



CONTRA COSTA COUNTY HEALTH HAZARDOUS MATERIALS PROGRAMS

Report for:

Fee Study

July 25, 2024

Prepared by:



Corporate Headquarters
32605 Temecula Parkway, Suite 100
Temecula, CA 92592
Toll free: 800.676.7516

TABLE OF CONTENTS

- 1. Executive Summary 3**
 - 1.1 Findings 3
 - 1.2 Report Format 4
- 2. Introduction and Fundamentals 5**
 - 2.1 Scope of Study 5
 - 2.2 Methods of Analysis 5
- 3. Hazardous Materials Fee Programs 10**
 - 3.1 Cost of Service Analysis 11
 - 3.2 Fee Establishment 12
 - 3.3 Cost Recovery Evaluation 13
 - 3.4 Comparison Survey 14
- 4. Conclusion 16**

Appendices

Cost of Service Analysis (Fee Tables)	Appendix A
Fully Burdened Hourly Rate	Appendix B
Comparative Fee Survey	Appendix C
Modified Chemical Exposure Index (MCEI)	Appendix D
Community Warning System Fee Calculation	Appendix E

1. EXECUTIVE SUMMARY

NBS performed a Fee Study (Study) for the Contra Costa Health – Hazardous Materials Programs, a Division of the Contra Costa County Health Department. The purpose of this report is to present the findings and recommendations of the various fee analyses performed as part of the Study and provide the County with the information needed to update and establish regulatory fees for service. Throughout the process, the Study afforded much effort to ensure that not only are the fees and charges reasonable and equitable, but that they also meet industry standards and uphold the statutory requirements of the State of California.

A Certified Unified Program Agency (CUPA) may impose regulatory fees for services and activities they provide through provisions set forth in Health and Safety Code section 25404.5(a)(2)(A). Under this legal framework, a single fee system shall be established at a level sufficient to pay the necessary and reasonable costs incurred by the certified unified program agency. For a regulatory fee to qualify as a fee and not a tax, the estimated costs of the regulatory service or regulatory activity must be provided, and the basis for determining the manner in which the costs are apportioned must bear a fair or reasonable relationship to the payor’s burdens on, or benefits from, the regulatory activity. Regulatory fees pay for the reasonable regulatory costs associated with operating a regulatory program, including issuing licenses and permits, performing investigations, inspections and audits, as well as other regulatory activities such as associated training, travel and overhead.

The County’s main reason for conducting this Study was twofold: (1) first, to ensure that existing fees do not exceed the costs of service, and (2) second, to provide an opportunity for the Board of Supervisors to re-align fee amounts with localized cost recovery policies.

1.1 Findings

This Study examined regulatory fees managed by the Contra Costa Health Hazardous Materials Programs (CCHHMP). The Study identified an estimated \$11.5 million in eligible costs for recovery from fees for service compared to approximately \$9.4 million CCHHMP is currently collecting each year from fees. The following table provides a summary of the Study’s results:

Table 1. Report Summary

Fee Category	Annual Estimated Revenues at Current Fee	Annual Estimated Revenues at Full Cost Recovery Fee	Annual Cost Recovery Surplus/ Deficit	Existing Cost Recovery Percentage
Hazardous Materials	\$9,443,967	\$11,471,240	(\$2,027,273)	82%
Total	\$ 9,443,967	\$ 11,471,240	\$ (2,027,273)	82%

As shown in Table 1 above, the County is recovering approximately 82% of the costs associated with providing regulatory fee-related services. Should the Board adopt fees at 100% of the full cost recovery amounts determined by this Study, an additional \$2 million in costs could be recovered.

1.2 Report Format

This report documents the analytical methods and data sources used in the Study, presents findings regarding current levels of cost recovery achieved from regulatory fees, and provides a comparative survey of fees to neighboring agencies for similar services. The report is organized into the following sections:

- Section 2 - Outlines the general framework, approach, and methodology of the Fee Study.
- Section 3 - Discusses the results of the cost of service analysis including: (1) fully burdened hourly rate(s); (2) calculation of the costs of providing service; and, (3) the cost recovery performance of each fee category.
- Section 4 - Presents the conclusions of the analysis provided in the preceding sections.
- Appendices to this report - Include additional details of the analysis performed and a comparison of the fees imposed by neighboring agencies for similar services.

2. INTRODUCTION AND FUNDAMENTALS

2.1 Scope of Study

As a Certified Unified Program Agency (CUPA), the Hazardous Materials Division of the County Health Department, administers the following programs, pursuant to the authorities granted under Section 25404 of the Health and Safety Code:

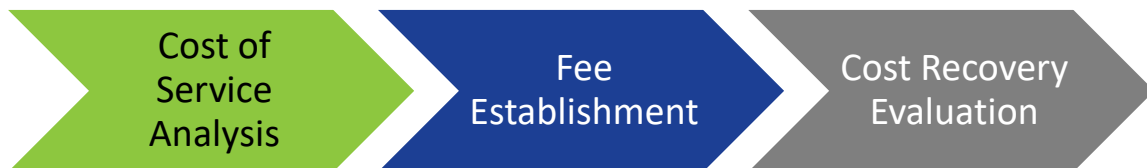
- Hazardous Waste Generator Program
- Hazardous Materials Business Plan Program
- Underground Storage Tank Program
- California Accidental Release Prevention (CalARP) Program
- Aboveground Petroleum Storage Act Program

In addition to the programs listed above, a limited scope of review was performed to determine the total costs associated with the Community Warning System as well as any specialized costs required for the implementation of the Unified Programs. These costs are intended to be layered on top of fees and only applied to the fee payors who benefit from these services.

The fees examined in this report focus on regulatory fees and other applicable fees for services, and specifically excludes fines and penalties imposed by the County for violations of its requirements or codes.¹

2.2 Methods of Analysis

Three phases of analysis were completed for the Hazardous Materials Programs:



2.2.1 COST OF SERVICE ANALYSIS

This cost of service analysis is a quantitative effort that compiles the full cost of providing governmental services and activities. There are two primary types of costs considered: direct and indirect costs. Direct costs are those that specifically relate to an activity or service, including the real-time provision of the service. Indirect costs are those that support the provision of services in general but cannot be directly or easily assigned to a singular activity or service.

Direct Costs:

¹ According to the California Constitution Article XIII C § 1 (e) (4) and (5), the County is not limited to the costs of service when imposing fines and penalties.

- **Direct personnel costs** – Salary, wages and benefits expenses for personnel specifically involved in the provision of services and activities to the public.
- **Direct non-personnel costs** – Discrete expenses attributable to a specific service or activity performed, such as contractor costs, third-party charges, and materials used in the service or activity.

Indirect Costs:

- **Indirect personnel costs** – Personnel expenses supporting the overall provision of services, including and not limited to line supervision, departmental management, administrative support, and time spent on general training related activities. These support activities cannot be identified to a single fee objective, but rather support the entire fee program as a whole.
- **Indirect non-personnel costs** – Expenses other than labor involved in the provision of services. In most cases, these costs are allocated across all services provided by a department, rather than directly assigned to individual fee/rate categories.
- **Overhead costs** – These are expenses, both labor and non-labor, related to County-wide support services. Support services include general administrative services such as County Administrator, Finance, Human Resources, etc. The amount of costs attributable to CCHMP included in this Study were sourced from the County Cost Allocation Plan published on the California State Controller Office website and adopted operating budget.

All cost components in this Study use annual (or annualized) figures, representing a twelve-month cycle of expenses incurred by the Division in the provision of all services and activities County-wide.

Nearly all the fees reviewed in this Study require specific actions on the part of County staff to provide the service or conduct the activity. Since labor is the primary underlying factor in these activities, the Study expresses the full cost of service as a fully burdened cost per labor hour. NBS calculated a composite, fully burdened, hourly rate for the Hazardous Materials fee programs. This rate serves as the basis for further quantifying the average full cost of providing individual services and activities. Determining the fully burdened rate requires two data sets: (1) the full costs of service, and (2) the number of staff hours available to perform those services.

The annual cost of providing services was derived from the earlier steps of the cost of service analysis described above. The number of staff hours available was determined through a review of a complete list of the County’s Hazardous Materials program staff and/or available service hours of its contracted professionals (where applicable). The County also supplied the total number of paid labor hours for each employee involved in the delivery of services included in this Study. NBS reviewed documentation regarding basic types of leave such as vacation, sick, and holiday time to establish a Net Paid Productive Hours for each position. These “net” available hours represent the amount of time available to provide both fee-recoverable and non-fee recoverable services and activities. Time tracking records for the fee programs studied as part of this analysis, when available, proved useful in identifying time spent providing indirect categories of service (e.g., division administration, plan review, inspection, public information assistance, etc.), versus direct categories of service for individual fee for service activities. The annual full cost of providing fee for service activities divided by the available labor hours attributable to the fee program equals the composite, fully burdened hourly rate.

The fully burdened rate was then applied at the individual fee level through further time data analysis to yield the average total cost of providing each fee for service or activity. NBS received three (3) fiscal years' worth of time tracking data that was used to establish an average amount of time spent per year on each individual fee for service activity. This data was analyzed and then reviewed and revised carefully by the Division's staff and managers. Based on the results of this review, the County reconsidered its time estimates until all parties were comfortable that the fee models reasonably reflected the average service level provided. Where needed, NBS also assisted the County in estimating the average amount of staff time required for services that did not have tracked time data to rely upon or where the tracked time data did not reflect the reasonable level of effort required to perform the service.

It should be noted that the development of these time estimates was not a one-step process but required careful review by both NBS and Division managers to assess the reasonableness of such estimates.

2.2.2 FEE ESTABLISHMENT

The fee establishment process includes a range of considerations, including the following:

- **Addition to and deletion of fees** – The Study provided the opportunity to propose additions and deletions to the current fee schedule, as well as to re-name, re-organize, and clarify fee names and categories as needed. Many of these fee revisions allow for better adherence to current practices, as well as for improvement in the calculation, application, and collection of the fees when administered by staff.
- **Revision to the structure of fees** – In most cases, the focus was to re-align the fee amount to match the costs of service and leave the current structure of fees unchanged. However, in several cases, fee categories and fee names had to be simplified or re-structured to increase the likelihood of full cost recovery or to enhance the fairness of how the fee is applied to the various types of fee payers.
- **Documentation of the tools used to calculate special cost recovery** – CCHMP's fee schedule should include the fully burdened rate developed by the Study. Documenting that rate in the fee schedule provides an opportunity for the Board of Supervisors to approve a rate for cost recovery under a "time and materials" approach, when needed. It also provides clear publication of the rate so that all fee payers can readily reference the basis of any fee amounts. The fee schedule should provide language that supports special forms of cost recovery for activities and services not included in the adopted master fee schedule. In these rare instances, the published hourly rate is used to estimate a flat fee or bill on an hourly basis, at the director's discretion.

