentage of non-white population is higher than the state average, the voter turnout is below state average, there is a high number of sensitive land uses identified near the facility. Other indicators are non-existent or minimal for the number of water wells, and oil and gas wells.

Local Government or Community Information

The community within the area of analysis (3 miles) has been selected as a community for AB 617 implementation. Specifically, the census tracts included in the area of analysis meets all three of the following AB 617 criteria:

- CalEnviroScreen score is in the top 25% percentile statewide;
- The air toxics cancer risk is in the top 25% percentile as assessed under South Coast Air Quality Management District's Multiple Air Toxics Exposure Study V (MATES V). This detailed scientific study determines the cumulative impacts of air toxics in the region; and
- Average percentage of industrial land use within 1000 feet from the school boundaries was higher than 20%, based on 2016 Regional Transportation Plan data from the Southern California Association of Governments.

Potential Draft Facility Designation: Pathway 1

Rationale: This facility is a complex treatment facility with high truck traffic and large capacity. The CalEnviroScreen score indicates the surrounding community is highly impacted and residents are living in close proximity to the facility. Supplemental data and local government data confirm the high pollution burden in the community. Given the high facility score and high CalEnviroScreen score, and the additional information, the facility is placed on Pathway 1.

Case Study 2 – Used Oil Transfer Facility

Consolidated Oil Shipment Company is located in Fresno County. It is bordered by a major state route on the side of the property, on the north by a commercial zone, and surrounded by farmland. The facility occupies approximately 2 acres and the local planning agency has been granted a conditional use permit to operate in an area zoned for light industrial uses.

This standardized permit facility collects, and stores used oil, waste antifreeze, non-RCRA oily wastewater, and non-RCRA oily soil. The liquid waste is stored in four tanks, each dedicated to a different waste. Tank 1 has the capacity to hold 20,000 gallons of liquid waste and Tank 2 holds 10,000 gallons. Both Tank 1 and 2 are permitted by the Department to store used oil. Tank 3 is 5,000 gallons and will store non-RCRA oily wastewater. Tank 4 is 5,000 gallons and holds waste anti-freeze. There is a fenced outdoor cage that will hold up to 20 metal drums of solid waste that includes oily soils and oil filters. Liquid wastes are received in smaller trucks and consolidated into the appropriate tank until the wastes are removed and transferred to an authorized facility. Solid waste cannot be opened, mixed, or combined into bigger bulk transportation containers. All wastes are stored onsite for a maximum time of one year and the maximum total storage capacity of the facility is 41,100 gallons.

The hazardous waste originates from car repair shops, service stations, quick lube shops, government motor pools, grocery stores, metal working industries, boat marinas, farmers, and household hazardous waste collection centers.

Maximum CalEnviroScreen Percentile in the Area of Analysis = 95 (High)

Area of Analysis = 0.5 to 1.0 miles for a standardized permit facility. Based on the type of facility, we will use 1.0 mile as a conservative estimate for this example.

Facility Score = Medium

Facility activity = offsite storage

Permit = Standardized Series C Permit

Proximity to populated Census blocks = less than ½ mile

Violation Scoring Procedure (VSP) Compliance Tier = acceptable. This is based on the compliance history and the Facility VSP Score of less than 10 for the previous calendar year.

Truck Trips = Truck trips are less than 10 trucks per day of hazardous waste

transporters. Based on the average number of hazardous waste manifests per day, this is considered low.

Corrective Action = There is no evidence of releases or subsurface contamination at this site. There is no need for corrective action to remediate the facility site.

Supplemental Data = Supports a Pathway 2 designation due a lack of additional vulnerability indicators such as the following factors:

Although the percentage of non-white population is higher than the state average, and the voter turnout is below the state average, there are no other specific indicators that support raising the pathway from Pathway 2 to Pathway 1. Within the area of analysis, there is an average number of drinking wells, and number of gas and oil wells. Due to the low population density near the facility, there is a lower than average number of sensitive land uses identified near the facility.

Local Government or Community Information

Local air monitoring data indicate sporadic elevated level of fine particulate matter in the area of analysis. Sources for the particulate matter have been identified as mobile sources due to vehicle traffic. For drinking water, there have been a few exceedances recorded for maximum metal contaminant levels in water during the last 3 years. Consequently, the water purveyor has established more frequent monitoring intervals.

