

Staff Report on the Determination and
Apportionment of CUPA Fees

Contra Costa County
Certified Unified Program Agency

Board of Supervisors
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I. INTRODUCTION

On January 1, 1997, Contra Costa County (“County”) was certified by the California Environmental Protection Agency (“CalEPA”) to be the Certified Unified Program Agency (“CUPA”) for all of Contra Costa County. In its capacity as a CUPA, the County, by and through the Hazardous Materials Programs (“HMP”) Division of the County Health Services Department, administers the following programs, pursuant to the authorities granted under Section 25404 of the Health and Safety Code:

- Hazardous Materials Business Plan (HMBP) Program¹
- Hazardous Waste Generator (HWG) Program²
- California Accidental Release Prevention (Cal/ARP) Program³
- Underground Storage Tank (UST) Program⁴
- Aboveground Petroleum Storage Act (APSA) Program⁵

As a CUPA, the County is required by statute to establish, and has established, a “single fee system.”⁶ Under the single fee system, a single fee is charged by the CUPA to fund all of its programs. The single fee replaced separate fees formerly charged for the above programs under separate legal authorities before the County was certified as a CUPA. The Contra Costa County CUPA is hereafter referred to as the “CUPA.” As the governing board of the CUPA, the Board of Supervisors is authorized and required to establish the amount to be paid by each person regulated by the unified program to pay the “necessary and reasonable costs” incurred by the CUPA.⁷ The amounts charged are hereafter collectively referred to as the “CUPA Fees.” CUPA Fees are imposed as the reasonable regulatory cost of issuing the annual CUPA permits to

¹ Health & Saf. Code, § 25404, subd. (c)(4) (citing Chapter 6.95, Article 1 of the Health & Safety Code) and (c)(6) (citing the Uniform Fire Code, § 80.103, subd. (b) and (c), as adopted by the State Fire Marshal pursuant to Section 13143.9).

² Health & Saf. Code, § 25404, subd. (c)(1)(A) (citing Chapter 6.5 of the Health & Safety Code).

³ Health & Saf. Code, § 25404, subd. (c)(5) (citing Chapter 6.95, Article 2 of the Health & Safety Code).

⁴ Health & Saf. Code, § 25404, subd. (c)(3)(A) (citing Chapter 6.7 of the Health & Safety Code).

⁵ Health & Saf. Code, § 25404, subd. (c)(2) (citing Chapter 6.67 of the Health & Safety Code).

⁶ Health & Saf. Code, § 25404.5, subd. (a)(1).

⁷ Health & Saf. Code, § 25404.5, subd. (a)(2)(A).

regulated businesses. Businesses that fall within the regulatory ambit of the CUPA are required to obtain a CUPA permit as a condition of operation in Contra Costa County.

The current CUPA Fees were established by Board Resolution No. 2011/151, adopted on April 12, 2011. Staff has evaluated the current CUPA Fees, the actual expenses of the CUPA in Fiscal Year 2010-2011 and the projected expenses in Fiscal Year 2011-2012, and applicable legal standards pertaining to the apportionment of regulatory fees. Based on this evaluation, staff recommends revision of the CUPA Fees, to take effect immediately upon Board approval. This Report serves to explain the method used in putting together the proposed fee schedule attached as **Exhibit A** to this Report, and provide an analysis of how the CUPA Fees satisfy applicable legal requirements.

II. OVERVIEW OF CUPA PROGRAMS

A. Hazardous Materials Business Plan Program

With certain limited exceptions, every business that handles specified quantities of hazardous materials is required to certify and submit a hazardous materials business plan (“HMBP”) to the CUPA.⁸ The purpose of a HMBP is to give emergency responders information about the hazardous materials stored at a regulated business facility in the event of a hazardous materials incident at the site. This information is necessary in order to prevent or mitigate the damage to the health and safety of persons and the environment from the release or threatened release of hazardous materials into the workplace and environment.⁹

A HMBP includes a list of chemicals and other hazardous materials handled at a facility, the quantity of hazardous materials handled at any one time by the business over the course of the year, and the location of the hazardous materials at the facility.¹⁰ This information allows emergency responders to prepare adequate emergency responses to potential releases of these materials. A HMBP also includes information regarding emergency response plans and procedures and an employee training

⁸ Health & Saf. Code, § 25505, subd. (a)(1).

⁹ Health & Saf. Code, § 25500.

¹⁰ Health & Saf. Code, §§ 25504, subd. (a), 25509.

program.¹¹ In addition to submission of the plan, regulated businesses are required to submit annual updates of their inventories to the CUPA.¹²

The CUPA is authorized to implement and enforce the provisions of Chapter 6.95 of the Health and Safety Code pertaining to business and area plans.¹³ The CUPA is also authorized to enforce provisions of the Uniform Fire Code as adopted by the State Fire Marshal pertaining to the Hazardous Material Management Plan and Hazardous Material Inventory Statement Program.¹⁴ Pursuant to these authorities, HMBP Program staff reviews the plans submitted by regulated businesses, inspects the business sites to verify that the businesses have reported the correct information and that the employees are being properly trained, and takes enforcement actions as needed in the event of noncompliance. Hazardous material inventories and reported locations of these hazardous materials are furnished to fire departments in Contra Costa County. HMBP Program staff also prepares an area plan, describing how the County's emergency responders will handle hazardous material incidents. This is done in cooperation with the multiple emergency response agencies in the County that may respond to a hazardous materials incident.

In order to carry out the purposes of Chapter 6.95 of the Health and Safety Code, CUPAs also "may train for, and respond to, the release, or threatened release, of a hazardous material."¹⁵ Pursuant to this authority, the HMBP Program includes a Hazardous Materials Incident Response Team ("IR Team"), which responds to reported hazardous material incidents throughout the County, and a Community Warning System. The Community Warning System is used to issue warnings to the public via the National Weather Service NOAA¹⁶ All Hazards Radio Network and the Emergency Alert System on primary radio stations. The Community Warning System also includes sirens and telephone notifications to alert the CUPA and the general public of hazardous material releases so that appropriate response efforts can be implemented efficiently and to provide direction and advice on avoiding exposure.

¹¹ Health & Saf. Code, § 25504, subd. (b)-(c).

¹² Health & Saf. Code, § 25505, subd. (d).

¹³ Health & Saf. Code, § 25501, subd. (g)(3).

¹⁴ Health & Saf. Code, § 25404, subd. (c)(6); Cal. Code Regs., tit. 27, § 15100, subd. (a)(6).

¹⁵ Health & Saf. Code, § 25507.2.

¹⁶ National Oceanic and Atmospheric Administration.

B. Hazardous Waste Generator Program

The California Legislature has found that “[l]ong-term threats to public health and to air and water quality are posed by the landfill disposal of many types of untreated hazardous wastes and by the inappropriate handling, storage, use and disposal of hazardous wastes.”¹⁷ In order to protect the public health and the environment and to conserve natural resources, the Legislature has declared that it is in the public interest to establish “regulations and incentives which ensure that the generators of hazardous waste employ technology and management practices for the safe handling, treatment, recycling, and destruction of their hazardous wastes prior to disposal.”¹⁸

Consistent with the Legislature’s intent, regulated business sites that generate hazardous waste are required to handle and dispose of their waste in accordance with the standards set forth in the Hazardous Waste Control Law¹⁹ and regulations adopted pursuant thereto.²⁰ Regulated facilities have different requirements depending on the quantities and types of hazardous wastes generated and the manner in which the regulated business sites handle their waste.²¹ The requirements for large-quantity generators are different from requirements for small-quantity generators.²² The requirements as to generators that treat their waste onsite differ from those applicable to generators that dispose of their waste offsite.²³

The Hazardous Waste Control Law places particular emphasis on the reduction of hazardous waste generation. The Legislature has found that “[n]umerous opportunities exist to reduce the amount of hazardous waste generated in the state and to conserve resources through the application of existing source reduction and recycling

¹⁷ Health & Saf. Code, § 25100, subd. (b).