2.2.3 COST RECOVERY EVALUATION

The NBS fee model compares the existing fee for each service or activity to the average total cost of service quantified through this analysis. Possible and typical outcomes of the fee analysis include:

- Cost recovery rate of 0% - This signifies that there is currently no current recovery of costs from fee revenues (or insufficient information available for evaluation).
- Cost recovery rate of 100% - This means that the fee currently recovers the full cost of service.

- Cost recovery rate between 0% and 100% - This indicates partial recovery of the full cost of service through fees.
- Cost recovery rate greater than 100% - This means that the fee exceeds the full cost of service. Regulatory fees should not exceed the full cost of service.

In all cases, the cost recovery rate achieved by a fee should not be greater than 100%. In most cases, imposing a fee above this threshold could change the definition of the charge from a cost of service based fee to a tax which requires voter approval to implement. The purpose of any fee study is to establish the necessary and reasonable cost of providing regulatory services. For any fee showing a greater than 100% cost recovery outcome, the fee must be reset to no more than 100% of the calculated cost of service as shown in the report appendix.

From here, the County can decide upon the “recommended” or “target” level of cost recovery for each fee, established at either 100% or any amount less than the calculated full cost of service. Targets and recommendations reflect discretion on the part of the agency based on a variety of factors, such as existing County policies and County-wide or departmental revenue objectives, economic goals, community values, market conditions, level of demand, and others.

2.2.4 COMPARATIVE FEE SURVEY

Policy makers often request a comparison fees to those of surrounding or similar communities. The purpose of a comparison is to provide a sense of market pricing for services, and to use that information to gauge the impact of recommendations for fee adjustments.

NBS worked with CCHHMP to choose five comparative agencies – Alameda County, Sacramento County, San Mateo County, Santa Clara County and Sonoma County. The results of the comparison are summarized in Section 3 of this report and detailed in Appendix C.

It is important to keep the following in mind when interpreting the general approach to, and use of, comparative survey data:

- Comparative surveys do not provide information about cost recovery policies or procedures inherent in each comparison agency.
- A “comparison-based” decision to price services below the full cost of service calculation is the same as deciding to subsidize that service.
- Comparative agencies may or may not base their fee amounts on the estimated and reasonable cost of providing services. NBS did not perform the same level of analysis of the comparative agencies’ fees.
- The results of comparative fee surveys are often non-conclusive for many fee categories. CCHHMP is a unique regulatory environment that regulates more hazardous materials per year than any other CUPA in the surrounding area. Contra Costa County is also the only jurisdiction that regulates refineries or bulk storage facilities, therefore the results of the comparative analysis may be skewed by the additional scope of services provided.

NBS made every reasonable attempt to source each comparison agency’s fee schedule from their respective websites and compile a comparison of fee categories and amounts for the most readily comparable fee items that match the County’s existing fee structure.

2.2.5 DATA SOURCES

The following data sources were used to support the cost of service analysis and fee establishment phases of this Study:

- The Adopted Budget for Fiscal Year 2022-23
- A complete list of all CCHMP personnel, salary/wage rates, regular hours, paid benefits, and paid leave amounts provided by the Finance Department
- Prevailing adopted fee schedules
- Annual workload data for Fiscal Year 2019, 2020, and 2021 (number of permits processed/services performed)

The adopted budget serves as an important source of information that affects the cost of service results. NBS did not audit or validate the County's financial documents and budget practices, nor was the cost information adjusted to reflect different levels of service or any specific, targeted performance benchmarks. This Study accepts the County's budget as a legislatively adopted directive describing the most appropriate and reasonable level of County spending. NBS consultants accept the Board of Supervisors' deliberative process and the County's budget plan and further assert that through this legislative process, the County has yielded a reasonable and valid expenditure plan to use in setting cost-based fees.

3. HAZARDOUS MATERIALS FEE PROGRAMS

The mission of the Contra Costa Health Hazardous Materials Programs (CCHHMP) is to protect human health and the environment by promoting pollution prevention, increasing process safety knowledge and environmental awareness, responding to incidents, and implementing consistent regulatory compliance and enforcement programs.

CCHHMP is organized into various programs, summarized as follows:

- **Hazardous Waste Generator Program** – This program ensures the safe and legal handling, treatment, storage, and disposal of hazardous waste. Activities to obtain this objective include regular inspections, business education activities and the issuance of hazardous waste generator permits.
- **Hazardous Materials Business Plan Program** – This program’s purpose is to prevent or minimize damage to public health, safety, and the environment, from a release or threatened release of hazardous materials. It also satisfies community right-to-know laws. This is accomplished by requiring businesses that handle hazardous materials in reportable quantities to submit an annual hazardous materials business plan to the local Certified Unified Program Agency (CUPA) as well as prepare a site map, develop an emergency response plan, and implement a training program for employees. Contra Costa Health - Hazardous Materials Programs (CCHHMP) is the CUPA for all businesses within Contra Costa County.
- **Underground Storage Tank Program** – Underground Storage Tanks (USTs) are used for the storage of many substances that may be considered hazardous. This program’s purpose is to protect the public health from exposure to hazardous materials stored in the USTs, including the protection of groundwater from contamination. Activities to obtain these objectives include annual inspections and the issuance of operating permits. Construction permits are also issued for UST system installation, removals, upgrades and repairs.
- **California Accidental Release Prevention Program** – This program administers the California Accidental Release Prevention Program (CalARP). This includes reviewing Risk Management Plans, auditing facilities, and following up with recommended action items.
- **Industrial Safety Ordinance** – This program administers the Industrial Safety Ordinances (ISO) for Contra Costa County and the City of Richmond. This includes reviewing safety plans, auditing facilities and following up with recommended action items, reviewing Major Chemical Accidents or Releases (MCAR), assisting with incident investigations, and performing hazard scoring for development projects associated with land use applications.
- **Aboveground Petroleum Storage Act Program (APSA)** – This program regulates tank facilities that are subject to the federal SPCC rule or tank facilities with an aggregate storage capacity of 1,320 gallons or more of petroleum in aboveground storage containers or tanks with a shell capacity equal to or greater than 55 gallons. APSA also regulates tank facilities with less than 1,320 gallons of petroleum if they have one or more stationary tanks in an underground area (TIGUA) with a shell capacity of 55 gallons or more of petroleum.

- **Incident Response Team** - Unified program agencies are authorized to respond to hazardous material releases or threats of a release, as outlined in Chapter 6.95 of the Health and Safety Code. Even facilities not covered under this chapter must comply with release reporting requirements. To fulfill this responsibility, the Unified Program has established a Hazardous Materials Incident Response Team (IR Team) that promptly responds to reported hazardous material incidents. The IR Team works closely with the Community Warning System, which uses a fully integrated alert system to issue warnings to the public regarding hazardous material releases. This system, in conjunction with the IR team, helps to efficiently implement appropriate response efforts and provide direction and advice to emergency responders and the public on avoiding exposure. (Health & Saf. Code, § 25510, 25270.8, 25180.7, 42301.7)
- **Community Warning System (CWS)** – The Community Warning System (CWS) is a fully integrated, web-based alert mass notification system that is designed to provide critical emergency information to CCC residents. Utilizing a variety of communication tools, including outdoor safety sirens, industrial facility CWS terminals, emergency responder pages, text messages, and emails to CWS registered users, phone calls, Wireless Emergency Alerts (WEA), the Emergency Alert System (EAS), NOAA weather radios via the National Weather Service (NWS), and social media posts, the CWS ensures timely dissemination of information during crises. Additionally, emergency information, including a map of the area where protective actions have been issued, is automatically posted to the www.CWSAlerts.com website. The CWS was developed through the efforts of the Contra Costa County Community Awareness and Emergency Response (“CAER”) Group working cooperatively with CCHHMP, representatives from local industry, the community, and other regulatory agencies to provide local residents with timely notification of emergencies, including hazardous materials releases.

3.1 Cost of Service Analysis

NBS developed a composite, fully burdened, hourly rate for CCHHMP as shown in Table 2 on the next page:

Table 2. Fully Burdened Hourly Rate

Expenditure Type	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities	Total
Labor	\$ 538,537	\$ 125,293	\$ 4,005,601	\$ 4,669,431
Recurring Non-Labor	981,312	14,732	470,990	1,467,035
Overhead	25,528	6,145	196,454	228,126
Allocated Common Activities	-	212,104	6,780,923	6,993,027
Division Subtotal	\$ 1,545,377	\$ 358,275	\$ 11,453,968	\$ 13,357,619
Other Funding Sources				
Grants / Misc Funding			\$ (524,418)	\$ (524,418)
R9200 - License/Permit/Franchises			(150,000)	(150,000)
R9300 - Fines/Forfeits/Penalties			(485,000)	(485,000)
R9800 - Miscellaneous Revenue			(53,000)	(53,000)
Other Funding Source Subtotal			\$ (1,212,418)	\$ (1,212,418)
Division Total	\$ 1,545,377	\$ 358,275	\$ 10,241,550	\$ 12,145,201
Cost per Direct Hour Recoverable from Fees for Service	n/a	n/a	\$ 365	
<i>Reference: Direct Hours Only</i>	n/a	n/a	28,092	

CCHHMP incurs a total annual cost of approximately \$13.4 million, of which approximately \$11.5 million is eligible for recovery from fees for service. These costs are first offset by revenue from alternate funding sources such as grants, fines and penalties. Approximately \$10.2 million remains targeted for recovery from fees for service. All subsequent cost of service calculations at the individual fee level assume a fully burdened hourly rate of **\$365**.