Potential Draft Facility Designation: Pathway 2

Rationale: In this case, the facility impacts are medium based on facility activities, truck traffic levels and proximity to the residents. However, the community impacts and vulnerability are high around the facility based on CalEnviroScreen scores. Supplemental data indicate that there may be additional vulnerabilities in the community beyond those captured in CalEnviroScreen. Because the surrounding community vulnerability is high and the facility operations include activities that impact the surrounding community, this facility would be placed on Pathway 2.

Case Study 3 – Onsite Public Utility Company

The Energy Power Company is located in San Diego County. The storage facility located within a larger complex that acts as a maintenance yard for activities relating to the distribution of electricity. The maintenance yard is located in an industrial zoned area bordered by three major freeways on approximately 15 acres of land. The storage facility occupies a parcel that is less than one acre near the center of the maintenance yard.

The hazardous waste storage facility only receives waste from its own maintenance operations on power poles and underground electric utility vaults, and substations. There are three hazardous waste units for the storage of waste containing polychlorinated biphenyls (PCBs). The permitted storage units include one tank for the storage of liquid PCB waste, and two PCB storage buildings. Hazardous waste liquids may be stored in the tank or in drums. The liquids are very stable mixtures that are relatively non-volatile oils and may contain varying concentrations of PCB. Solids are stored in only in drums in the PCB storage buildings. Solids may also include contaminated equipment that are too large to fit into drums and are stored in bins or on pallets. All hazardous waste is shipped offsite to an authorized facility for treatment and disposal facility. No federally regulated hazardous waste are stored in the permitted storage units.

The hazardous waste originates from the maintenance of electrical equipment. PCBs were used widely in electrical equipment like capacitors and transformers. The PCB-contaminated waste generated includes transformer insulating oil and any resulting contaminated sludge, wastewater, absorbents, personal protective equipment, rags, and contaminated equipment.

Maximum CalEnviroScreen Percentile in the Area of Analysis = 60 (Moderate)

Area of Analysis = 0.5 to 1.0 mile for a small standardized permit facility. Based on the type of facility, we will use 1.0 miles as a conservative estimate for this example.

Facility Score = Low

Facility activity = onsite storage

Permit = Standardized Series C Permit

Proximity to populated census blocks = greater than 1 mile

Violation Scoring Procedure (VSP) Compliance Tier = acceptable. This is based on the compliance history and the Facility VSP Score of 0 for the previous calendar year.

Truck Trips = Number of truck trips are less than 2 trucks per day. Based on the average number of hazardous waste manifests per day, this is considered very low.

Corrective Action = There is no contamination or releases documented, so no corrective action is needed.

Supplemental Data = Supports a Pathway 3 designation due a lack of additional vulnerability indicators such as the following factors:

There are no specific indicators that support raising the pathway. The percentage of non-white population is equal to the state average, and the voter turnout is considered higher than average. Within the area of analysis, there is a low number of drinking wells, and no gas and oil wells. The facility is in a large light industrial area, so the number of sensitive land uses identified near the facility is very low.

Local Government or Community Information

There was no additional information provided by the community or any local government agencies.

Potential Draft Facility Designation: Pathway 3

Rationale: This facility is not conducting treatment or accepting waste from other generators. The facility score is low and there is no additional supplemental data or community data to elevate concerns. However, the facility is located in a community with moderate vulnerability based on their CalEnviroScreen percentile. This facility would be placed on Pathway 3 and would be required to conduct community outreach to better inform the community about hazardous waste operations.

Appendix 5 – Summary of Comments

Following is a “Feedback Matrix” that includes a general overview of feedback received during the public outreach phase for the “SB 673 Cumulative Impacts and Community Vulnerability Draft Regulatory Framework Concepts” document dated October 2018. The matrix has been edited to include feedback themes received from October 2018 through April 2019 in written comments as well as feedback received during public workshops and working groups.

NOTE: The comments are organized by elements that have since been renamed in this 2021 Draft Regulatory Framework. Furthermore, the Department has revised some of the terminology used in these comments. The following is a partial listing of the revised terminology:

- “mitigation measure” and “monitoring measure”
 - are now both called “facility actions.”
- “Facility Action Pathway”
 - is now called the facility tiered pathway or tiered pathway
- “buffer zone”
 - is now called the “area of analysis” or “AoA.”