¹⁸ Health & Saf. Code, § 25101, subd. (a).

¹⁹ Health & Saf. Code, § 25100 et seq.

²⁰ Health & Saf. Code, § 25150, subd. (a); Cal. Code Regs., tit. 22, § 66262.10.

²¹ See Cal. Code Regs., tit. 22, § 66262.34.

²² *Id.*

²³ *Id.*; see also Health & Saf. Code, §§ 25200.3, 25201.1; Cal. Code Regs., tit. 22, § 67450.3; Cal. Code Regs., tit. 22, div. 4.5, chapter 14-15.

technology.”²⁴ The Legislature declared in 1985 that, whenever possible, the “generation of hazardous waste is to be reduced or eliminated as expeditiously as possible,” and that waste that is generated should be “recycled, treated, or disposed of in a manner that minimizes any present or future threats to human health or the environment.”²⁵ In 1989, the Legislature declared its intent to expand the state’s hazardous waste source reduction activities beyond those directly associated with source reduction evaluation reviews and plans.²⁶ The Hazardous Waste Source Reduction and Management Review Act of 1989 (the “Act”) codified the Legislature’s intent that the state Department of Toxic Substances Control (“DTSC”) “maximize the use of its available resources in implementing the expanded source reduction program through cooperation with other entities, including, but not limited to, CUPAs. . .”²⁷ The intent of the Act was to “promote the reduction of hazardous waste at its source, and wherever source reduction is not feasible or practicable, to encourage recycling.”²⁸

The primary purpose of the CUPA’s Hazardous Waste Generator (“HWG”) Program is to implement and enforce the Hazardous Waste Control Law as it pertains to hazardous waste generators and others governed by Chapter 6.5 of the Health & Safety Code.²⁹ CUPAs are not limited to enforcement of the mandatory elements of Chapter 6.5, however.³⁰ Consistent with the public policy of encouraging the reduction of hazardous waste generation, CUPAs are also authorized to “integrate optional waste reduction and pollution prevention programs into the unified inspection and enforcement program.”³¹

²⁴ Health & Saf. Code, § 25100, subd. (d).

²⁵ Health & Saf. Code, § 25244.1, subd. (a)

²⁶ Health & Saf. Code, § 25244.13, subd. (c).

²⁷ Health & Saf. Code, § 25244.13, subd. (d).

²⁸ Health & Saf. Code, § 25244.13, subd. (f).

²⁹ Health & Saf. Code, § 25180, subd. (a)(2)(B).

³⁰ See Health & Saf. Code, § 25404.2, subd. (d): “The certified unified program agency. . . may incorporate, as part of the unified program within its jurisdiction, the implementation and enforcement of laws which the unified program agencies are authorized to implement and enforce, other than those specified in subdivision (c) of Section 25404, if that incorporation will not impair the ability of the unified program agencies to fully implement the requirements of subdivision (a).”

³¹ Cal. Code Regs., tit. 27, § 15200, subd. (d).

Based on the above authorities, the CUPA's HWG Program includes a Hazardous Waste Reduction element. As part of this element, Hazardous Materials Specialists inspect regulated facilities to verify their compliance with the requirements applicable to those facilities³² and bring enforcement actions when sites are found to be out of compliance. They also review source reduction plans at regulated business sites and offer instruction in pollution prevention during inspections, at safety fairs and in publications. As part of this element, the HWG Program also encourages facilities to reduce their waste generation through the Green Business Program, and through its HWG Program Fees ("HWG Fees"). Additionally, as discussed *infra*, a component of the HWG Fees provides an incentive to generators to maximize source reduction efforts by charging proportionately lower fees to smaller generators than to larger generators.

C. California Accidental Release Prevention Program

The California Accidental Release Prevention ("CalARP") Program is designed to prevent catastrophic accidental releases of highly toxic or flammable chemicals. Regulated facilities are required to have prevention programs to prevent such releases. The CalARP Program is a merger of federal and state programs aimed at the prevention of accidental releases of regulated toxic and flammable substances. Under the CalARP Program, owners or operators of stationary sources that handle threshold quantities of specified regulated hazardous materials in any activity involving a regulated substance (a "process")³³ may be required to submit a risk management plan ("RMP") to the CUPA.³⁴ The elements of an RMP include identification of the regulated substances held onsite at the stationary source, the worst-case scenarios in terms of offsite consequences of an accidental release, an accidental release prevention program, an emergency response program, a five-year accident history and proposed changes to improve safety.³⁵

³² DTSC issues facility permits to some of the regulated facilities that are also inspected by the CUPA. In these circumstances, the CUPA regulates and inspects the portions of the facility that the CUPA is required to regulate and inspect. Under some conditions, DTSC may also inspect portions of a regulated business site that the CUPA is required to inspect. (See **Exhibit B.**)

³³ Health & Saf. Code, § 25532, subd. (e).

³⁴ Health & Saf. Code, §§ 25534, 25535.1.

³⁵ Health & Saf. Code, § 25532, subd. (i); 40 C.F.R. § 68.12.

Engineers assigned to the CalARP Program review the RMPs and determine when the plans are complete. They also conduct regular audits of the stationary source sites to ensure compliance with applicable regulations and follow up with action items associated with RMP reviews to verify that potential problems are adequately addressed. Enforcement action is taken as needed in the event of noncompliance.

D. Underground Storage Tank Program

Businesses that store hazardous materials in underground tanks are required to have tanks that can safely hold the materials, to ensure the integrity of the tanks and the associated piping and to have a Designated Operator of the tank system.³⁶ The purpose of the Underground Storage Tank (“UST”) Program is to inspect tanks for compliance with statutory and regulatory compliance and take enforcement action in the event of noncompliance. These inspections are conducted by Hazardous Materials Specialists who are trained and tested to become certified UST inspectors. In addition to conducting routine tank inspections, these inspectors perform plan checks, review and monitor tank removals, inspect new tank installations and monitor the certification of tank monitoring systems.

E. Aboveground Petroleum Storage Act Program

The implementation, enforcement and administration of the Aboveground Petroleum Storage Act (“APSA”)³⁷ was transferred to CUPAs effective January 1, 2008, with the enactment of Assembly Bill 1130. Prior to that date, aboveground storage of petroleum and petroleum products and byproducts was regulated by the State Water Resources Control Board and Regional Water Quality Control Boards.

APSA applies to petroleum and petroleum products and byproducts that are stored in aboveground 55-gallon drums or larger containers. The owners or operators of these tanks are generally required to prepare a written Spill Prevention Control and Countermeasure (“SPCC”) Plan conforming to applicable federal regulations. The SPCC Plan must include a facility diagram, the type of oil in each container, discharge prevention measures, secondary containment or other discharge or drainage controls,

³⁶ See Health & Saf. Code, § 25280 *et seq.*

³⁷ Health & Saf. Code, § 25270 *et seq.*

countermeasures for discharge discovery, response and cleanup, methods of disposal of recovered materials, and an emergency contact list.³⁸

The APSA Program involves periodic inspections³⁹ by CUPA inspectors of aboveground storage tanks to determine whether the owner or operator is in compliance with the SPCC Plan requirements.⁴⁰ Only specially trained personnel who have passed a state examination on spill prevention control and countermeasure plan provisions and safety requirements for aboveground storage tank inspections may conduct APSA inspections.⁴¹ Tank owners or operators who fail to comply with APSA requirements are subject to civil penalties, recoverable in legal actions brought on behalf of the CUPA.⁴²

III. LEGAL STANDARDS AND AUTHORITY FOR CUPA FEES

A. General Principles

The police power granted by the California Constitution authorizes a county or city to “make and enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general laws.”⁴³ Under its police power, a municipality may impose a regulatory fee when the fee constitutes an “amount necessary to carry out the purpose and provisions of the regulation.”⁴⁴ Regulatory fees are fees charged in connection with regulatory activities which “do not exceed the reasonable cost of providing services necessary to the activity for which the fee is charged and which are not levied for unrelated revenue purposes.”⁴⁵ The CUPA Fees,

³⁸ See Health & Saf. Code, § 25270.4.5; 40 C.F.R. § 112.7.