In addition to the costs for the direct services and activities described in the previous paragraph, CCHHMP also incurs costs for a variety of expenses arising from the Community Warning System and specialized training required for the CalARP program. These costs are intended to be layered on top of fees and only applied to the fee payors who benefit from these services. CCHHMP will continue to assess an additional fee based on their existing methodology for these two services. For informational purposes only, Appendix D and E of this report show the existing calculation methodology currently used by County staff to calculate these additional fees.

3.2 Fee Establishment

The following is a summary of the overall changes to the CCHHMP fee schedule:

- All CUPA programs require varying levels of staff training, depending on the complexity of the environmental regulations related to the regulated activity. To ensure that staff maintain core competencies within all regulatory programs, costs associated with training time specific to each program have been included in the permit fee.
- Deletion of fees that are no longer used or needed, such as Unannounced Inspection Program under the CalARP Program, and the 5 billion pounds of materials designation under the Hazardous Material Business Plan program.

- Reorganization of fee categories or clarification of fee names to create a more user-friendly fee structure such as:
 - Hazardous Material Business Plan Program – Changed the tiering from number of employees to number of chemical’s stored at the facility for facilities with greater than 10,000 pounds of material.
 - Community Warning System – The use of the Community Warning System (CWS) varies based on the complexity of the facility. The CWS cost is part of the Hazardous Materials Business Plan fee and is distributed among facilities based on complexity, therefore an additional fee will be assessed by the Hazardous Materials Business Plan Program facilities on top of the annual regulatory inspection fee. See Appendix E for more information.
 - Underground Storage Tank Program – Fees were restructured to reflect the services provided by CCHHMP. The categories of base fee, installation, and closure are now simply based on 1st tank and each additional tank. Modifications have been structured to reflect minor, moderate and major modifications.
 - CalARP – Changed the Annual Permit fee to reflect a baseline level of regulatory effort provided based on each facility’s pre-determined Program level. The amount of time spent annually auditing and inspecting a facility varies based on the facilities calculated risk factor, therefore an additional fee will be assessed on top of the annual regulatory inspection fee to recover the costs associated with staff’s training efforts through the CalARP risk factor analysis. Risk factors will continue to be determined using Source Modified Chemical Exposure Indexes (SMCEI). See Appendix D to this report for more information on how the SMCEI is used to calculate hazard potential of facilities in the County. As mentioned above, the Unannounced Inspection Program category has been deleted.
 - ISO – The Industrial Safety Ordinance program has been modified to reflect a new category for bulk liquid storage (new facility type). The remaining existing ISO facility fees were changed to reflect a baseline level of regulatory effort provided based on each facility’s pre-determined Program level. The amount of time spent annually auditing and inspecting a facility varies based on the facilities calculated risk factor, therefore an additional fee will be assessed on top of the annual regulatory inspection fee to recover staff’s training efforts.
- Addition of new fee categories, notated as “New” in the Current Fee column of Appendix A² such as Very Small Quantity Generator not including RCRA waste Generation under the Hazardous Waste Generator Program.

3.3 Cost Recovery Evaluation

Appendix A presents the results of the detailed cost recovery analysis of fees for the County’s Hazardous Materials Program. In the Appendix, the “Cost of Service per Activity” column establishes the maximum adoptable fee amount for the corresponding service identified in the “Fee Description” list.

² Refer to Section 2.2, *Methods of Analysis*, for additional discussion on the Study’s approach to adding, deleting, and revising fee categories.

Currently, CCHHMP is recovering approximately 82% of the total cost of providing services from fees. As Table 3 shows, CCHHMP collects approximately \$9.4 million per year in revenue at the current fee amounts. At full cost recovery and the same demand level for these services, approximately \$11.5 million would be recovered.

Table 3. Cost Recovery Outcomes

Fee Category	Annual Estimated Revenues at Current Fee	Annual Estimated Revenues at Full Cost Recovery Fee	Annual Cost Recovery Surplus/ Deficit	Existing Cost Recovery Percentage
Hazardous Materials Fee Program	\$9,443,967	\$9,567,589	(\$123,622)	
CalARP/ISO Risk Factor Analysis	<i>included above</i>	\$358,275	(\$358,275)	
Community Warning System		\$1,545,377	(\$1,545,377)	
Total	\$ 9,443,967	\$ 11,471,240	\$ (2,027,273)	82%

NBS provided a full cost of service evaluation and the framework for considering fees, while CCHHMP staff determined the appropriate cost recovery levels at or below full cost amounts.

3.4 Comparison Survey

As discussed in section 2.2.4, Comparative Fee Survey, NBS compared the County’s current list of fees to those of 5 comparison agencies selected by CCHHMP. While the results of the comparative fee surveys are often non-conclusive for many fee categories, NBS made every reasonable attempt to source each comparison agencies fee schedule. It is important to remember that CCHHMP is a unique regulatory environment that regulates more hazardous materials per year than any other CUPA in the surrounding area. Contra Costa County is also the only jurisdiction that regulates refineries or bulk storage facilities, therefore the results of the comparative analysis may be skewed by the additional scope of services provided.

Below is an analysis of CCHHMP’s fees by program:

- Hazardous Waste Generator – The fee programs for San Mateo and Santa Clara County match closest to Contra Costa’s. For these agencies, CCHHMP’s current fees and full cost recovery fees are lower for most tiers. Current and full cost recovery fees would be higher for the other agencies surveyed.
- Hazardous Materials Business Plan – As a newly structured fee program, the current fees shows in Appendix A are averages of current fees charged making the outcomes more difficult to compare. Alameda County uses the most similar fee structure and all fees fall in line with the comparison agency except for the current fee for 1 billion+ lbs with includes oil refineries. At full cost recovery, this particular fee would be adjusted and would fall in line with Alameda County. The other agencies surveyed did not yield any useable results.
- Underground Storage Tank Program – San Mateo, Santa Clara and Sonoma County fees most closely match CCHHMP’s proposed fee structure. Current base fees are lower than the agencies surveyed, and at full cost recovery fall in line with those agencies. Current and full cost recovery fees would be higher than these agencies, but would be lower than Alameda County. Closures and modifications are in line with other agencies surveyed.

- California Accidental Release Prevention Program – As a newly structured fee program, the current fees shown in Appendix A are averages of current fees charged making the outcomes more difficult to compare. CCHHMP’s fees would be higher for both current and full cost, however, it is difficult to determine what the other agencies fees include, therefore this category is inconclusive.
- Aboveground Petroleum Storage Act Program – CCHHMP’s fees are the highest of all agencies surveyed for current and full cost fee amounts.
- Miscellaneous Fees (hourly rates) – CCHHMP’s current hourly rate is higher than most agencies surveyed. Santa Clara County is the only agency with an hourly rate higher than CCHHMP’s current hourly rate, and in line with the fully-burdened hourly rate.

4. CONCLUSION

Based on the outcomes of the Cost of Service Analysis, Fee Establishment, and Cost Recovery Evaluation presented in this Study, the proposed Fee Schedule has been prepared by CCHHMP staff for implementation and included in the Division's Staff Report to the Board of Supervisors.

The adopted Fee Schedule should become a living document, but handled with care. The following are recommended best management practices for the County's consideration:

- A fundamental purpose of the fee schedule is to provide clarity and transparency to the public and to staff regarding fees imposed by the County. Once adopted by the Board of Supervisors, the fee schedule is the final word on the amount and method in which fees should be charged and supersedes all previous fee schedules. If it is discovered that the master document is missing certain fees, those fees will eventually need to be added to the master fee schedule and should not exist outside the consolidated, master framework.
- A comprehensive review and analysis to the extent presented in this report is recommended on a periodic basis, approximately every three to five years in alignment with the County MOU frequency. Conducting a comprehensive fee study is not an annual requirement, and only becomes worthwhile over time as shifts in organization, local practices, legislative values, or legal requirements result in significant change. In between comprehensive fee program reviews, CCHHMP could consider adjusting these fees on an annual basis to keep pace with agreed upon labor adjustments as set in the divisions MOU.

As discussed throughout this report, the intent of the proposed fee schedule is to improve the County's recovery of costs incurred to provide individual services, as well as adjust fees where the fees charged exceed the average costs incurred. Predicting the amount to which any adopted fee increases will affect County revenues is difficult to quantify. For the near-term, CCHHMP should not count on increased revenues to meet any specific expenditure plan. Experience with the revised fee amounts should be gained first before revenue projections are revised. However, unless there is some significant, long-term change in activity levels, proposed fee amendments should enhance cost recovery performance over time, providing it the ability to stretch other resources further for the benefit of the public at-large.

Disclaimer: In preparing this report and the opinions and recommendations included herein, NBS has relied on a number of principal assumptions and considerations with regard to financial matters, conditions and events that may occur in the future. This information and assumptions, including the County's budgets, time estimate data, and workload information from County staff, were provided by sources we believe to be reliable; however, NBS has not independently verified such information and assumptions. While we believe NBS' use of such information and assumptions is reasonable for the purpose of this report, some assumptions will invariably not materialize as stated herein and may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others.