Comments are summarized by element in the following tables

- Element 1: Initial Selection of Facility Action Pathways
- Element 2. Public Review and Draft List of Facility Action Pathways
- Element 3. Permit Application Review
- Element 4. Community Engagement and Outreach
- Element 5. Mitigation and Monitoring
- Element 6. Use of CalEnviroScreen and other Cumulative Impact Tools
- Element 7. Coordination with Other Agencies
- 8. Other Issues

Element 1: Initial Selection of Facility Action Pathways

ELEMENT 1	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
<p>1 Big Picture</p>	<p>The state must tackle the historic burdens of hazardous waste facilities on low-income communities and communities of color and tackle the historic burdens of hazardous waste facilities on low-income communities of color.</p> <p>We should be looking at this process as a way to level the playing field for areas that simply cannot sustain current levels of pollution due to population vulnerability or multiple sources of local pollution.</p> <p>The Department should clearly define conditions for permit denial in cases where community burdens and vulnerabilities are too high.</p> <p>These impacts are problems now. Address the immediacy of this issue.</p> <p>Transparency and public input in all stages of DTSC’s process to make permitting decisions is critical, including decisions on facility responses to community impacts and vulnerabilities.</p>	<p>The Framework appears to go beyond the Department authority to regulate hazardous waste facilities.</p> <p>The Department should focus on environmental exposures and mitigations over which it has direct authority, recognizing that other outside impacts, including issues related to land use, are overseen and mitigated through other agencies and jurisdictions.</p> <p>The framework could, if not well designed, inadvertently cause permitted hazardous waste facilities to close, whether due to excessive administrative burden or through permit denials. This would run counter to state goals to treat and manage hazardous materials.</p>	<p>Local agencies are pursuing their own efforts to address disproportionate impacts and integrate environmental justice (EJ) into their programs.</p> <p>Local examples include local air district AB 617 steering committees, community monitoring and emission reduction plans; CUPA work to enhance enforcement authority against bad actors and increase coordination on EJ issues; local health department shift to community perspective on regulations, policy and outreach; LA County Green Zones program and development of Environmental Justice Screening Map, among others.</p> <p>Cumulative impacts require a higher level of vigilance.</p>
<p>1 Process for facility review</p>	<p>Reiterate the importance of community inclusion for all stages of the cumulative impacts’ analysis, including during the initial</p>	<p>There should be no initial recommendation of an action pathway prior to the permitting</p>	<p>Early interagency collaboration and coordination is helpful.</p>

ELEMENT 1	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
	<p>classification of facilities. Current 2018 Draft Regulatory Framework Concepts propose an initial classification based on preliminary data, with public comment and additional data analysis conducted only after the initial classification, during the permit application phase.</p> <p>This process appears to be unnecessarily cumbersome for community residents and unlikely to lead to re-classification because there will be significant momentum already leading in one direction.</p> <p>Effective community education and language access are fundamental in the earliest stages of classification and must be available throughout the process and especially during the initial categorization, opportunities for re-classification, community outreach, and mitigation development.</p> <p>Documents notifying the public throughout the process must be available in the major languages spoken in a community and must be in plain language and readily comprehensible.</p>	<p>process. It adds time to an already lengthy process.</p> <p>Process is speculative, not based in science, and can be highly political</p> <p>The science is uncertain</p> <p>The Department must engage stakeholders and experts to validate the framework, separate from policy discussions around how the framework is implemented.</p> <p>The association between facility siting and community conditions and public health outcomes—such as cardiovascular disease, unemployment, and linguistic isolation – is not well understood. Yet the Department seeks to require a facility to “improve conditions” and provide investments in order to reduce community vulnerability</p> <p>It will be difficult to change a facility's rating from Pathway 1 to Pathway 3 because a designation in Pathway 1 will preliminarily inspire fear; risks "poisoning the well" of public opinion</p> <p>It's an internal screening and not a</p>	<p>All policies and regulations have to be viewed from perspective of “Is this protective of health?”</p> <p>Will you analyze any additional time it will take to go through the permitting process, and the added cost, for the measures proposed?</p> <p>How will you ensure consistency across the state in terms of what is required in the permits?</p>