³⁹ An aboveground storage tank with the capacity to store 10,000 gallons or more of petroleum is generally required to be inspected at least once every three years. (See Health & Saf. Code, § 25270.5, subd. (a).) The state has not set a mandated inspection interval for smaller tanks.

⁴⁰ Health & Saf. Code, § 25270.5, subd. (a).

⁴¹ Health & Saf. Code, § 25270.5, subd. (c)(1)-(2).

⁴² Health & Saf. Code, § 25270.12.

⁴³ Cal. Const., article XI, § 7.

⁴⁴ *Pennell v. City of San Jose* (1986) 42 Cal.3d 365, 375, fn. 11.

⁴⁵ *Sinclair Paint Co. v. State Bd. of Equalization* (1997) 15 Cal.4th 866, 876.

which by statute are established and collected to pay the costs of operating the CUPA and not for general revenue purposes, are regulatory fees.

B. CUPA Fees

1. Single Fee System

Each CUPA is required to institute a “single fee system,” which replaces fees levied for individual programs under separate provisions of the Health & Safety Code.⁴⁶ Pursuant to the California Code of Regulations, the CUPA single fee system may reflect variations in cost to implement and maintain programs for different regulated businesses.⁴⁷ As the governing board of the CUPA, the Board of Supervisors is required to “establish the amount to be paid by each person regulated by the unified program under the single fee system at a level sufficient to pay the necessary and reasonable costs incurred by the certified unified program agency”⁴⁸

CUPA fee schedules are to be established by the Board⁴⁹ based on “factors associated with the cost of implementing and maintaining programs.”⁵⁰ Fees may differ from one jurisdiction to the next, based on the necessary and reasonable costs to implement the unified program.⁵¹ Provided the single fee system meets the minimum legal requirements, a CUPA has the authority to determine the level of service it will provide and to set its fees to fund the necessary and reasonable costs of its program.⁵² The CUPA may also adjust the fee schedule to reflect changes in reasonable and necessary costs.⁵³

⁴⁶ Health & Saf. Code, § 25404.5, subd. (a)(1).

⁴⁷ Cal. Code Regs., tit. 27, § 15210, subd. (c).

⁴⁸ Health & Saf. Code, § 25404.5, subd. (2)(A).

⁴⁹ Cal. Code Regs., tit. 27, § 15210, subd. (i).

⁵⁰ Cal. Code Regs., tit. 27, § 15210, subd. (c)(1).

⁵¹ Cal. Code Regs., tit. 27, § 15210, subd. (c)(2).

⁵² Cal. Code Regs., tit. 27, § 15210, subd. (d).

⁵³ Cal. Code Regs., tit. 27, § 15210, subd. (c)(3).

The CUPA has implemented a single fee system that incorporates fees for all of the CUPA programs. Under this system, a single invoice is issued annually to each of the regulated business sites. The single invoice includes line items for each of the different CUPA programs and State surcharges. The fees that are collected are used to implement and maintain the CUPA programs, in the form of salaries and benefits, services and supplies, and overhead costs.

2. Fee Accountability

Each CUPA is required to implement a fee accountability program designed to encourage efficient and cost-effective operation of the program for which the single fee and surcharge are assessed.⁵⁴ The accountability program includes the following elements:⁵⁵

1. Accounting for the fee schedule, amount billed and revenue collected;
2. Discrete billable services;
3. Staff work hours required to implement the program;
4. Program expenses (salaries, services, supplies, durable and disposable equipment, facility costs and administrative costs);
5. The number of businesses in each program;
6. The number of total regulated businesses within the CUPA jurisdiction;
7. The quantity and range of services provided, including the frequency of inspection.

The Health Services Department (HSD), Finance Division, works with the CUPA administration to implement the fee accountability program by keeping track of the fees and other charges that are invoiced, the revenues collected, and the expenses incurred in each program administered by the CUPA. The CUPA administration is charged with tracking the number of regulated businesses within the jurisdiction, determining the level of service to be provided to the businesses in each of the CUPA programs, the staff levels needed to provide those services and other expenditures necessary to operate the CUPA. Based on these costs, the CUPA administration works with HSD Finance to determine what fee revenues are required, and then allocates the fees among the regulated businesses.

⁵⁴ Health & Saf. Code, § 25404.5, subd. (c); Cal. Code Regs., tit. 27, § 15220, subd. (a).

⁵⁵ Cal. Code Regs., tit. 27, § 15220, subd. (a)(1)(A)-(H).

IV. PUBLIC REVIEW PROCESS

The County conducts a public review process, beyond what is legally required, to give the regulated community opportunity to review and comment on proposed CUPA fee schedules, including the release of a proposed fee schedule and a public workshop. A copy of a public notice and the proposed fee schedule released on March 20, 2012, is attached as **Exhibit C**. A public workshop was held on April 9, 2012, during a public comment period that began on March 20, 2012, and ended on April 19, 2012. Copies of written comments received before the end of the comment period are attached as **Exhibit D**. Staff's written responses to those comments are attached as **Exhibit E**.

V. METHOD USED TO DETERMINE REVISED CUPA FEES

A. General Considerations

Determining the amount and allocation of fees required to operate a CUPA is a complex exercise that requires analysis of the estimated costs of, and revenues needed to operate, the CUPA, and a reasonable basis for apportionment of the fees among the regulated businesses in the CUPA's jurisdiction. There is no express statutory or regulatory requirement that the revenues and expenses of the individual CUPA programs be perfectly in balance, or that there be a separate fee to fund each program. In fact, the regulations indicate that fees for each program are optional.⁵⁶ The requirement is simply that the amount to be paid by each person regulated by the CUPA be set "at a level sufficient to pay the necessary and reasonable costs incurred by the certified unified program agency. . ."⁵⁷ Notwithstanding that the CUPA is not required to do so, staff's goal in setting revised fees is to balance the revenues and expenses of the CUPA as a whole, to balance the revenues and expenses for each of the individual programs, and to set fees to fund each CUPA program.

Staff uses projections of expenses and revenues to set those fees; however, projections may not match the actual expenses incurred and revenues collected, for a host of reasons. One reason is that, because the individual CUPA programs do not function independently but are instead components of a CUPA, adjustments can be and

⁵⁶ See Cal. Code Regs., tit. 27, § 15210, subd. (g): "Each billing statement shall itemize the fees by program element, *if those fee elements are calculated separately.*" (Emphasis added.)

⁵⁷ Health & Saf. Code, § 25404.5, subd. (a)(2)(A).

are made during the year that may shift resources from one program to another to meet the needs of the programs. Another reason is that not all of the revenues that are projected are actually collected. A percentage of the CUPA's billings are not paid, more so in some programs than others. Additionally, the number of regulated businesses changes every year. New businesses open and others close, resulting in new fee revenue from some and a loss of revenue from others. Thus, program fee revenue collected to fund operations of a program for an upcoming fiscal year may turn out to be greater than the expenses incurred over the course of that year. When that occurs, excess revenues are carried forward to the following year, and fees adjusted accordingly. Conversely, expenses may exceed the revenues collected, leaving a shortfall in funding. When that occurs, revenues to be collected in the following fiscal year are borrowed to cover the shortfall, and the shortfall becomes an expense to be funded by the following year's fees.