APPENDIX A

Cost of Service Analysis – Hazardous Materials Programs

No.	Fee Description	Fee Unit Type	Notes	Activity Service Cost Analysis			Cost of Service Per Activity	Cost Recovery Analysis			Annual Estimated Revenue Analysis		
				Estimated Average Labor Time Per Activity (hours)				Current Fee	Routine Inspection Frequency (years)	Existing Cost Recovery %	Estimated Volume of Activity	Annual Estimated Revenues	
				Hazmat	Training	Total						Current Fee	Full Cost Recovery
				\$ 365	\$ 365								
HAZARDOUS MATERIALS													
7100	Hazardous Waste Generator Program												
	Annual Permit Fee												
7110/7140	Very Small Quantity Generator not including RCRA waste Generation (Less than 1.3 tons)	flat		0.42	0.13	0.55	\$ 200	NEW	5	0%	1218	\$ -	\$ 244,089
7101/7131	Less than 5 tons/year	flat		1.16	0.13	1.28	\$ 468	\$ 485	2	104%	982	\$ 476,270	\$ 459,936
7102/7132	5 tons or more but less than 12 tons/year	flat		1.31	0.13	1.44	\$ 526	\$ 658	2	125%	166	\$ 109,228	\$ 87,281
7103/7133	12 tons or more but less than 25 tons/year	flat		2.10	0.69	2.79	\$ 1,017	\$ 986	2	97%	85	\$ 83,810	\$ 86,450
7104/7134	25 tons or more but less than 50 tons/year	flat		5.25	0.69	5.94	\$ 2,165	\$ 1,516	2	70%	55	\$ 83,380	\$ 119,101
7105/7135	50 tons or more but less than 250 tons/year	flat		10.50	0.69	11.19	\$ 4,080	\$ 3,188	2	78%	67	\$ 213,596	\$ 273,327
7106/7136	250 tons or more but less than 500 tons/year	flat		31.50	2.10	33.60	\$ 12,250	\$ 10,559	1	86%	6	\$ 63,354	\$ 73,499
7107/7137	500 tons or more but less than 1,000 tons/year	flat		42.00	5.25	47.25	\$ 17,226	\$ 16,517	1	96%	5	\$ 82,585	\$ 86,132
7108/7138	1,000 tons or more but less than 2,000 tons/year	flat		52.50	15.75	68.25	\$ 24,882	\$ 26,897	1	108%	1	\$ 26,897	\$ 24,882
7109/7139	2,000 tons or more/year	flat		84.00	26.25	110.25	\$ 40,195	\$ 57,409	1	143%	6	\$ 344,454	\$ 241,168
	Onsite Treatment		[3]										
7182/7186	Permit by Rule (Fixed Units)	per instance		12.60	4.67	17.27	\$ 6,295	\$ 3,068	1	49%	9	\$ 27,612	\$ 56,655
7180	Conditional Authorization	per instance		9.45	4.67	14.12	\$ 5,147	\$ 3,068	2	60%	13	\$ 39,884	\$ 66,906
7111/7181	Conditional Exemption	per instance		2.10	4.67	6.77	\$ 2,467	\$ 614	2	25%	8	\$ 4,912	\$ 19,736
	Service Fees - Application Review												
7184/7187/7188	During Normal Business Hours	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	5	\$ 1,285	\$ 1,823
	After Normal Business Hours	per hour		1.00	0.00	1.00	\$ 404	\$ 280	1	69%	0	\$ -	\$ -

Cost Estimation for Providing Fee Related Activities and Services

No.	Fee Description	Fee Unit Type	Notes	Activity Service Cost Analysis			Cost of Service Per Activity	Cost Recovery Analysis			Annual Estimated Revenue Analysis		
				Estimated Average Labor Time Per Activity (hours)				Current Fee	Routine Inspection Frequency (years)	Existing Cost Recovery %	Estimated Volume of Activity	Annual Estimated Revenues	
				Hazmat	Training	Total						Current Fee	Full Cost Recovery
				\$ 365	\$ 365								
7200	Hazardous Materials Business Plan Program												
	Annual Permit Fee												
7201	Less than 1,000	flat		1.05	0.11	1.16	\$ 421	\$ 254	2	60%	615	\$ 156,210	\$ 258,969
7202/7203	1,000 or more but less than 10,000	flat		1.35	0.11	1.46	\$ 531	\$ 672	2	127%	1450	\$ 974,400	\$ 770,160
7204/7205	10,000 or more but less than 100,000												
	1-15 chemicals	flat		1.51	1.05	2.56	\$ 935	\$ 1,051	2	112%	429	\$ 450,879	\$ 401,036
	16-50 chemicals	flat		1.62	2.10	3.72	\$ 1,357	\$ 1,051	2	77%	77	\$ 80,927	\$ 104,493
	51+ chemicals	flat		1.95	2.10	4.05	\$ 1,475	\$ 1,051	2	71%	3	\$ 3,153	\$ 4,426
7206/7207	100,000 or more but less than 250,000												
	1-15 chemicals	flat		2.16	1.05	3.21	\$ 1,171	\$ 1,905	2	163%	245	\$ 466,725	\$ 286,991
	16-50 chemicals	flat		2.43	2.10	4.53	\$ 1,653	\$ 1,905	2	115%	40	\$ 76,200	\$ 66,111
	51+ chemicals	flat		2.70	2.10	4.80	\$ 1,751	\$ 1,905	2	109%	5	\$ 9,525	\$ 8,757
7208/7209	250,000 or more but less than 500,000												
	1-15 chemicals	flat		3.31	2.10	5.41	\$ 1,971	\$ 3,522	2	179%	92	\$ 324,024	\$ 181,374
	16-50 chemicals	flat		3.86	2.10	5.96	\$ 2,172	\$ 3,522	2	162%	20	\$ 70,440	\$ 43,449
	51+ chemicals	flat		4.13	2.10	6.23	\$ 2,273	\$ 3,522	2	155%	7	\$ 24,654	\$ 15,910
7210	500,000 or more but less than 2.5 million												
	1-15 chemicals	flat		4.41	16.50	20.91	\$ 7,623	\$ 7,427	2	97%	14	\$ 103,978	\$ 106,727
	16-50 chemicals	flat		4.41	16.50	20.91	\$ 7,623	\$ 7,427	2	97%	27	\$ 200,529	\$ 205,830
	51+ chemicals	flat		4.41	16.50	20.91	\$ 7,623	\$ 7,427	2	97%	13	\$ 96,551	\$ 99,103
	Community Warning System Fee	flat	[6]					\$ 3,744					
7211	2.5 million or more but less than 10 million												
	1-15 chemicals	flat		6.62	16.50	23.12	\$ 8,427	\$ 11,898	2	141%	2	\$ 23,796	\$ 16,854
	16-50 chemicals	flat		6.62	16.50	23.12	\$ 8,427	\$ 11,898	2	141%	5	\$ 59,490	\$ 42,136
	51+ chemicals	flat		6.62	16.50	23.12	\$ 8,427	\$ 11,898	2	141%	6	\$ 71,388	\$ 50,563
	Community Warning System Fee	flat	[6]					\$ 6,823					
7212	10 million or more but less than 100 million												
	1-15 chemicals	flat		8.82	44.00	52.82	\$ 19,257	\$ 19,441	2	101%	1	\$ 19,441	\$ 19,257
	16-50 chemicals	flat		8.82	44.00	52.82	\$ 19,257	\$ 19,441	2	101%	7	\$ 136,087	\$ 134,799
	51+ chemicals	flat		8.82	44.00	52.82	\$ 19,257	\$ 19,441	2	101%	4	\$ 77,764	\$ 77,028
	Community Warning System Fee	flat	[6]					\$ 12,247					
7213	100 million or more but less than 1 billion												
	Community Warning System Fee	flat	[6]					\$ 23,787					
7214/7216	1 billion+ including Refinery												
	Community Warning System Fee	flat	[6]					\$ 52,953					
7217	Conditionally Exempt	flat		0.13	0.00	0.13	\$ 48	No Charge	1	0%	8	\$ -	\$ 383
	Service Fees		[2]										
	Exemption Application Review	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	8	\$ 2,056	\$ 2,917

No.	Fee Description	Fee Unit Type	Notes	Activity Service Cost Analysis			Cost of Service Per Activity	Cost Recovery Analysis			Annual Estimated Revenue Analysis		
				Estimated Average Labor Time Per Activity (hours)				Current Fee	Routine Inspection Frequency (years)	Existing Cost Recovery %	Estimated Volume of Activity	Annual Estimated Revenues	
				Hazmat	Training	Total						Current Fee	Full Cost Recovery
				\$ 365	\$ 365								
7300	Underground Storage Tank Program												
7302	UST Base Fee (1st Tank)	flat		6.50	0.40	6.90	\$ 2,515	\$ 480	1	19%	381	\$ 182,880	\$ 958,376
7304	Each Additional Tank	per tank		1.58	0.00	1.58	\$ 574	\$ 720	1	125%	933	\$ 671,760	\$ 535,739
7314	UST Installation (1st Tank)	flat		19.95	0.00	19.95	\$ 7,273	\$ 4,753	1	65%	3	\$ 14,259	\$ 21,820
7314	Each Additional Tank	per tank		2.10	0.00	2.10	\$ 766	\$ 514	1	67%	9	\$ 4,626	\$ 6,891
7316	UST Closure (1st Tank)	flat		7.35	0.00	7.35	\$ 2,680	\$ 1,798	1	67%	8	\$ 14,384	\$ 21,437
7316	Each Additional Tank	per tank		1.58	0.00	1.58	\$ 574	\$ 385	1	67%	8	\$ 3,080	\$ 4,594
	UST Modification												
7324	Minor	per tank		3.68	0.00	3.68	\$ 1,340	\$ 938	1	70%	60	\$ 56,280	\$ 80,389
7323	Moderate	per tank		8.40	0.00	8.40	\$ 3,062	\$ 2,698	1	88%	30	\$ 80,940	\$ 91,874
7321	Major	per tank		14.18	0.00	14.18	\$ 5,168	\$ 4,753	1	92%	10	\$ 47,530	\$ 51,679
7500	California Accidental Release Prevention (CalARP) Program												
7503	Industrial Safety Ordinance												
	Bulk Liquid Storage	flat		183.75	0.00	183.75	\$ 66,991	NEW	3	0%	0	\$ -	\$ -
	Program 3/ISO Facility (ISO only fee)	flat		168.84	0.00	168.84	\$ 61,555	\$ 15,331	1	25%	4	\$ 61,324	\$ 246,222
	Program 4/ISO Facility (ISO only fee)	flat		162.96	0.00	162.96	\$ 59,412	\$ 141,792	1	239%	3	\$ 425,375	\$ 178,235
7505	CalARP Program Annual Regulatory Inspection		[5]										
	Program 1	flat		19.95	0.00	19.95	\$ 7,273	\$ 5,113	3	70%	8	\$ 40,900	\$ 58,187
	Program 2	flat		41.00	0.00	41.00	\$ 14,948	\$ 15,530	3	104%	12	\$ 186,359	\$ 179,372
	Program 3	flat		183.75	0.00	183.75	\$ 66,991	\$ 68,522	3	102%	12	\$ 822,261	\$ 803,895
	Program 3/ISO Facility (CUPA only fee)	flat		112.56	0.00	112.56	\$ 41,037	\$ 33,698	3	82%	4	\$ 134,792	\$ 164,148
	Program 4/ISO Facility (CUPA only fee)	flat		244.44	0.00	244.44	\$ 89,118	\$ 233,748	3	262%	3	\$ 701,244	\$ 267,353
	CalARP Risk Factor Analysis Fee	flat		To be calculated using existing MCEI			Included above						
7600	Aboveground Petroleum Storage Act Program												
7601	Less than 10,000 gallons	flat		1.05	0.01	1.06	\$ 386	\$ 536	3	139%	256	\$ 137,216	\$ 98,921
7602	10,000 gallons or more but less than 100,000 gallons	flat		2.63	0.10	2.72	\$ 992	\$ 1,206	2	122%	66	\$ 79,596	\$ 65,469
7603	100,000 gallons or more but less than 1 million gallons	flat		8.40	3.42	11.82	\$ 4,308	\$ 4,822	2	112%	9	\$ 43,398	\$ 38,770
7604	1 million gallons or more but less than 10 million gallons	flat		13.65	13.93	27.58	\$ 10,054	\$ 6,429	2	64%	5	\$ 32,145	\$ 50,272
7605	10 million gallons or more but less than 100 million gallons	flat		21.00	17.47	38.47	\$ 14,025	\$ 9,644	2	69%	5	\$ 48,220	\$ 70,127
7606	100 million gallons ore more	flat		84.00	32.67	116.67	\$ 42,534	\$ 16,074	1	38%	7	\$ 112,518	\$ 297,736