ELEMENT 1	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
		<p>public process.</p> <p>The Risk Assessment from Track 1 informs where a facility should be tiered.</p>	
<p>1 Cumulative Impacts</p>	<p>The Department is required under SB 673 to establish standards and procedures for permitting decisions, including standards and procedures for permit revocation and denial. Cumulative impact assessments should be included in the standards and procedures for permit revocation and denial under the new proposed framework.</p> <p>Health protective zones are an important concept to ensure the compatibility of land-uses pre-emptively <i>and</i> over time as conditions and settings change.</p>	<p>Businesses should not be swept into a higher tier simply due to community considerations if it makes no contribution to the environmental concerns in the community.</p> <p>The Department has already addressed community considerations in the existing (Track 1) regulation that is burdensome and demanding. No additional regulations are needed.</p> <p>Permit actions should take into consideration each facility's contribution to the problem.</p> <p>Science is uncertain.</p> <p>The framework makes it difficult to understand what problem the Department seeks to solve, how the permitting process would be made consistent for applicants, and what measures or mitigations would be justifiable as an outcome of the</p>	<p>Many local agency programs are now shifting to understand community vulnerability and address cumulative impacts, as reflected in the comments above (under "Big Picture").</p>

ELEMENT 1	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
		<p>process. The Department must make a clear distinction among the different, although interrelated, domains it seeks to address:</p> <p>Cumulative impacts from a permitted facility,</p> <p>Cumulative risk or cumulative pollution burden within the community from all sources, and</p> <p>Community vulnerability, which is thought to amplify the effects of environmental exposures.</p>	
<p>1 Ideas for methodology</p>	<p>Because hazardous waste facilities must obtain permit renewals on a regular basis, The Department is in the position of continually assessing whether the operation of a hazardous waste facility is compatible as land uses change and people may become more susceptible and vulnerable to its impacts due to proximity or other factors.</p> <p>Incorporate community perspectives and complaint history into the permit decision making process.</p>	<p>Start all facilities at tier 3 and then provide public notice: Gives facilities the benefit of the doubt</p> <p>There is precedent for this with the water board</p> <p>Not staying within the conditions of your permit requirement elevate you to a different tier. Baseline based on that facility’s impacts and exceedances elevate it to a higher tier.</p> <p>Is science-based</p>	<p>How will you determine which pathway each facility will be assigned?</p> <p>How will the extent of mitigation and monitoring measures be determined?</p>

ELEMENT 1	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
		<p>Before tiering facilities, determine facility's pollution burden.</p> <p>Transparency in methodology and how this regulation will function is needed by the business community as well as the EJ community.</p>	
<p>1 Pathway designations</p>	<p>The Department should expand these categories to be more protective of human health and more reflective of other statewide classifications based on CalEnviroScreen. Rank a facility in Tier 1 if it has an impact on a community ranked in the 75th percentile or higher on CalEnviroScreen because that is the state definition of disadvantaged community. The other tiered ranking should be adjusted to reflect this modification, by using percentiles 50-75th for Tier 2, and 50th and below for Tier 3.</p> <p>Additional information should be provided about the facility characteristics that lead to classification, beyond the size of a facility and the types of waste it is processing. Further clarification and clear criteria should be provided for public review.</p>	<p>Tiering should be based on review of a facility's potential impacts. This should include consideration of baseline conditions and actions and mitigations overseen by other responsible agencies beyond the Department, such as federal Risk Management Plans approved by the federal EPA and compliance with local air district rules.</p> <p>Supplemental information about community conditions should follow the facility review. It is critical that community stakeholders have a clear understanding of the actual risk from a facility before attempting to judge which tier may be appropriate. As part of this, the Department has an obligation to inform the public of additional programs in place at other agencies so that the public may be aware of the full extent of</p>	

ELEMENT 1	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
		<p>environmental, public health, and safety measures in place to protect communities.</p>	
<p>1 Addressing expired permits</p>	<p>Review why facilities with expired permits remain in operation. Identify ways to mitigate this issue.</p>	<p>The Department needs to change the way permits are described on Envirostor because it makes facilities look like their permits are expired when they are in compliance after the expiration date when the Department procedures are followed.</p>	
<p>1 Permit denial</p>	<p>Explicitly incorporate permit denial as a pathway in this framework if community vulnerability is too high.</p>	<p>The Department needs to be able to shut down bad facilities faster. They are in the minority and make a bad name for all hazardous waste facilities.</p>	<p>Establish how denial of a permit will be considered in the regulation, since it was considered an option in the legislation.</p>
<p>1 Proximity to sensitive receptors</p>	<p>Proximity to sensitive receptors should be factored in to bump up facility pathways.</p> <p>Include residential communities as sensitive receptors along with daycares, schools and medical facilities.</p> <p>A facility should not be downgraded based on lack of sensitive uses in proximity to the facility because sensitive groups such as children, elderly, and the disabled will be located within residential communities even</p>		<p>1. Consider weighting setback distances based on the types of sensitive receptors and their proximity to a facility.</p> <p>2. Setback distances are normally determined for new projects by planning departments. How will the Department coordinate with them?</p>