B. Expense Projection Process

The first step in the fee setting process is to evaluate expenses of the CUPA, which include staff salaries and benefits, services and supplies, and overhead costs. Staff salaries and benefits make up the bulk of those expenses. The fee-setting process was delayed this year; therefore, rather than project the expenses for Fiscal Year 2010-2011, staff determined the actual expenses for that year in most categories for the CUPA as a whole and for the individual CUPA programs. The Fiscal Year 2010-2011 actual expenses were used to set the fees for the HMBP and HWG programs which, with one exception discussed below, will fund the operations of those programs in Fiscal Year 2010-2011. The Fiscal Year 2010-2011 expenses were also used in conjunction with projecting revenues in the CalARP, UST and APSA programs to determine any shortfalls or carryovers in any of those programs.

The projected Fiscal Year 2011-2012 budgeted expenses were used to set the fees for the UST, CalARP and APSA programs, which will be collected to fund operations of those programs in Fiscal Year 2011-2012. The Fiscal Year 2011-2012 budgeted expenses of the Community Warning System ("CWS") are also used to set the CWS component of the HMBP Fees, because that component funds the operations of the CWS for the upcoming fiscal year, as opposed to the preceding fiscal year. The HMBP Fees are thus a combination of fees needed to fund operations in two separate fiscal years.

The process of making expense projections for the CUPA and each of the CUPA programs is not an exact science. The CUPA is not an independent agency but, instead, is operated by the HMP Division, which in turn is one of many divisions of the Health Services Department. Determining the costs necessary to run the CUPA requires separating its costs from the other costs required to operate the HMP Division, including the other programs it operates. While some costs can be attributed directly to the CUPA or to specific CUPA programs, indirect costs, such as administrative staff time, office expenses and facility overhead, are incurred by the HMP Division as a whole, and must be allocated between the CUPA and the rest of the division.

1. Salaries and Benefits

Expenses are computed differently in different expense categories. For Fiscal Year 2011-2012, projections of salary and benefit expenses of the CUPA as a whole were based on actual salary and benefit expenses incurred in Fiscal Year 2010-2011. Adjustments to these projections were then made based on anticipated changes in personnel and pay rates. As noted *supra*, the salary and benefit expenses for the CUPA as a whole in Fiscal Year 2010-2011 that are set forth in this Report were the actual expenses incurred by the CUPA in that fiscal year.

Determining salaries and benefit expenses in the individual CUPA programs, however, is a far more complex exercise. Challenges in making these determinations for the individual CUPA programs arise from the fact that the CUPA programs do not operate independently of one another. Rather, they are components of a regulatory agency with multifaceted responsibilities. For example, the CUPA has a single administrative structure, but the administrative staff oversees multiple programs. Administrative time may be spent on a single program, on multiple programs or on all of the CUPA programs simultaneously, depending on the task at hand. Similarly, hazardous materials specialists employed by the CUPA work within multiple programs, and may perform inspections for several programs at a single business site all on the same day. This practice, as opposed to having dedicated personnel assigned to particular programs, saves money, because it eliminates unnecessary costs, such as additional travel time and travel expenses that would otherwise be expended if the specialists took separate trips to perform inspections in separate programs.

The drawback to this efficient structure is the difficulty in pinpointing exactly how much time is spent in each program. While efforts are under way to change this, the accounting system is not set up at this time to track the precise times spent on each

individual program inspection by a hazardous materials specialist; instead, it tracks the time spent by a specialist at each regulated facility. For this reason, rough estimates of inspection times by the specialists are used to allocate salaries and benefits to the various programs as part of the payroll process. These estimates are then adjusted by staff to more precisely reflect hours spent in each program. The revised estimates are then used to allocate salaries and benefits of the specialists among the various programs for the fiscal year in which the time was spent, and in turn used as the starting point for allocations of their time in Fiscal Year 2011-2012. The CUPA administrative staff also does not keep detailed time records tracking the hours or fractions of hours spent on different programs, and there are no plans to start doing so, because these efforts would result in additional and unnecessary costs to the CUPA; moreover, the CUPA's accounting system is not set up to track administrative staff time per specific task. These hours must therefore be allocated proportionately to all of the HMP Division programs according to a specific formula.

2. Services and Supplies

The projection of expenses in the services and supplies category for a fiscal year is based on an analysis of the service and supply expense budget for the previous year and the actual expenditures in that year. If actual expenditures are higher than the budgeted amount, staff first determines the reason for the excess. If staff determines that higher expenditures are either likely or unlikely to continue in the next fiscal year, adjustments are made to the projected amount for that year. The projection is then adjusted a second time to account for any extraordinary expenses anticipated in the upcoming fiscal year. Such things as increases or decreases in fuel costs and mileage reimbursements rates, for example, would enter into the equation.

3. Indirect Administration Costs; County Overhead Costs

Projected indirect administration costs attributable to each CUPA Program are determined based on the total of such costs allocated to the HMP Division by the Health Services Department. Similarly, projected County overhead costs attributable to each CUPA program are determined based on the total of such costs allocated by the County to the HMP Division.

4. Uncollected Fees; Other Revenue Shortfalls

Uncollected fees – fees that are billed for not paid – are another expense of the CUPA. The actual amounts not collected for Fiscal Year 2009-2010 in the HMBP and HWG programs were used in the calculation of Fiscal Year 2010-2011 expenses. These amounts are shown as expenses in Table 1 of this Report.

Programs may also experience shortfalls in revenues to cover costs due to expenses that exceed the projected costs. Revenue shortfalls tend to occur in the CUPA programs where fees are collected at the beginning of the fiscal year funded by the fees; namely, the CalARP, UST and APSA programs. Shortfalls are calculated by subtracting the total expenses incurred in a program by the total revenues collected to fund the program for the fiscal year. There were shortfalls in the UST, APSA and CalARP programs in Fiscal Year 2009-2010 and in the UST program in Fiscal Year 2010-2011. Shortfalls are funded by borrowing against revenues anticipated in the following fiscal year. The Fiscal Year 2009-2010 shortfalls are therefore included in the expenses projections for Fiscal Year 2010-2011, and the Fiscal Year 2010-2011 shortfalls are an expense in Fiscal Year 2011-2012. The Fiscal Year 2009-2010 shortfalls appear in Table 1 of this Report.

VI. REASONABLENESS AND NECESSITY OF THE CUPA EXPENSES

A. Fiscal Year 2010-2011

Fiscal Year 2010-2011 expenses are shown in Table 1 below, for the CUPA as a whole and the individual CUPA programs:

Table 1

CUPA Expenses Fiscal Year 2010-2011

Description	HMBP Program	HWG Program	Cal/ARP Program	UST Program	APSA Program	Total CUPA Programs
Salaries and Benefits	\$2,232,344	\$1,322,961	\$728,017	\$ 815,135	\$286,583	\$5,385,040
Services and Supplies	\$1,457,782	\$ 223,556	\$123,021	\$ 137,743	\$ 48,427	\$1,990,529
Indirect Administration	\$ 167,209	\$ 126,719	\$ 69,733	\$ 78,077	\$ 27,450	\$ 469,188
County Overhead	\$ 60,441	\$ 45,806	\$ 25,207	\$ 28,223	\$ 9,922	\$ 169,599
Uncollected Fees/ Revenue Shortfalls	\$ 286,809	\$ 139,588	\$ 42,128	\$ 491,645	\$ 18,640	\$ 978,810
Total	\$4,204,585	\$1,858,630	\$988,106	\$1,550,823	\$391,022	\$8,993,166

Each of the functions of the five programs administered by the CUPA is essential to the operation of the CUPA. The bulk of the expenses of these programs encompass the salaries and benefits of the personnel who perform the inspections and audits for those programs and staff the Incident Response (IR) Team. Other personnel costs include the CUPA's administrative and clerical staff salaries and benefits and the salaries and benefits of those who operate the Green Business Program and Community Warning System. Additional costs include services and supplies for all programs and indirect administrative overhead. As discussed in detail below, all of these costs are essential to the operation of the CUPA, and are therefore reasonable and necessary costs that are appropriately funded by the CUPA Fees.