No.	Fee Description	Fee Unit Type	Notes	Activity Service Cost Analysis			Cost of Service Per Activity	Cost Recovery Analysis			Annual Estimated Revenue Analysis		
				Estimated Average Labor Time Per Activity (hours)				Current Fee	Routine Inspection Frequency (years)	Existing Cost Recovery %	Estimated Volume of Activity	Annual Estimated Revenues	
				Hazmat	Training	Total						Current Fee	Full Cost Recovery
				\$ 365	\$ 365								
1	Miscellaneous Fees												
	Incident Response Fee		[4]										
	During Business Hours	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	0	\$ -	\$ -
	After Business Hours	per hour		1.00	0.00	1.00	\$ 404	\$ 280	1	69%	0	\$ -	\$ -
	Re-Inspection Fee	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	0	\$ -	\$ -
	Audit Verification Fee	per hour		1.00	0.00	1.00	\$ 365	\$ 151	1	41%	0	\$ -	\$ -
	Initial Permit Processing Fee	flat		0.26	0.00	0.26	\$ 96	\$ 60	1	63%	0	\$ -	\$ -
2	For services requested, which have no fee listed in this fee schedule												
	During Normal Business Hours	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	0	\$ -	\$ -
	After Normal Business Hours	per hour		1.00	0.00	1.00	\$ 404	\$ 280	1	69%	0	\$ -	\$ -
TOTAL HAZARDOUS MATERIALS												\$ 9,443,967	\$ 9,567,589

Notes

- [1] Sourced from: "fee-exhibits.pdf" provided by the County
- [2] Per unstaffed remote facility
- [3] Permit to be charged for each instance at the facility, rather than one fee for the entire facility regardless of the number of treatment units.
- [4] First incident response of \$3,000 or less to a regulated facility in the HMBP Program exempt from billing.
- [5] Additional program training costs will be charged to each individual facility based on facility risk index level calculated and maintained by County.
- [6] Proportional CWS costs calculated by County. NBS did not evaluate. See Appendix E for calculation details.

APPENDIX B

Fully-Burdened Hourly Rate – Hazardous Materials Programs

LABOR EXPENDITURES AND STATISTICS

Expenditure or Statistic	Notes	Allocated or Direct Assignment of Cost to Functional Activity						
		2022-23 Adopted Budget	Adjustments	Net Divisional Expenditures to be Considered	General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
<i>Labor Hours Allocation Percentage - All</i>				100%	55.23%	5.01%	1.21%	38.55%
<i>Labor Hours Allocation Percentage - Hazmat</i>				100%	58.14%	0.00%	1.27%	40.59%
<i>Labor Hours Allocation Percentage - CWS</i>				100%	0.00%	100.00%	0.00%	0.00%
Hazmat	[1]							
1011 Permanent Salaries	[3]	\$ 5,350,989	462,384	\$ 5,813,373	\$ 3,380,057	\$ -	\$ 73,804	\$ 2,359,512
1013 Temporary Salaries	[5]	100,000	(100,000)	-	-	-	-	-
1014 Permanent Overtime		150,000	-	150,000	87,214	-	1,904	60,881
1015 Deferred Comp		57,832	-	57,832	33,625	-	734	23,473
1019-1070 Benefits	[3]	3,525,576	322,232	3,847,808	2,237,223	-	48,850	1,561,735
Subtotal Hazmat		\$ 9,184,396	\$ 684,617	\$ 9,869,013	\$ 5,738,119	\$ -	\$ 125,293	\$ 4,005,601
Community Warning System	[6]							
Salaries & Benefits		\$ 538,537	-	\$ 538,537	\$ -	\$ 538,537	\$ -	\$ -
Subtotal Community Warning System		\$ 538,537	\$ -	\$ 538,537	\$ -	\$ 538,537	\$ -	\$ -
TOTAL LABOR		\$ 9,722,933	\$ 684,617	\$ 10,407,550	\$ 5,738,119	\$ 538,537	\$ 125,293	\$ 4,005,601
Functional "Productive" Labor Hours				74,660	40,655	4,983	930	28,092

RECURRING NON-LABOR EXPENDITURES

Operating Expenditures By Budget Unit	Notes	Allocated or Direct Assignment of Cost to Functional Activity						
		2022-23 Adopted Budget	Adjustments	Net Divisional Expenditures to be Considered	General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
Hazmat	[1]							
2100 OFFICE EXPENSE		\$ 65,000	\$ -	\$ 65,000	\$ 37,793	\$ -	\$ 825	\$ 26,382
2102 BOOKS, PERIODICALS, SUBSCRIP		5,000	-	5,000	2,907	-	63	2,029
2103 POSTAGE		20,000	-	20,000	11,629	-	254	8,118
2110 COMMUNICATIONS		100,000	-	100,000	58,143	-	1,270	40,588
2111 TELEPHONE EXCHANGE		12,500	-	12,500	7,268	-	159	5,073
2130 SMALL TOOLS & INSTRUMENTS		5,000	-	5,000	2,907	-	63	2,029
2131, MINOR EQUIPMENT		50,000	-	50,000	29,071	-	635	20,294
2140 MEDICAL & LAB SUPPLIES		15,000	-	15,000	8,721	-	190	6,088
2150 FOOD		9,000	-	9,000	5,233	-	114	3,653
2160 CLOTHING & PERSONAL SUP		22,500	-	22,500	13,082	-	286	9,132
2170 HOUSEHOLD EXPENSE		500	-	500	291	-	6	203
2190 PUB & LEGAL NOTICES		2,500	-	2,500	1,454	-	32	1,015
2200 MEMBERSHIPS		15,000	-	15,000	8,721	-	190	6,088
2250, RENTS & LEASES-EQUIPMENT		15,000	-	15,000	8,721	-	190	6,088
2251 COMPUTER SOFTWARE COST		10,000	-	10,000	5,814	-	127	4,059
2262, BLDG OCCUPANCY COSTS		452,928	-	452,928	263,345	-	5,750	183,833
2270 MAINTENANCE - EQUIPMENT		12,500	-	12,500	7,268	-	159	5,073
2276 MNTN RADIO-ELECTRON EQUIP		10,000	-	10,000	5,814	-	127	4,059
2284, REQUESTED MAINTENANCE		50,000	-	50,000	29,071	-	635	20,294
2301 AUTO MILEAGE - EMPLOYEES		80,000	-	80,000	46,514	-	1,016	32,470
2303 OTHER TRAVEL - EMPLOYEES		1,000	-	1,000	581	-	13	406
2310 PROFESSIONAL/SPEC SVCS		277,278	-	277,278	277,278	-	-	-
2314 CONTRACTED SERVICES		20,000	-	20,000	20,000	-	-	-
2315 DATA PROCESSING SVCS		7,500	-	7,500	4,361	-	95	3,044
2320 OUTSIDE MEDICAL SERVICES		500	-	500	291	-	6	203
2326 Information Security charges		10,000	-	10,000	5,814	-	127	4,059
2328 ADMINISTRATION	[2]	337,886	(337,886)	-	-	-	-	-
2331 GSD Courier Svc.		4,000	-	4,000	2,326	-	51	1,624
2335 Other Telecom Charges		50,000	-	50,000	29,071	-	635	20,294
2000 OTHER INTRDPTMNTL CHARGES		10,000	-	10,000	5,814	-	127	4,059
2467, ED SUPPLIES & COURSES		20,000	-	20,000	11,629	-	254	8,118
2479 OTHER SPECIAL DEPT EXP		100,000	-	100,000	58,143	-	1,270	40,588
2490 MISC SERVICES & SUPPLIES		5,000	-	5,000	2,907	-	63	2,029
3000 Other charges		1,500	-	1,500	1,500	-	-	-
4000 FIXED ASSETS	[7]	100,000	(100,000)	-	-	-	-	-
5000 EXPENDITURE TRANSFERS	[7]	119,419	(119,419)	-	-	-	-	-
Subtotal Hazmat		\$ 2,016,511	\$ (557,305)	\$ 1,459,206	\$ 973,483	\$ -	\$ 14,732	\$ 470,990