ELEMENT 1	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
	<p>if schools and care facilities are not present.</p>		
<p>1 Area of Analysis and Setback Distance</p>	<p>When assessing impacts to a community (area of analysis) look beyond the half-mile buffer area.</p> <p>We are concerned that communities like Buttonwillow, Kettleman City and Westmorland, which are affected by these facilities, could be excluded.</p> <p>Expand beyond the half-mile setback.</p> <p>Consider the need to focus on setback distances when there has not been any new permitted RCRA facilities cited in California in decades.</p>	<p>A toxicologist needs to be part of the establishment of buffer zones and/or review of UCD's methodology.</p> <p>This issue will need input from local governments about land use.</p> <p>Why is the Department only asking for scientific support for using cumulative impacts and community vulnerability assessments for a larger area than the suggested half-mile buffer? It appears the Department is looking for a way to deny permits and shut down facilities.</p>	<p>Consider variable setback distances around facilities based on chemical and plume modeling, types and proximity of sensitive receptors to facilities.</p> <p>Base area of analysis on potential impacts that are specific to facilities activities, or potential from an uncontrolled release that will impact a broader area.</p> <p>Model the specifics and set the area with a technically defensible rationale. Make it a formula or strategy for a facility-specific area, not a one-size-fits-all number.</p>
<p>1 Definition of Community Vulnerability</p>	<p>Community vulnerability assessments should include type of facility permit, analysis of clusters of facilities nearby and use of underlying CalEnviroScreen data.</p>	<p>The Department should not apply a separate standard of community criteria to a permit completely independent of the permit record.</p> <p>Community vulnerability is already considered in the increased demands focused on gathering information about the community, communications with the community, and the health risk profile.</p>	

ELEMENT 1	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
<p>1 Case Studies</p>	<p>Develop case studies to explain how framework applies to:</p> <ul style="list-style-type: none"> - Facilities with current permit - Facilities with permit soon to be expired - Facilities with continued permits that have already expired 	<p>Identify case studies to explain how framework applies to:</p> <ul style="list-style-type: none"> - Small facilities with minimal output - Large facilities - Facilities in communities with high CalEnviroScreen scores but little direct pollution from the hazardous waste facility. - A facility that has a recent permit renewal, that is not due for a renewal in 7-8 years. <p>A facility immediately placed into a tier 1 action pathway from a CalEnviroScreen score may be driven by pollution factors that are not linked to the facility.</p>	<p>Look at case studies to understand how facilities may be affected by these concepts.</p>
<p>1 Other vulnerabilities</p>	<p>Consider other exposure pathways (i.e.: gardens because of increased risk of ingesting contaminants)</p>		

Element 2. Public Review and Draft List of Facility Action Pathways

ELEMENT 2	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
<p>2 Suggested Supplemental Data</p>	<p>Include AB 617 CARB air toxics monitoring data (also should be incorporated into CalEnviroScreen).</p>	<p>OSHA Process Safety Management Plans</p> <p>California Accidental Release Prevention Requirements</p> <p>Spill Contingency and Response Plans required by OES</p> <p>Stormwater requirements under SWRCB</p> <p>Air permits and chemical inventory reports required by CARB, air districts and EPA</p> <p>Incorporate more community impact information into Part B of the Permit Application</p>	<p>L.A. County DRP is developing an Environmental Justice Screening Map (EJSM), a data and mapping tool that is similar to CalEnviroScreen with additional data layers including local data as well as an indicator on cancer risks.</p> <p>CalEPA has a tool called Regulated Sites Portal on their website. It has information about facilities and the surrounding areas, from many sources of data. It is geospatial and easy to search.</p> <p>Shared databases (need to develop interfaces between platforms).</p> <p>Include information on chronic conditions such as heart disease and cancer.</p> <p>Human health risk assessments have certain thresholds that show where cancer risk is higher.</p>

Element 3. Permit Application Review (at time of application for an operating permit for a hazardous waste facility)

ELEMENT 3	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
3 See Element 1	Several issues under Element 1 apply here, as well.	Several issues under Element 1 apply here, as well What are the additional demands on staff/facilities for this extra review?	