1. **Salaries and Benefits**

a. HMBP Program

(1) *Hazardous Materials Specialists and Technicians*

(a) **Inspections**

Nineteen Hazardous Materials Specialists⁵⁸ performed inspections for the HMP Division in Fiscal Year 2010-2011. Hazardous Materials Specialists are not dedicated to a particular program or dedicated to the CUPA; rather, they perform inspections for multiple CUPA and non-CUPA programs. A total of 1,502 facilities underwent HMBP inspections in Fiscal Year 2010-2011. Of those, 1,335 were inspected by Hazardous Materials Specialists.⁵⁹⁶⁰

HMBP inspection times vary significantly based on the complexity and size of the facilities inspected. Estimated inspection times for businesses in different categories, and estimated total annual inspection hours, are shown in Table 2.⁶¹

⁵⁸ Eighteen Hazardous Materials Specialists were employed full-time through Fiscal Year 2010-2011. The nineteenth worked nine months of the year.

⁵⁹ The remaining 167 facilities were inspected by the Richmond Fire Department, which performs HMBP inspections for the CUPA under a contract between the County and the City of Richmond.

⁶⁰ Staff arranged for more inspections to be conducted in Fiscal Year 2010-2011 than average and fewer the following year, in order to carve out time for the specialists to plan for the replacement of the CUPA's data management system.

⁶¹ Inspection time estimates shown in Table 2 include the time for preparation for the inspection, travel time, the onsite inspection of the business, post-inspection filing, receipt and review of additional information from the business, and one follow-up inspection.

Table 2

**Estimated HMBP Program Inspection Hours
Fiscal Year 2010-2011**

# Employees	Pounds of Material	# Facilities⁶²	Estimated Inspection Hours Per Facility	Average # Inspections Per Category (2 Years)⁶³	Inspection Hours Per Category (2 Years)
N/A	<1K	416	1.50	416	624
0-19	1K ≤ x <10K	688	2.00	688	1,376
0-19	10K ≤ x <100K	234	3.00	234	702
0-19	100K ≤ x <250K	219	4.00	219	876
0-19	250K ≤ x <500K	81	5.00	81	405
≥20	1K ≤ x <10K	155	5.75	155	891.25
≥20	10K ≤ x <100K	159	6.75	159	1,073.25
≥20	100K ≤ x <250K	35	7.75	35	271.25
≥20	250K ≤ x <500K	13	8.75	13	113.75
N/A	500K ≤ x <2.5M	46	11.25	92	1,035
N/A	2.5M ≤ x <10M	7	14.50	14	203
N/A	10M ≤ x <100M	9	19.00	18	342
N/A	100M ≤ x <1B	2	24.00	4	96
N/A	1B ≤ x <5B	2	28.00	4	112
N/A	≥5B	0	N/A	N/A	N/A
Refineries		3	32.00	6	192
Totals		2,069		2,138	8,312.5

Based on these average inspection times, the inspection intervals and the average number of facilities in each category, an average inspection time of 3.9 hours⁶⁴

⁶² The facility numbers shown in Table 2 exclude facilities inspected by the Richmond Fire Department.

⁶³ Businesses that handle 500,000 pounds or more of hazardous materials are generally inspected annually. Businesses that handle lesser quantities are generally inspected every other year.

⁶⁴ For greater accuracy, unrounded hourly estimates are used in the calculation of costs in this Report. Because showing unrounded numbers can be cumbersome, however, some of the hourly estimates

can be calculated. Based on this rate and the 1,335 facilities inspected by the Hazardous Materials Specialists in Fiscal Year 2010-2011, approximately 5,190 of their 30,131 annual working hours⁶⁵ were spent on HMBP Program inspections. The HMBP inspection hours equate to \$599,549 in salary and benefits.⁶⁶ This cost is necessary and reasonable because the associated inspections are necessary to verify that businesses are complying with HMBP statutes and regulations.

(b) Incident Response Team

The IR Team is the primary hazardous materials response team in the County. In Fiscal Year 2010-2011, 18.75 specialists served on the team. At least six team members are available to respond to an incident during business hours, with one of those members tasked to take telephone calls, follow up on complaints concerning hazardous materials, receive notifications and call out the team when needed. IR Team members also represent the CUPA at meetings of the Contra Costa County Community Awareness and Response Group, Inc. ("CAER"), emergency preparedness, emergency

appearing in this Report have been rounded.

⁶⁵ A Hazardous Materials Specialist worked an average of 1,607 hours in Fiscal Year 2010-2011. This was determined by starting with the total number of working hours in a year (2,080 hours, based on 52 weeks per year and 40 hours per week) and then subtracting average vacation hours taken (121 hours), 10 paid holidays (80 hours), average personal holiday time taken (19 hours), six furlough days (48 hours), average overtime comp hours taken (19 hours), average sick leave taken (70 hours), and average flex time taken (9 hours) to yield 1,714 hours. These averages were based on actual time off taken by all of the specialists in Fiscal Year 2010-2011. The 1,714 annual hours equates to 214 eight-hour days. Specialists are allowed two 15-minute breaks per day. Multiplying 30 minutes per day by 214 working days yields a total of 107 in annual break time hours per specialist. This amount is then subtracted from 1,714 to yield the total of 1,607 working hours per year. Based on this total for one specialist, the 18.75 specialists employed by the HMP Division in Fiscal Year 2010-2011 worked a collective 30,131 regular hours.

⁶⁶ A salary and benefit rate of \$115.51 per hour is used for Hazardous Materials Specialists. This figure is calculated by adding the base pay and benefits for all specialists, dividing the total by the number of specialists, and dividing again by the number of working hours per year (1,607). This rate does not include overtime. Benefits are projected to be 79.3 percent of salaries. Hazardous Materials Specialists, who earn an average base salary of \$92,807 per year, in addition to differentials, overtime and on-call pay, are highly compensated because of their high level of education and training and dangers they face in the course of their duties. The Hazardous Materials Specialists employed by the CUPA all have at least a bachelor's degree in science and are specially trained to respond to hazardous materials incidents and determine the impact of a hazardous materials release. Given the type of services they provide, this rate of pay is necessary and reasonable for these employees.

notification, outreach and regional hazardous materials response actions teams and the Petrochemical Mutual Aid Organization, all of which are focused on improving coordination between industry and emergency response agencies in responding to hazardous materials incidents. Additionally, Hazardous Materials Specialists work with the Regional Hazardous Materials Response Action Team to develop hazardous material incident drills, and the IR Team members participate in those drills to improve their performance in the event of an actual incident.

After business hours, at least six members are on call. Members are paid for one hour of every four hours on call, and time and a half for overtime when called to respond to an incident after hours, in addition to their regular salaries. The IR Team stands ready to deploy 24 hours per day, seven days per week. The team is a California Emergency Management Agency Type II team.

A Hazardous Materials Technician assists the IR Team and also trains and responds as a member of the IR Team. The technician keeps the response vehicles and flatbed, box, and pickup trucks fully equipped and supplied so they are ready for deployment in the event of an incident. The technician also performs regular calibrations of instrumentation, trains the team on the use of the instrumentation, keeps personal protective equipment (such as self-contained breathing apparatus and response clothing) clean and ready to use and arranges for proper disposal of hazardous wastes collected from incident sites.