RECURRING NON-LABOR EXPENDITURES

Operating Expenditures By Budget Unit	Notes	Allocated or Direct Assignment of Cost to Functional Activity						
		2022-23 Adopted Budget	Adjustments	Net Divisional Expenditures to be Considered	General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
Community Warning System	[6]							
2100 OFFICE EXPENSE		\$ 5,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -	\$ -
2103 POSTAGE		200	-	200	-	200	-	-
2110 COMMUNICATIONS		6,400	-	6,400	-	6,400	-	-
2111 TELEPHONE EXCHANGE		400	-	400	-	400	-	-
2131 MINOR FURNITURE/EQUIPMENT		1,000	-	1,000	-	1,000	-	-
2132 MINOR COMPUTER EQUIPMENT		5,000	-	5,000	-	5,000	-	-
2200 MEMBERSHIPS		700	-	700	-	700	-	-
2260 RENTS & LEASES - REAL ESTATE		65,700	-	65,700	-	65,700	-	-
2270 MAINTENANCE - EQUIPMENT		-	-	-	-	-	-	-
2284 REQUESTED MAINTENANCE		1,000	-	1,000	-	1,000	-	-
2301 AUTO MILEAGE - EMPLOYEES		200	-	200	-	200	-	-
2303 OTHER TRAVEL - EMPLOYEES		3,000	-	3,000	-	3,000	-	-
2310 PROFESSIONAL/SPEC SVCS		805,712	-	805,712	-	805,712	-	-
2467 ED SUPPLIES & COURSES		5,000	-	5,000	-	5,000	-	-
2473 SPECIALIZED PRINTING		10,000	-	10,000	-	10,000	-	-
4952 MISC EQUIPMENT		60,000	-	60,000	-	60,000	-	-
5011 REIMBURSEMENTS GOV/GOV		12,000	-	12,000	-	12,000	-	-
Subtotal Community Warning System		\$ 981,312	\$ -	\$ 981,312	\$ -	\$ 981,312	\$ -	\$ -
Total Non-Labor		\$ 2,997,823	\$ (557,305)	\$ 2,440,518	\$ 973,483	\$ 981,312	\$ 14,732	\$ 470,990

OVERHEAD COSTS

					Allocated or Direct Assignment of Cost to Functional Activity			
Allocated Indirect/Support Services	N o t e s	Overhead Cost	Adjustments	Net Divisional Expenditures to be Considered	General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
Department Administration	[2]	\$ 337,886	\$ -	\$ 337,886	\$ 186,614	\$ 16,927	\$ 4,075	\$ 130,270
Countywide Overhead	[4]	171,666	-	171,666	94,811	8,600	2,070	66,184
TOTAL OVERHEAD COSTS		\$ 509,552	\$ -	\$ 509,552	\$ 281,425	\$ 25,528	\$ 6,145	\$ 196,454

SUMMARY OF LABOR, NON-LABOR, & OVERHEAD COSTS

			Allocated or Direct Assignment of Cost to Functional Activity			
Cost Element	N o t e s	Established Cost	General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
Labor		\$ 10,407,550	\$ 5,738,119	\$ 538,537	\$ 125,293	\$ 4,005,601
Recurring Non-Labor		2,440,518	973,483	981,312	14,732	470,990
Overhead		509,552	281,425	25,528	6,145	196,454
TOTAL LABOR, NON-LABOR, & OVERHEAD COST		\$ 13,357,619	\$ 6,993,027	\$ 1,545,377	\$ 146,171	\$ 4,673,045

ALLOCATION OF COMMON ACTIVITIES

			Allocated or Direct Assignment of Cost to Functional Activity		
Cost Layer	N o t e s	Established Cost	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
General Support Activities		\$ 6,993,027	\$ -	\$ 212,104	\$ 6,780,923
Total		\$ 6,993,027	\$ -	\$ 212,104	\$ 6,780,923

FULLY-BURDENED HOURLY BILLING RATE FOR RECOVERY IN FEES

Expenditure Type	Notes	Functional Activities / Cost Pools			Total
		Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities	
Labor		\$ 538,537	\$ 125,293	\$ 4,005,601	\$ 4,669,431
Recurring Non-Labor		981,312	14,732	470,990	1,467,035
Overhead		25,528	6,145	196,454	228,126
Allocated Common Activities		-	212,104	6,780,923	6,993,027
Division Subtotal		\$ 1,545,377	\$ 358,275	\$ 11,453,968	\$ 13,357,619
Other Funding Sources					
Grants / Misc Funding				\$ (524,418)	\$ (524,418)
R9200 - License/Permit/Franchises				(150,000)	(150,000)
R9300 - Fines/Forfeits/Penalties				(485,000)	(485,000)
R9800 - Miscellaneous Revenue				(53,000)	(53,000)
Other Funding Source Subtotal				\$ (1,212,418)	\$ (1,212,418)
Division Total		\$ 1,545,377	\$ 358,275	\$ 10,241,550	\$ 12,145,201
Cost per Direct Hour Recoverable from Fees for Service		n/a	n/a	\$ 365	
	<i>Reference: Direct Hours Only</i>	n/a	n/a	28,092	

Notes

- [1] Sourced from: "FY 2022-2023 Budget Comparison.xlsx" provided by County
- [2] Reclass budgeted Administration costs
- [3] Budget adjustment to add (3) Supervising Hazardous Materials Specialists and remove (1) Assistant Director. Adjustment also includes increase in salary & benefit for Assistant Director and Director as a result of the reorganization.
- [4] Source: "ccap_apv_fy2223_07.pdf" found on SCO website. Shared 50% to Hazmat based on budget allocation methodology.
- [5] Not currently utilizing County temporary support
- [6] Sourced from: "FY22-23 Approved Budget (1).pdf" provided by County
- [7] Capital expenditures and transfers excluded from calculation

APPENDIX C

Comparative Fee Survey – Hazardous Materials Programs

Contra Costa County					Comparison Agencies				
No.	Fee Description	Fee Unit Type	Current Fee	Full Cost Recovery	Alameda County	Sacramento County	San Mateo County	Santa Clara County	Sonoma County
7100	Hazardous Waste Generator Program								
	Annual Permit Fee								
7110/7140	Very Small Quantity Generator	flat	NEW	\$ 200	Generator: Self-Employed \$453 1-4 Employees \$543 5-9 Employees \$640 10-19 Employees \$895 20-49 Employees \$1,037 50-99 Employees \$1,316 100-499 Employees \$1,679 Over 499 Employees \$2,025 Silver-Only Haz Waste Generator: \$348 CA LQG - HW Generator: Self-Employed \$814 1-4 Employees \$865 5-9 Employees \$981 10-19 Employees \$1,315 20-49 Employees \$1,626 50-99 Employees \$2,285 100-499 Employees \$2,944 Over 499 Employees \$3,627 RCRA LQG - HW Generator: Self-Employed \$814 1-4 Employees \$865 5-9 Employees \$981 10-19 Employees \$1,315 20-49 Employees \$1,626 50-99 Employees \$2,285 100-499 Employees \$2,944 Over 499 Employees \$3,627 Recycler-Waste and Non-Waste Generating: Self-Employed \$402 1-4 Employees \$439 5-9 Employees \$475 10-19 Employees \$510 20-49 Employees \$546 50-99 Employees \$583 100-499 Employees \$619 Over 499 Employees \$655		<27 Gal./yr: \$193 <1 Ton/yr: \$1,160		
7101/7131	Less than 5 tons/year	flat	\$ 485	\$ 468			\$ 1,255	Generates Waste Oil Only: \$244 Generates <100 Kg/Yr: \$244	
7102/7132	5 tons or more but less than 12 tons/year	flat	\$ 658	\$ 526				Generates 100 Kg To < 5 Tons/Year: \$510 Generates 5 To <25 Tons/Year: \$732	Small Quantity Generator Permits: 325 gallons to 5 tons with source reduction recycle per year: \$300
7103/7133	12 tons or more but less than 25 tons/year	flat	\$ 986	\$ 1,017				6-25 Tons/yr: \$1,331 Generates 25 To <50 Tons/Year: \$1,130 Generates 50 To <250 Tons/Year: \$1,611	325 gallons to 5 tons without source reduction recycle per year: \$374 Less than 325 gallons per year: \$192
7104/7134	25 tons or more but less than 50 tons/year	flat	\$ 1,516	\$ 2,165			\$ 2,050	Generates 250 To <500 Tons/Year: \$2,236	Recycle less than 5 gallons per month: \$140
7105/7135	50 tons or more but less than 250 tons/year	flat	\$ 3,188	\$ 4,080			\$ 5,127	Generates 500 To <1,000 Tons/Year: \$3,275 Generates 1,000 To <2,000 Tons/Year: \$4,671	Vineyard hazardous waste 325 gallons to 5 tons with source reduction per year: \$226
7106/7136	250 tons or more but less than 500 tons/year	flat	\$ 10,559	\$ 12,250			\$ 25,631	Generates 2,000 Or More Tons/Year: \$6,663	Vineyard hazardous waste less than 325 gallons per year: \$146
7107/7137	500 tons or more but less than 1,000 tons/year	flat	\$ 16,517	\$ 17,226			\$ 51,261	Generates <10 Gal/Year: \$109 Silver Waste Only <100 Kg/Year: \$152	Vineyard hazardous waste Recycle less than 5 gallons per month(Exempt): \$N/A
7108/7138	1,000 tons or more but less than 2,000 tons/year	flat	\$ 26,897	\$ 24,882				Hw Generator, Add'l Contiguous Facility: \$386 Hw Generator-Add'l Contig Fac (RCRA LQG): \$386	Treatment Permits: \$351
7109/7139	2,000 tons or more/year	flat	\$ 57,409	\$ 40,195				No comparison available	Large Quantity Generator Permits: 5 to less than 25 ton per year: \$1,053 25 to less than 250 tons per year: \$1,588 250 to less than 500 tons per year: \$3,141
	Onsite Treatment								Greater than 500 tons per year: \$8,668
7182/7186	Permit by Rule (Fixed Units)	per instance	\$ 3,068	\$ 6,295	Permit by Rule: \$833 HW Permit by Rule Household: \$1,587	\$531 HHW - Permanent: \$1,287	\$ 1,140	\$ 1,335	
7180	Conditional Authorization	per instance	\$ 3,068	\$ 5,147	\$ 825	\$ 531	\$ 1,140	\$ 1,229	
7111/7181	Conditional Exemption	per instance	\$ 614	\$ 2,467	Specific Waste: \$575 SQ Treat: \$567 Commercial Laundry: \$558 Limited: \$550	\$ 149	\$ 100	\$ 306	
	Service Fees - Application Review								
7184/7187/7188	During Normal Business Hours	per hour	\$ 257	\$ 365	\$174/hr	\$213/hr	\$198/hr	\$353/hr	
	After Normal Business Hours	per hour	\$ 280	\$ 404					