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Element 4. Community Engagement and Outreach

ELEMENT 4	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
<p>4 Considerations of Community Perspective</p>	<p>Provide specific site examples of how the regs apply; these examples will inform community needs and shape the process.</p>	<p>Facilities don't have the trust of communities.</p>	<p>Agencies working on building trust of communities.</p> <p>Local models from local planning departments, health departments and air districts</p> <p>Asking the community to provide additional data or information can put a burden on those impacted communities.</p> <p>The Department has to be clear about what the community can expect to accomplish through this process and manage expectations.</p> <p>Communities want to see their input make a difference locally - need to engage early.</p>
<p>4 Community Representation</p>	<p>Community engagement plans and mitigation measures should be developed by the Department and the community, not the facility. The facility should have the opportunity to comment and make proposals as would the public and significant</p>	<p>Need clarity about who is considered to be the legitimate representative of the community for purposes of making decisions to represent community interests in Community Engagement Plans and other elements</p>	<p>How will the community advisory groups be chosen, and will the business community be allowed to be on the advisory groups?</p> <p>Communities want to be seen and heard about the specific impacts they</p>

ELEMENT 4	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
	<p>participants in the process.</p> <p>The Department should propose and publish for comment draft criteria that it will use for review and approval of community engagement plans and invite comment on every specific community plan.</p>	<p>It's unclear who could qualify as a representative authorized to negotiate on behalf of the community</p> <p>What is the role of local government?</p> <p>The Department does not explain how it would choose these representatives.</p> <p>Who is the community, how does this relate to setback distances?</p>	<p>experience.</p>
<p>4 Relationship Building</p>	<p>Community engagement plans should be developed and implemented in coordination with local community groups, community-based organizations, faith communities, social service providers, housing authorities, schools, legal services offices, shelters, and others that serve and work directly with residents</p>	<p>We want to be good neighbors.</p> <p>If the Department can develop a regulation that listens to the community and allows the impacts they identify to be specifically examined, as long as business knows specifically what they will be required to do, it's possible to have a win-win regulation.</p>	<p>Work is needed for state and local agencies to build relationships with communities</p> <p>Businesses need to engage with their communities early and often. Need to investigate pathways to communication and engagement, like local chambers of commerce.</p>

Element 5. Mitigation and Monitoring

ELEMENT 5	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
5 Big picture	<p>The most at-risk element may not be the most in need of mitigation - there needs to be a holistic understanding</p> <p>Should mitigations be directly tied to community vulnerabilities identified? Or driven by community consensus?</p>	<p>A holistic view of pollution, waste management, and the positive impacts of hazardous waste facilities are not recognized in this process.</p> <p>Need clarity about who is deemed to be the community representatives for purposes of representing community interests in developing mitigation and monitoring plans.</p>	<p>Local agencies like the ideas of EJ work but have resource constraints. Financial obstacles need to be overcome.</p> <p>What is the responsibility of the facilities in addressing impacts from their facilities and cumulative impacts?</p> <p>What is the responsibility of the facility to mitigate impacts that are not caused by the facility?</p>
5 Feasibility of mitigating impacts	<p>Identify what the Department will do when impacts cannot be mitigated and next steps in this case.</p>		
5 Metrics for success		<p>If there are actions taken, they should provide meaningful benefit to the community.</p>	<p>What are the goals of mitigation and monitoring?</p> <p>How will success be defined and evaluated? Measurable health indicators? Change in CalEnviroScreen scores?</p>
5 Role of other regulatory bodies in mitigation		<p>How do actions of other regulatory agencies apply to mitigation? And does the Department view these as supplementary?</p>	<p>How will mitigation measures for CEQA and conditional use permits be coordinated with local planning departments?</p>

ELEMENT 5	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
<p>5 Mitigation project ideas</p>	<p>Mitigating the impacts of hosting a hazardous waste facility by doing lead abatement is a USEPA idea and would not meet the CALEPA SEP requirements for nexus.</p> <p>Need to address source reduction, recycling and reuse.</p> <p>Appropriate mitigation measures must be community-specific and should be developed in close coordination with the affected community.</p> <p>A clearinghouse of mitigation measures should be developed, but its general development should include a public process and the Department should take comment on and use appropriate additional mitigation measures that are not included on the list.</p>		<p>Cal Recycle for garbage and transfer stations have monitoring and training requirements.</p> <p>Los Angeles County Department of Regional Planning (DRP) is working on the Green Zones Program, which looks at EJ issues from a land use perspective. DPR is working on a draft ordinance.</p> <p>CUPA Forum Board is working on AB 1500 to give local CUPAs the authority to shut down facilities that have significant violations, pose an imminent threat to public health, or haven't been paying their fees.</p> <p>South Coast AQMD incentive programs have been successful in reducing burdens on certain communities. These provide opportunities for businesses to go above and beyond regulatory compliance, and can be written into a permit requirement or utilize incentive dollars</p> <p>LA County Department of Public Health is a good model for doing community outreach, health assessments, and identifying community needs</p> <p>The City of Long Beach is one of three</p>

ELEMENT 5	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
			cities in the state that has its own health department and health officer. They have a number of different departments that work with sensitive populations that could provide expertise.