The IR Team includes a team leader, who is responsible for ensuring that the team members fulfill their training requirements and overseeing the drafting and review of policies, procedures and standards for responding to incidents. The team leader also reviews incident response reports, works with the team to determine what worked and what did not work and takes steps to improve responses where necessary.

The salaries and benefits of the IR Team, including overtime pay and on-call pay, are allocated to the HMBP Program, and are included in the salary and benefit estimates for that program. During business hours, one of the IR Team's Hazardous Materials Specialists acts as point person for the team; he or she receives calls, deploys the team when needed and takes complaints regarding hazardous materials incidents. These efforts take about half of that person's time, or about 803.5 hours. The Hazardous Materials Specialists on the IR Team spent an estimated 816 hours

responding to incidents during normal business hours in Fiscal Year 2010-2011⁶⁷, and approximately 858 hours participating in incident response activities, including two specialized training drills based on specific scenarios involving uncontrolled hazardous materials releases – situations some of the newer team members had not yet faced in the field. Each year, the Hazardous Materials Specialists also spend approximately 120 hours working with CAER and other teams and about 50 hours with the California Department of Fish and Game and U.S. Coast Guard to develop oil spill contingency plans. The specialist members must also satisfy certain medical requirements, including periodic recertification training in cardiopulmonary resuscitation and blood borne pathogens, respiratory fit testing and annual physical examinations, which add eight hours per specialist per year (a total of 150 hours in Fiscal Year 2010-2011). IR Team members also meet twice a month to debrief incidents and discuss lessons learned. At an average of two hours apiece, the meetings took an estimated 900 hours. One new member spent 240 hours in California Specialized Training Institute (CSTI) training in Fiscal Year 2010-2011 and approximately 136 hours responding to incidents during business hours along with the other responding IR Team members. Specialist members of the IR Team also assisted with First Responder Operations and decontamination training of Contra Costa County Fire Protection District personnel. This effort, which took 300 hours in Fiscal Year 2010-2011, is a reasonable and necessary cost of the CUPA because in the event of large incidents in Contra Costa County, this District, assists the CUPA with the pre-hospitalization decontamination of members of the public who come in contact with hazardous materials. Additionally, the IR Team leader spent about half of his annual working hours (803.5 hours) on his own IR Team-related duties as discussed above. All of this time adds up to 5,177 hours, at a cost of \$597,995. To this is added the \$104,409 in salaries and benefits paid to the Hazardous Materials Technician who worked for the IR Team in Fiscal Year 2010-2011.

On-call pay, which is 25 percent of regular pay, is given during non-business hours to IR Team members when they are off duty but must respond in the event of a callout. The total on-call pay given in Fiscal Year 2010-2011 was \$471,537. In addition to on-call pay, IR Team members who respond to incidents during off-hours are paid time and a half for the hours they spend responding, plus one extra hour of pay. The total salary and benefit costs of call-back time in Fiscal Year 2010-2011 totaled \$15,123.

⁶⁷ These hours are based on an estimated 12-hour response time for each of the 68 incidents in Fiscal Year 2010-2011.

Based on the above estimates, the total salary and benefit costs of the IR Team were approximately \$1,189,064 in Fiscal Year 2010-2011. This was a necessary and reasonable cost of the HMBP Program because the functions of the IR Team are an essential part of the HMBP Program with respect to training for and responding to a release or threatened release of hazardous material.

(c) Other Time

In addition to HMBP inspections and IR Team duties, the Hazardous Materials Specialists spend time performing other activities. Some of the activities are specific to the HMBP Program, such as training associated with performing inspections and assisting businesses in filling out annual forms, and HMBP enforcement actions, including preparation of administrative enforcement orders and notices of violation. Training, which is essential to ensure that inspectors are consistent in their inspections and implement the law as required, took up to approximately six hours of 18.75 Hazardous Materials Specialists' time in Fiscal Year 2010-2011, or 112.5 hours total. Enforcement activities such as the preparation of notices and orders, which are essential to push noncompliant businesses to abide by the requirements of the HMBP Program, took about 150 hours. Additionally, one Hazardous Materials Specialist performs duties in his capacity as HMBP Lead, which involves setting standards, reviewing inspection reports, and working on improvements to the program, such as developing improved inspection forms and training the staff to perform better inspections. These duties, which are essential to maintaining the integrity of the HMBP Program, take approximately 37.5 percent of the HMBP Lead's time, or 602.625 hours per year.⁶⁸ All of this HMBP Program-specific other time adds up to 865.125 hours, which equates to approximately \$99,931.

The Hazardous Materials Specialists also perform a variety of tasks that generally apply to multiple programs. For example, four Hazardous Materials Specialists also serve as CUPA coordinators: A Health & Safety coordinator, Enforcement coordinator, Training coordinator, and Site Mitigation coordinator. The first three perform tasks that apply to multiple CUPA programs.⁶⁹ The Enforcement Coordinator is responsible for establishing enforcement action policies and assisting staff with enforcement actions. The Health and Safety Coordinator is responsible for the overall safety of the office, prepares emergency response plans and investigates injuries. The Training Coordinator works with a training committee to determine the appropriate training for the different programs, tracks staff training and develops training

⁶⁸ The HMBP Lead is the lead for the HMBP Program and a non-CUPA program. Half of his annual working hours are spent on lead functions, of which 75 percent is spent on the HMBP Program and the remaining 25 percent on the non-CUPA program.

⁶⁹ The Site Mitigation Coordinator oversees site mitigation work performed in the County, reviews land use permit applications, and works with committees to mitigate contaminated sites as part of the HWG Program. These hours are allocated solely to the HWG Program.

policies. These efforts require about 25 percent of each coordinator's time, which collectively equates to about 1,205.25 hours per year. Of that, 20 hours of the Health and Safety Coordinator's allotted time is attributed to the non-CUPA programs. The remaining 1,185.25 hours are shared among multiple CUPA programs.

The Hazardous Materials Specialists also perform outreach to businesses to teach them how to complete forms and comply with the various programs, develop education materials that address how to comply with the different programs, develop and perform trainings on how to complete the CUPA forms, and respond to miscellaneous questions about the programs. In Fiscal Year 2010-2011, this work required approximately 750 hours.

Other time was spent on special projects. About 186 hours was spent participating in discussions, meetings and joint inspections with other regulatory agencies as part of the Hazardous Materials Interagency Task Force. The specialists also worked approximately 614 hours in Fiscal Year 2010-2011 preparing for the transition to the new CUPA data management system.⁷⁰ This work included preparing a transition plan, applying for a CalEPA grant to pay part of the cost of the transition, preparing contract documents to design and purchase the system and meetings with the data management company and other CUPAs that will also be implementing the system. In total, these special projects took about 800 hours.

In sum, other work performed by the Hazardous Materials Specialists that apply to multiple CUPA programs totaled 2,735.25 hours in Fiscal Year 2010-2011, at a cost of approximately \$315,949. The cost of this work, which may be referred to in this Report as "CUPA-wide activities" and in tables as "Other Time/Multi-Programs," are allocated among the HWG, UST and APSA programs, the IR Team component of the HMBP Program, and the rest of the HMBP Program, based on the percentage derived by dividing the total regular working hour salaries and benefits of the specialists in each program or component by the total regular working hour salaries and benefits of the specialists in the four programs collectively (excluding the cost of CUPA-wide activities). The amount allocated to the IR Team is 19.5 percent of the total, or \$61,547, as shown

⁷⁰ By January 1, 2013, CUPAs throughout the state are required to electronically report program data to CalEPA, pursuant to Health & Safety Code section 25404, subdivision (e)(4). The CUPA's new data management system will incorporate this new reporting system. Staff had anticipated that more hours would be spent on the data management system project than were actually spent in Fiscal Year 2010-2011, as the project was delayed. The project is continuing through Fiscal Year 2011-2012 and into Fiscal Year 2012-2013.

in Table 3 below. Another 22.8 percent of the total other time cost, which equals \$71,993, is allocated to the balance of the HMBP Program (referred to as “BP” in the table below). These costs are necessary and reasonable because these efforts are essential to the operation of the HMBP Program.