Contra Costa County					Comparison Agencies				
No.	Fee Description	Fee Unit Type	Current Fee	Full Cost Recovery	Alameda County	Sacramento County	San Mateo County	Santa Clara County	Sonoma County
7200	Hazardous Materials Business Plan Program								
	Annual Permit Fee								
7201	Less than 1,000	flat	\$ 254	\$ 421	<u>1 Type HM</u> Category 1 \$506 <u>1-5 Types HM</u> Category 1 \$762 Category 2 \$794 Category 3 \$823 Category 4 \$900 Category 5 \$946 Category 6 \$998 Category 7 \$1,055 Category 8 \$1,118 <u>6-10 Types HM</u> Category 1 \$1,032 Category 2 \$1,067 Category 3 \$1,108 Category 4 \$1,149 Category 5 \$1,195 Category 6 \$1,241 Category 7 \$1,293 Category 8 \$1,344 <u>11-20 Types HM</u> Category 1 \$1,260 Category 2 \$1,298 Category 3 \$1,341 Category 4 \$1,385 Category 5 \$1,434 Category 6 \$1,482 Category 7 \$1,537 Category 8 \$1,591 <u>21-100 Types HM</u> Category 1 \$2,237 Category 2 \$2,340 Category 3 \$2,460 Category 4 \$2,544 Category 5 \$2,646 Category 6 \$2,749 Category 7 \$2,911 Category 8 \$3,013 <u>>100 Types HM</u> Category 1 \$2,598 Category 2 \$2,700 Category 3 \$2,803 Category 4 \$2,905 Category 5 \$3,007 Category 6 \$3,109 Category 7 \$3,212 Category 8 \$3,314 Category 19 \$17,893 Category 20 \$22,666 Category 21 \$27,436 Category 22 \$32,209				
7202/7203	1,000 or more but less than 10,000	flat	\$ 672	\$ 531					
7204/7205	10,000 or more but less than 100,000								
	1-15 chemicals	flat	\$ 1,051	\$ 935					
	16-50 chemicals	flat	\$ 1,051	\$ 1,357					
	51+ chemicals	flat	\$ 1,051	\$ 1,475					
7206/7207	100,000 or more but less than 250,000								
	1-15 chemicals	flat	\$ 1,905	\$ 1,171					
	16-50 chemicals	flat	\$ 1,905	\$ 1,653					
	51+ chemicals	flat	\$ 1,905	\$ 1,751					
7208/7209	250,000 or more but less than 500,000								
	1-15 chemicals	flat	\$ 3,522	\$ 1,971					
	16-50 chemicals	flat	\$ 3,522	\$ 2,172					
	51+ chemicals	flat	\$ 3,522	\$ 2,273					
7210	500,000 or more but less than 2.5 million								
	1-15 chemicals	flat	\$ 7,427	\$ 7,623					
	16-50 chemicals	flat	\$ 7,427	\$ 7,623					
	51+ chemicals	flat	\$ 7,427	\$ 7,623					
	Community Warning System Fee	flat	\$ 3,744						
7211	2.5 million or more but less than 10 million								
	1-15 chemicals	flat	\$ 11,898	\$ 8,427					
	16-50 chemicals	flat	\$ 11,898	\$ 8,427					
	51+ chemicals	flat	\$ 11,898	\$ 8,427					
	Community Warning System Fee	flat	\$ 6,823						
7212	10 million or more but less than 100 million								
	1-15 chemicals	flat	\$ 19,441	\$ 19,257					
	16-50 chemicals	flat	\$ 19,441	\$ 19,257					
	51+ chemicals	flat	\$ 19,441	\$ 19,257					
	Community Warning System Fee	flat	\$ 12,247						
7213	100 million or more but less than 1 billion		\$ 34,242	\$ 36,121					
	Community Warning System Fee	flat	\$ 23,787						
7214/7216	1 billion+ including Refinery		\$ 70,389	\$ 64,220					
	Community Warning System Fee	flat	\$ 52,953						
7217	Conditionally Exempt	flat	No Charge	\$ 48					
	Service Fees								
	Exemption Application Review	per hour	\$ 257	\$ 365					

Contra Costa County					Comparison Agencies				
No.	Fee Description	Fee Unit Type	Current Fee	Full Cost Recovery	Alameda County	Sacramento County	San Mateo County	Santa Clara County	Sonoma County
7300	Underground Storage Tank Program								
7302	UST Base Fee (1st Tank)	flat	\$ 480	\$ 2,515	1 Container: \$2,146 2 Containers: \$2,428 3 Containers: \$2,551 4 Containers: \$2,892 5 Containers: \$3,015 6 Containers: \$3,391 7 Containers: \$3,514 8 Containers: \$3,638 9 Containers: \$3,761 10 Containers: \$3,885 UST 11: \$2,689	Operating Permit: 1 Tank: \$1,193 2 Tanks: \$1,387 3 Tanks: \$1,565 4 Tanks: \$1,75 5 Tanks: \$1,987 6 Tanks: \$2,205 7 Tanks: \$2,439 8 Tanks: \$2,651 9 Tanks: \$2,810 10 Tanks: \$2,959 Each Additional Tank: \$211	\$ 828	\$ 1,130	\$ 1,637
7304	Each Additional Tank	per tank	\$ 720	\$ 574	Over 10 Containers: \$123/tank	Installation: 1 Tank: \$4,309 2 Tanks: \$4,657 3 Tanks: \$5,011 4 Tanks: \$5,357 5 Tanks: \$5,737 Each Additional: \$642	\$ 263	\$ 470	\$ 956
7314	UST Installation (1st Tank)	flat	\$ 4,753	\$ 7,273	\$ 8,768	3 Tanks: \$5,011 4 Tanks: \$5,357 5 Tanks: \$5,737 Each Additional: \$642	\$ 3,320	\$ 3,869	\$ 1,878
7314	Each Additional Tank	per tank	\$ 514	\$ 766	\$ 840	Upgrade to Existing UST System, Including Piping: 1 Tank: \$2,769 2 Tanks: \$3,195 3 Tanks: \$3,621 4 Tanks: \$4,047 5 Tanks: \$4,473 Each Additional Tank: \$1,228	No comparison available	No comparison available	\$ 263
					Plan Check - UST 1 - System Install: \$719 Plan Check - UST 2 - System Install: \$1,069 Plan Check - UST 3 - System Install: \$1,418 Plan Check - UST 4 - System Install: \$1,778 Plan Check - UST 6 - System Install: \$2,452 Plan Check - UST 8 - System Install: \$3,092 Plan Check - UST 14 - System Install: \$4,872 Plan Check - UST Per Tank Over 20 - System Install: \$289	Upgrade to Existing UST system, Without Piping: 1 Tank: \$1,704 2 Tanks: \$2,130 3 Tanks: \$2,556 4 Tanks: \$2,982 5 Tanks: \$3,408 Each Additional Tank: \$707			
7316	UST Closure (1st Tank)	flat	\$ 1,798	\$ 2,680	\$ 3,161	Underground Storage Tank Repair: Tank, Piping or Monitoring System: \$1,209	Abandonment/Removal Fee: \$2,117	\$ 2,660	\$ 1,419
7316	Each Additional Tank	per tank	\$ 385	\$ 574	\$ 123	Underground Storage Tank Repair: Spill Containment: \$817	\$ 453	\$ 1,060	\$ 443
	UST Modification					Tank Removal and Permanent Closure In Place: 1 Tank: \$1,495 2 Tanks: \$1,704 3 Tanks: \$1,917 4 Tanks: \$2,130 5 Tanks: \$2,343 Each Additional Tank: \$247		\$ 706	
7324	Minor	per tank	\$ 938	\$ 1,340	Minor: \$1,324 UST 2 - Modification: \$1,069 UST 3 - Modification: \$1,418 UST 4 - Modification: \$1,778 UST 9 - Modification: \$3,410 Major: \$2,741	Underground Storage Tank Temporary Closure - 1 Year: \$828	\$ 793	No comparison available	Repair Permit: \$625
7323	Moderate	per tank	\$ 2,698	\$ 3,062					
7321	Major	per tank	\$ 4,753	\$ 5,168					

Contra Costa County					Comparison Agencies				
No.	Fee Description	Fee Unit Type	Current Fee	Full Cost Recovery	Alameda County	Sacramento County	San Mateo County	Santa Clara County	Sonoma County
7500	California Accidental Release Prevention (CalARP) Program								
7503	Industrial Safety Ordinance								
	Bulk Liquid Storage	flat	NEW	\$ 66,991	<i>no comparison available</i>	<i>no comparison available</i>	<i>no comparison available</i>	<i>no comparison available</i>	<i>no comparison available</i>
	Program 3/ISO Facility (ISO only fee)	flat	\$ 15,331	\$ 61,555					
	Program 4/ISO Facility (ISO only fee)	flat	\$ 141,792	\$ 59,412					
	Tier 3: 21-30 processes	flat	\$ 210,948	\$ -					
	Tier 4: 31+ processes	flat	\$ 125,565	\$ -					
7505	CalARP Program Annual Regulatory Inspection								
	Program 1	flat	\$ 5,113	\$ 7,273	CalARP DEH Review (hourly): \$174	Plan Review: Program Level 1 - \$2,313 Program Level 2 or 3 - \$5,074 Update/Revision - \$213	\$ 583	\$ 1,328	
	Program 2	flat	\$ 15,530	\$ 14,948	CalARP Outside Consultant Review: \$141.50	Annual Activity: Program Level 1 - \$1,303 Program Level 2 - \$2,338 Program Level 3 - \$2,893 First Additional NCWS - \$217	\$ 777	\$ 1,558	
	Program 3		\$ 68,522	\$ 66,991	CalARP State Surcharge: \$270		\$ 971	\$ 1,558	\$ 841
	Program 3/ISO Facility	flat	\$ 33,698	\$ 41,037					
	Program 4/ISO Facility	flat	\$ 233,748	\$ 89,118		Additional Covered Process \$767			
	CalARP Risk Factor Analysis Fee	flat	Included above	To be calculated using existing MCEI			<i>No comparison available</i>	<i>No comparison available</i>	
7600	Aboveground Petroleum Storage Act Program								
7601	Less than 10,000 gallons	flat	\$ 536	\$ 386		\$ 122			
7602	10,000 gallons or more but less than 100,000 gallons	flat	\$ 1,206	\$ 992	Exempt Farms, Nursery, Construction Site: \$523	\$ 575	Tank Storage Capacity = >1,320 And <5k Gal: \$300 = >5k And <10k Gal: \$300 = >10k And <100k Gal: \$334 = >100k And <1 mil Gal: \$400 = >1 mil And <10 mil Gal: \$466 = >10 mil And <100 mil Gal: \$600 = >100 mil Gal: \$733	APSA Facility - SPCC Exempt: \$117	Tier 1: \$258
7603	100,000 gallons or more but less than 1 million gallons	flat	\$ 4,822	\$ 4,308	SPCC 1,320 - 5,000 gal: \$841 SPCC 5,001-10k gal: \$890 SPCC >10k gal: \$1,683 State Surcharge: \$26 Tank in Underground: \$841	\$ 679		APSA Facility-SPCC Template (<10,000 Gal Cap): \$353	Tier 2: \$518
7604	1 million gallons or more but less than 10 million gallons	flat	\$ 6,429	\$ 10,054		\$ 1,184		APSA Facility-10,000 To <50,000 Gal Capacity: \$824	Tier 3: 1,036
7605	10 million gallons or more but less than 100 million gallons	flat	\$ 9,644	\$ 14,025		\$ 1,341		APSA Facility-50,000+ Gal Capacity: \$1,413	Tank Closure: \$485
7606	100 million gallons ore more	flat	\$ 16,074	\$ 42,534		\$ 1,341			Ea. Add'l: \$124
1	Miscellaneous Fees								
	Incident Response Fee								
	During Business Hours	per hour	\$ 257	\$ 365	\$ 174	\$ 213			\$ 124
	After Business Hours	per hour	\$ 280	\$ 404					\$ 185
	Re-Inspection Fee	per hour	\$ 257	\$ 365	\$ 174	\$ 213			\$ 170
	Audit Verification Fee	per hour	\$ 151	\$ 365			<i>No comparison available</i>	<i>No comparison available</i>	
	Community Warning System Fee	per hour	\$ 101	\$ -	<i>No comparison available</i>	<i>No comparison available</i>			<i>No comparison available</i>
	Initial Permit Processing Fee	flat	\$ 60	\$ 96					
2	For services requested, which have no fee listed in this fee schedule								
	During Normal Business Hours	per hour	\$ 257	\$ 365	\$ 174	\$ 213	\$ 198	\$ 353	\$ 124
	After Normal Business Hours	per hour	\$ 280	\$ 404					\$ 185