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Element 6. Use of CalEnviroScreen 3.0 and other Cumulative Impact Tools

ELEMENT 6	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
6 CalEnviroScreen components	Consider mechanism to integrate tribal perspective into CalEnviroScreen.		
6 The role of CalEnviroScreen 3.0 in this process	<p>Clarify how the regulations will adapt to future changes to CalEnviroScreen scores.</p> <p>The relative and fluctuating nature of CalEnviroScreen scores makes the actual value of reflected negative impacts disputable.</p>	<p>CalEnviroScreen should not be used as a tool to make permitting decisions.</p> <p>CalEnviroScreen is a screening tool.</p> <p>How do you weight the CalEnviroScreen score relative to qualitative facility assessment factors? It's hard to understand how the Department could do that facility by facility in an objective manner absent information currently existing.</p>	
6 How does CalEnviroScreen 3.0 overlap with other tools?		<p>How does CalEnviroScreen compare to Healthy Places Index? Would like to do some case studies.</p> <p>The use of multiple screening tools in a sequential manner, such as CalEnviroScreen, EJ Screening Method (EJSM), and California Health Places Index (CHPI) is problematic because they all rely on similar or overlapping data sets. How will the Department avoid double counting and obscure</p>	

ELEMENT 6	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
		weighting when using both tools (HPI and CalEnviroScreen) at once?	
6	Use of EJSM versus CalEnviroScreen	Why use the EJ Screening Method which includes race, in a state permitting action when this is unlawful due to a Supreme Court decision?	

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Element 7. Coordination with Other Agencies

ELEMENT 7	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
<p>7 The Department coordination with other agencies</p>	<p>Identify areas of overlap and opportunity to coordinate with ARB and other agencies, as well how the Department will accomplish coordination.</p> <p>Need to include local agencies in process.</p>	<p>Coordinate with CARB and state and local agencies</p>	<p>Shared databases can be IT solutions for sharing and coordination between agencies. Developing interfaces between platforms is important but difficult.</p> <p>Many local health departments rely on grants and can't expend resources outside of those grant parameters. We like the ideas of this EJ work but this logistic/financial obstacle needs to be overcome in order to engage in this work.</p> <p>Engage the California Department of Public Health (CDPH) as well as the California Conference of Local Health Officers (CCLHO), which is like a sister organization to CUPAs. CDPH championing the cause could help the funding issues for local health departments.</p> <p>Existing small and medium facilities are CEQA exempt. Even if they submit a CUP, it will not trigger the CEQA process. That calls for better coordination and collaboration between agencies to keep communities safe.</p>
<p>7 Traffic concerns</p>		<p>Coordination with CARB over provisions regarding diesel truck trips should be expressly provided.</p>	

8. Other Issues

OTHER ISSUES	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
8 Consistency		Need standards for QA and QC to apply to the broader regulatory framework and all elements	
8 Workgroup Engagement	<p>Incorporate relevant previous public input into this effort (and current input into concurrent efforts) before asking for more input. This avoids redundancy and respect contributors’ time.</p> <p>Ensure the process is beneficial for everyone with the intention of not letting either side control the process or dictate the focus and direction of this work</p> <p>Have appropriate tone at the community advocate meetings. The community advocate meetings water down current impacts and reflect tone deafness to the severity of the situation as advocates see it.</p> <p>In future meetings, include: CARB, industry, other agencies, CUPA's, local environmental health, sensitive receptors affected by permitted facilities, residents who experience</p>	<p>Ground truth the methodologies with the business representatives and the community stakeholders</p> <p>Need for Technical Working Group to review data needs.</p>	Need for ongoing coordination and collaboration with local agencies.