Table 3

**Allocation of Hazardous Materials Specialist Other Time Expenses
Fiscal Year 2010-2011⁷¹**

Program	Specialist Regular Hour Salaries and Benefits	% Allocation	Cost Allocation
HMBP • IR Team • BP	\$ 597,995 \$ 699,480	19.5 22.8	\$ 61,547 \$ 71,993
HWG	\$ 887,464	28.9	\$ 91,341
UST	\$ 654,653	21.3	\$ 67,379
APSA	\$ 230,161	7.5	\$ 23,689
Total	\$3,069,753	100.0	\$315,949

(2) *Temporary Workers*

The CUPA hired two student temporary workers and one temporary retiree in Fiscal Year 2010-2011 to perform a variety of tasks. In the HMBP Program, one of the students assisted by locating businesses that clearly handled hazardous materials (such as owners of auto repair shops, dry cleaners, and automobile dismantlers) but had not been filing Hazardous Materials Business Plans. The temporary retiree assisted with the transition of the HMBP Program Lead position to a new person. This work cost an estimated \$10,872 out of a total \$12,575 paid to these workers this year.

(3) *Administrative/Clerical*

In Fiscal Year 2010-2011, the administrative/clerk staff of the HMP Division and the CUPA consisted of a Chief Environmental Health and Hazardous Materials

⁷¹ Percentages shown in this and other tables in this Report have been rounded. Unrounded percentages, however, are used in the calculation of costs, for greater accuracy.

Officer (Chief Officer)⁷², full-time Assistant Director and three full-time clerical personnel, including one clerical supervisor. The Chief Officer bears overall responsibility for operation of the HMP Division, including the CUPA. The Assistant Director and the Administrative Assistant Supervisor report to the Chief Officer. The Chief Officer is responsible for the overall budget of the office, the overall improvement of the office, setting direction, setting policies, and working with other CUPAs throughout the state, CalEPA, the State Water Resources Control Board, DTSC, California Emergency Management Agency, and the State Fire Marshal to ensure consistency in, and set policy and guidance for, the CUPA programs statewide. The Assistant Director oversees the operations and staff for the HMBP, HWG, UST and APSA Programs. His duties include setting policies for the programs and monitoring the performance of inspections to ensure they meet accepted standards. At the clerical level, an Administrative Assistant Supervisor acts as the office manager. In this capacity, she oversees and performs miscellaneous clerical duties along with two Administrative Assistants.

The administrative and clerical staff time of the HMP Division is not tracked to specific programs, for the reasons outlined above. Administrative and clerical staff salaries and benefits are thus allocated to each CUPA program (including a separate allocation to the IR Team) and the non-CUPA programs based on the percentage derived by dividing the total regular working hour salaries and benefits of all employees in each program or component (excluding administrative and clerical salaries and benefits) by the total regular working hour salaries and benefits all employees (except for administrative/clerical employees) of the HMP Division. As shown in Table 4 below, the HMP Division total administrative and clerical costs for Fiscal Year 2010-2011 were \$624,488; of that, the CUPA share is \$559,482. The IR Team share is 15.8 percent of the HMP Division total, or \$98,508, and the amount allocated to the balance of the HMBP Program, (referred to in the table and elsewhere in this Report as the “BP” component) is 16.2 percent of the total, or \$100,880.

⁷² The time of the Chief Environmental Health and Hazardous Materials Officer (formerly the HMP Director) is split between the Environmental Health Division (35%) and the HMP Division (65%).

Table 4

**Administrative and Clerical Salary and Benefit Allocations
Fiscal Year 2010-2011**

Program	Total Regular Working Hour Salaries and Benefits	% Allocation	Cost Allocation to Program
HMBP • IR Team • BP	\$ 763,951 \$ 782,345	15.8 16.2	\$ 98,508 \$100,880
HWG	\$1,171,855	24.2	\$151,106
CalARP	\$ 644,865	13.3	\$ 83,152
UST	\$ 722,032	14.9	\$ 93,103
APSA	\$ 253,850	5.2	\$ 32,733
Total CUPA Programs	\$4,338,898	89.6	\$559,482
Non-CUPA	\$ 504,136	10.4	\$ 65,006
Total HMP Division	\$4,843,034	100.0	\$624,488

The \$98,508 amount allocated to the IR Team and \$100,880 amount allocated to the rest of the HMBP Program, the On-Call and Call Back salary and benefit amount of \$486,660 and the \$10,872 in temporary worker pay are added to the \$1,535,424 in regular working hour salaries and benefits of the hazardous materials specialists and technicians attributed to the HMBP Program as a whole to yield a total of \$2,232,344. Based on the functions performed and the level of service provided, these were reasonable and necessary salary and benefit costs to operate the HMBP Program in Fiscal Year 2010-2011.

Table 5 below summarizes the salary and benefit estimates of the HMBP Program:

Table 5

**HMBP Program Salary and Benefit Summary
Fiscal Year 2010-2011**

Category	Total
HMBP Inspections	\$ 599,549
IR Team	\$1,189,064
Other Time	\$ 99,931
Other Time/Multi-Program • IR Team (19.5% share) • BP (22.8% share)	\$ 61,547 \$ 71,993
Administrative/Clerical • IR Team (15.8% share) • BP (16.2% share)	\$ 98,508 \$ 100,880
Temporary Workers	\$ 10,872
Total HMBP Program	\$2,232,344

b. HWG Program

(1) *Hazardous Materials Specialists*

(a) Inspections

A total of 1,069 facilities out of the 1,634 that are categorized by the tonnage of waste they generate underwent HWG inspections by Hazardous Materials Specialists in Fiscal Year 2010-2011.⁷³

HWG inspection times vary significantly based on the tonnage of waste generated by the facilities. Estimated inspection times for businesses in different tonnage categories are shown below in Table 6.⁷⁴ Also shown are estimated times for

⁷³ Staff arranged for more inspections to be conducted in Fiscal Year 2010-2011 than average and fewer the following year, in order to carve out time for the specialists to work on the data management system project in Fiscal Year 2011-2012.

⁷⁴ Inspection time estimates shown in Table 6 include the time for preparation for the inspection, travel time, the onsite inspection of the facility, post-inspection filing, receipt and review of additional information from the facility, and one follow-up inspection.

additional inspections at businesses that operate under permits by rule, conditional authorizations and conditional exemptions. These times are also shown in Table 6.