APPENDIX D

Modified Chemical Exposure Index

CONTRA COSTA HEALTH CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM RELATIVE RISK DETERMINATION METHODOLOGY

I. INTRODUCTION. Contra Costa Health uses the Chemical Exposure Index (CEI)¹, as modified, to rank the relative potential of acute health hazard to people from possible chemical release incidents. The Modified CEI (MCEI) is used by the Department for the purpose of assessing stationary source fees. The MCEI formula is intended to provide a relatively simple method for comparing relative chemical toxic hazards, resulting in fees that fairly reflect the hazard potential of the facilities in the County.

The MCEI accounts for the following six factors that could influence the magnitude of a potential regulated substance exposure:

1. The potential health hazard posed by the regulated substance measured by the toxic endpoint and the vapor pressure (volatilization driving force) of the material.
2. The vapor quantity available for dispersion based on the largest single container of the regulated substance.
3. The distance to the nearest receptor.
4. The degree of dispersivity and vapor density as related to the molecular weight of the substance.
5. The number of processes using regulated substances at a stationary source.
6. Accident history.

¹For information regarding the Chemical Exposure Index, see *Dow Chemical's Chemical Exposure Guide*, published by the Center for Chemical Process Safety, American Institute of Chemical Engineers, 1994, New York, New York.

II. MODIFIED CHEMICAL EXPOSURE INDEX (MCEI) DETERMINATION METHODOLOGY.

A. Regulated Substance MCEI.

A Regulated Substance MCEI is determined for each regulated substance handled at a stationary source in quantities above the threshold quantities established by the regulations for the California Accidental Release Prevention Program. The MCEI for a Regulated Substance is determined by multiplying the applicable scale numbers for the various risk factors (Subsection B), as follows:

$$\begin{array}{rclclcl}
 1. & & 2. & & 3. & & 4. & & 5. \\
 \text{Regulated} & & \text{Largest} & & \text{Distance} & & \text{Molecular} & & \text{Modified} \\
 \text{Substance} & & \text{Single} & & \text{Scale No.} & & \text{Weight} & & \text{Chemical Exposure} \\
 \text{Scale No.} & \times & \text{Container} & \times & & \times & \text{Scale No.} & = & \text{Index} \\
 & & \text{Scale No.} & & & & & &
 \end{array}$$

B. Determination of Risk Factor Scale Numbers.

1. Regulated Substance Scale Number. Both the concentration at which a material is acutely toxic and the vapor/partial pressure that creates the driving force to volatilize and maintain the material in the atmosphere affect this scale number. For purposes of this scale number, the toxic endpoints, in parts per million, are used as the toxicity measurement. Volatility is measured by the vapor/partial pressure in mm Hg @ 25°C (millimeters of Mercury at 25 degrees Centigrade), up to a maximum of 760mm Hg.

The Regulated Substance Scale factor is determined by multiplying the toxic endpoint concentration by 760, and dividing that number by the vapor/partial pressure in mm Hg. The Regulated Substance Scale factors are assigned the following Regulated Substance Scale Numbers.

Regulated Substance Scale Factor	Regulated Substance Scale Number
0 - .99	5
1.0 - 9.9	4
10.0 - 99.0	3
100 - 999	2
1,000 - 1000,000	1
>100,000	0

For **flammable substances** and for **sulfuric acid** in a mixture with a flash point < 73°F, the Regulated Substances Scale Number of two (2) is assigned.

2. Largest Single Container Scale Number. The Scale Number for the largest single container is determined by taking the Log₁₀ of the maximum amount of regulated substance, in

pounds, stored in a single container at the stationary source.

3. Distance Scale Number. This factor quantifies the distance between the point of release and the public or environmental receptor. The term public receptor means offsite residences, institutions (e.g., schools, hospitals), industrial, commercial and office buildings, parks or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat or overpressure, as a result of an accidental release. (See Title 19 Cal. Code Regs. Division 5 Chapter 2) The term environmental receptor means natural areas such as national or state parks, forests, or monuments, officially designated wildlife sanctuaries, preserves, refuges or areas, and federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints, as a result of an accidental release and that can be identified on local U.S. Geological Survey maps. (See Title 19 Cal. Code Regs. Division 5 Chapter 2)

Distance	Scale Number
<1,000 ft.	4
1,000 - 5,279 ft.	3
1 mile - 5 miles	2
>5 miles - 15 miles	1
>15 miles	0

4. Molecular Weight Scale Number. The density of the vapor is directly related to the molecular weight and inversely affects the rate of dispersion. Therefore, regulated substances have been assigned the following scale numbers based upon their molecular weight.

Molecular Weight	Scale Number
>45	4
34 - 45	3
23 - 33	2
15-22	1
<15	0

Exceptions. The above formula does not apply to substances such as ammonia and hydrogen fluoride, which form heavier-than-air vapor clouds due to the formation of aerosols (ammonia) and strong intermolecular forces (hydrogen fluoride). These regulated substances are assigned Scale Number 4.

C. Stationary Source MCEI. A stationary source’s MCEI is obtained by adding the Regulated Substance MCEI for each regulated substance handled at the stationary source, and multiplying that number by Process Scale Number for the stationary source. If there has been a level-three accidents (as defined by the Community Warning System) in the last three years, the MCEI will be increased by a factor of 10 % for each level-three accident in this time period.

1. Process Scale Number. The relative risk for an accidental release from a stationary source is directly related to the amount of handling of regulated substances at the source. A stationary source’s MCEI uses the number of California Accidental Release Prevention Program covered processes at a stationary source as a determination of this factor.

Number of Processes	Scale Number
>10	4
6 - 10	3
3 - 5	2
0 - 2	1

2. Accident History Scale Factor. A factor of 1.1 will be used for each level-three incident occurring in a rolling three-year period. The first accident in this time period will have a factor of 1.1. If there have been two level three accidents, the factor will be 1.2, etc.

Date: August 13, 2024

APPENDIX E

Community Warning System Fee Calculation

Contra Costa County Community Warning System Fee

Contra Costa Health (CCH) conducted a review of notification data from 2011 to 2023 associated with the Contra Costa County Hazardous Materials Incident Notification Policy. Contra Costa County regulated facilities made 2,825 notifications to CCH during this period as required by the Incident Notification Policy. The average number of notifications in relation to the number of regulated facilities revealed 88% were from refineries, while less than 12% were associated with facilities that store between 2.5 million and 5 billion pounds of hazardous materials. Facilities that store less than 2.5 million pounds made up the remaining notifications and were not statistically significant.

CCH has developed a dynamic billing structure for the Community Warning System (CWS) budget (currently \$1,545,377). Based on reported usage, as described above, the structure will have a breakdown of fees for the facility categories, as indicated in Table 1 below. Some facilities, such as chemical plants or refineries, are considered high-risk and are required to submit a Risk Management Plan to the U.S. Environmental Protection Agency and CCH. These facilities must have at least one Federal Program 3 process. The high-risk facilities will receive a base fee for core CWS system costs relating to messaging and notification, as indicated in Table 1. Every year, CWS will submit a new budget, and the costs will be redistributed based on the proposed distribution.

This billing structure is further supported by California Health and Safety Code section 25510 as well as AB 1646, which amended California Health and Safety Code (section 25536.6 et seq.). CCH administers the California Accidental Release Prevention (CalARP) Program, and this mandate requires a "local implementing agency" (LIA) to develop an integrated Alert and Warning system in coordination with local emergency management agencies, Unified Program Agencies, local first response agencies, petroleum refineries, and the public. This system will be used to notify the community surrounding a petroleum refinery in the event of an incident at the refinery that warrants the use of the notification system.

Table 1. CWS Fee Structure (based on number of notifications per regulated facility)

Community Warning System (CWS) Fee Structure		
Base fee for high-risk facilities*		\$ 28,071.00
Facility Status	Old Fee	New Fee, not including base fee
HMBP: OIL REFINERIES	\$ 52,952.75	\$ 252,145.09
HMBP: >100M-1B LBS	\$ 23,786.50	\$ 4,357.47
HMBP: >10M-100M LBS	\$ 12,247.23	\$ 4,357.47
HMBP: >2.5M-10M LBS	\$ 6,823.09	\$ 4,357.47