OTHER ISSUES	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
<p>8 Larger Societal/Cultural issues</p>	<p>these impacts</p> <p>The Department should focus more on impacts to the community. The larger issue of reduction in consumer waste and broader state needs for storing, treating and disposing of hazardous waste should not be the top criteria in DTSC's permitting decisions.</p> <p>Be explicit and focus the process around Environmental Justice principles.</p> <p>Provide more clarity on DTSC's discretionary vs. mandatory enforcement authority and violation criteria. Identify ways to tighten DTSC's use of discretionary enforcement authority to provide more consistent community protection.</p> <p>How is the Department going to fix the problem of expired permits, i.e. Quemetco?</p> <p>Should mitigations be directly tied to community vulnerabilities identified? Or driven by community consensus?</p>	<p>Hazardous waste facilities are vilified and lumped together, but they are diverse.</p> <p>Positive impacts of hazardous waste facilities are not considered.</p> <p>Long term there needs to be a general plan to transition these facilities away from overburdened communities.</p> <p>We are not at a point where we can prevent hazardous waste.</p>	<p>The percentage of real estate allowed for heavy industry in L.A. is 4%. There is still a societal need to dispose of hazardous waste. Where will these facilities move? There must be a plan. It's essential to balance these needs and find the opportunity to have success and healthy communities for everyone.</p>
<p>8 The Department Authority &</p>	<p>Provide more clarity on DTSC's discretionary vs. mandatory</p>	<p>The Department needs to explicitly acknowledge limits in authority and how</p>	<p>For new facilities, will the permitting process be coordinated with CEQA in</p>

OTHER ISSUES	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
<p>Conflicts with Law</p>	<p>enforcement authority and violation criteria. Identify ways to tighten DTSC's use of discretionary enforcement authority (below) to provide more consistent community protection.</p> <p>HSC Section 25186 Any violation of/noncompliance with the Department permit requirements: is discretionary and does not identify a pattern</p> <p>HSC Section 25186.2 Imminent and substantial danger to the public, health, safety or the environment.</p> <p>CCR Title 22 Non-compliance with permit; failure to disclose relevant facts and Section 66270.43 information; endangerment of public health, safety or the environment: is discretionary.</p> <p>HSC 25186.05: 3 Class I violations within period of 5 years: Has not been applied as written, has been treated as discretionary when it is non-discretionary.</p>	<p>gaps in authority will be addressed</p> <p>The Framework appears to go beyond the Department authority to regulate hazardous waste facilities.</p> <p>The Department should focus on environmental exposures and mitigations over which it has direct authority</p> <p>The Department should recognize that other outside impacts, including issues related to land use, are overseen and mitigated through other agencies and jurisdictions.</p> <p>Has there been legal analysis of what the verb "consider" means in AB 707?</p> <p>Why isn't this dealt with under the Tanner Act?</p> <p>SB 673 requires the Department to improve transparency and consistency in decisions. The framework, however, appears to do the opposite by proposing varying or unstated acceptability criteria without explanation of how this new</p>	<p>terms of data generation and proposed mitigations?</p>

OTHER ISSUES	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
	<p>Criminal conviction of a Facility/Owner: Has only applied when found liable and not when a suit is settled out of court.</p> <p>The process of implementing 673 should not be used to repeal existing requirements gained by extensive public engagement and defended by affected communities over decades.</p> <p>The proposed process would strip full CEQA review and public involvement.</p> <p>Pre-existing Tanner Act Requirements are being ignored in this process.</p>	<p>information would be used or considered.</p> <p>SB 673 does not supplant or supersede the hazardous waste planning processes at the county and statewide levels, nor does it grant the Department any new or enhanced authority to regulate impacts in a community outside of those directly related to the permitted facility and its operations.</p>	
<p>8 Characterization of hazardous waste industry</p>		<p>This new process does not look holistically at the impacts (positive and negative) on a community, but unduly burdens hazardous waste facilities with the responsibility for mitigating pollution burdens on communities.</p> <p>The Department needs to keep identifying how they are managing the expectations of communities and business.</p> <p>Businesses are looking for fairness.</p> <p>It is the responsibility of the state to</p>	<p>Communities are employed by these businesses and the wellbeing of the business affects the socioeconomic wellbeing of the community.</p>

OTHER ISSUES	COMMUNITY COMMENTS	BUSINESS COMMENTS	LOCAL GOVERNMENT COMMENTS
		<p>ensure that these facilities are safe and functional to service our economy; these facilities are the state's partner in that</p> <p>This effort is not being reflected at federal level or in other states, increases hazardous waste leaving CA (50%) and likely being disposed of less responsibly.</p> <p>These regulations are a threat to CA business.</p>	

DRAFT

Appendix 6 – Research list

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