Table 6
Estimated Average HWG Program Inspection Hours
Fiscal Year 2010-2011

Category	# Facilities	Estimated Inspection Hours/Facility	Average # Inspections/Category (2 Years) ⁷⁵	Inspection Hours/Category (2 Years)
<5 tons	1,263	3.00	1,263	3,789
5 tons ≤ x <12 tons	150	3.75	150	562.5
12 tons ≤ x <25 tons	84	5.25	84	441
25 tons ≤ x <50 tons	59	7.50	59	442.5
50 tons ≤ x <250 tons	55	11.25	55	618.75
250 tons ≤ x <500 tons	9	22.50	18	405
500 tons ≤ x <1000 tons	6	30.00	12	360
1000 tons ≤ x <2000 tons	2	40.00	4	160
≤2000 tons	6	60.00	12	720
Subtotal	1,634		1,657	7,498.75
Permit by Rule	16	10	32	320
Conditional Authorization	11	10	22	220
Conditional Exemption	7	4	7	28
Subtotal	34		61	568
Total	1,668		1,718	8,066.75

Based on the above inspection times, the number of facilities in each category comprising the 1,634 facilities and inspection intervals, it takes an average of about 4.5

⁷⁵ Businesses that generate 250 or more tons of hazardous waste per year are generally inspected annually. Businesses that generate lesser quantities are generally inspected every other year. Facilities operating under a permit by rule or conditional authorization are generally inspected annually. Conditionally exempt facilities are generally inspected every other year.

hours⁷⁶ to inspect each of those facilities. The 1,069 inspections conducted in Fiscal Year 2010-2011 thus took approximately 4,838 hours. As the table also shows, the Hazardous Materials Specialists also spend approximately 284 hours annually to inspect facilities that operate under “permits by rule” or are conditionally exempt or conditionally authorized under the Hazardous Waste Control Law.

Adding up the above hours, the total average annual inspection time comes to approximately 5,122 hours. At a salary and benefit rate of \$115.51, these hours would cost \$591,614. The cost of these inspections is necessary and reasonable because the inspections are needed to verify compliance by regulated facilities with HWG laws and regulations.

(b) Other Time

Hazardous Materials Specialists perform additional non-inspection duties for the HWG Program. Among their duties are site mitigation work, which entails the review of hazardous waste cleanup plans and efforts by DTSC, the San Francisco Bay Area Regional Water Quality Control Board and the Central Valley Regional Water Quality Board within the CUPA jurisdiction (approximately 160 hours per year), tracking work done at Brownfield and Superfund sites in the jurisdiction (approximately 25 hours annually), checking to see that sites are clean after minor spills and ordering corrective action to clean up areas as necessary⁷⁷ (approximately 75 hours in Fiscal Year 2010-2011), providing advice on site mitigation as needed (about 150 hours in Fiscal Year 2010-2011), responding to communications from the public regarding hazardous waste sites in the jurisdiction (approximately 66 hours annually) and reviewing land use permit applications (about 75 hours in Fiscal Year 2010-2011). The Hazardous Materials Specialists also review source reduction reports prepared by specified regulated businesses, pursuant to the Hazardous Waste Source Reduction and Management Review Act of 1989⁷⁸ (approximately 20 hours every year) and handle enforcement actions and complaints concerning violations of hazardous waste laws and regulation (approximately 485 hours in Fiscal Year 2010-2011). They also receive training on HWG regulations and program requirements (about 300 hours in Fiscal Year 2010-2011).

⁷⁶ See footnote 64.

⁷⁷ Health & Saf. Code, § 25187, subd. (b).

⁷⁸ Health & Saf. Code, § 25244.18, subd. (c).

The Site Mitigation Coordinator spends approximately a quarter of her time (401.75 hours) reviewing and overseeing site mitigation work and reviewing land use permit applications. Finally, the HWG Lead spends approximately half of her annual working time (803.5 hours) setting standards and developing policies for the program, reviewing inspection reports, developing and presenting training programs to the staff, setting up training programs for regulated businesses on how to handle hazardous waste in accordance with the regulations, working with Information Systems to incorporate electronic inspections into the program, keeping abreast of hazardous waste reduction options, working with staff on hazardous waste reduction efforts, and generally making sure that the program remains consistent with applicable laws and regulations.

In total, this work is estimated to take approximately 2,561.25 hours at a cost of \$295,850. To this amount is added a 28.9 percent share of the CUPA-wide activities performed by Hazardous Materials Specialists, or \$91,341, for a total of \$387,191. These costs are included in the salaries and benefits estimates for the overall HWG Program. They are necessary and reasonable costs because these services are essential to the operation of the HWG Program.

(2) *Green Business Program Staff*

The Hazardous Waste Reduction element of the HWG Program includes the Green Business Program. The Green Business Program was integrated into the HWG Program in the mid-1990s because its primary focus is source reduction and pollution prevention, which are specific goals outlined in the Hazardous Waste Control Law. The Green Business Program has a number of goals, including the designation of businesses as “Green Businesses” when they meet set criteria; pollution prevention; and source reduction.

To meet these goals, the staff works with businesses to help them find ways to reduce the hazardous waste that they generate, handle the hazardous waste that they do generate appropriately, use less toxic materials and reduce their consumption of energy, water and other resources. When a business reaches an established standard, the business is designated a green business. The staff works with other Green Business Programs in the Bay Area through the Association of Bay Area Governments to coordinate programs and keep informed as to the effectiveness of their various efforts to reduce hazardous waste generation. These efforts are all aimed at hazardous waste

reduction. Regulated business sites are inspected by a Hazardous Materials Specialist to ensure that the business continues to meet the Hazardous Waste Reduction Program standard of being designated a green business during the regular HWG inspection. If it does not, the designation is removed.

A Hazardous Waste Reduction Manager and a Pollution Prevention Specialist are assigned to the Green Business Program. Their combined salaries and benefits will total \$224,986 in Fiscal Year 2010-2011; of that, \$191,347 is part of the cost of the HWG Program. These costs are necessary and reasonable because they fund efforts to reduce the generation of hazardous waste, consistent with the primary goal of Chapter 6.5 of the Health and Safety Code.

(3) *Temporary Student Worker*

One of the CUPA's student workers worked in the HWG Program by assisting with pollution prevention efforts. Specifically, this individual worked with businesses to decrease the amount of pollution they produce. This work cost the CUPA approximately \$1,703.

(4) *Administrative/Clerical*

Of the \$559,482 in administrative and clerical salaries and benefits attributed to the CUPA for Fiscal Year 2010-2011, \$151,106 was allocated to the HWG Program. This amount is added to the \$978,805 in estimated salaries and benefits of hazardous materials specialists, temporary workers and Green Business Program staff to yield a total of \$1,322,961, as shown in Table 7 below. Based on the functions performed and the level of service provided, these were reasonable and necessary costs to operate the HWG Program in Fiscal Year 2010-2011.

Table 7

**HWG Program Salary and Benefit Summary
Fiscal Year 2010-2011**

Category	Cost
HWG Inspections	\$ 591,614
Other Time/HWG	\$ 295,850
Other Time/Multi-Program (28.9% share)	\$ 91,341
Green Business Program	\$ 191,347
Administrative/Clerical (24.2% share)	\$ 151,106
Temporary Workers	\$ 1,703
Total HWG Program	\$1,322,961

c. CalARP Program

(1) *Engineers*

(a) Audits

There are 45 regulated business sites in Contra Costa County that are subject to the CalARP Program, each in one of three program levels.⁷⁹ The CUPA in this County performs the most extensive auditing and overview of regulated business sites of any CalARP Program in California.

It takes three or four engineers about one month onsite to perform an audit of a single Program 3 regulated business site. It takes additional time for the audit lead

⁷⁹ The Program levels are:

- Program 1 – Regulated business sites that do not impact a public receptor under a “worst” case scenario
- Program 2 – Regulated businesses sites that are not Program 1 or Program 3 business sites
- Program 3 – Regulated business sites with a specified North American Industry Classification System (NAICS) classification or subject to the CalOSHA Process Safety Management Program.

(Cal. Code Regs., tit. 19, § 2735.4.)

engineer to prepare the audit plan, perform the quality check of the onsite audit, interact with the regulated business site to develop a plan of action to address any deficiencies, and determine the degree that the regulated business site complied with the CalARP Program requirements. In Fiscal Year 2010-2011, these efforts equaled to a projected 650 staff hours per audit of a Program 3 regulated business site.

The onsite audit of a Program 2 regulated business site takes two to three weeks for three engineers to complete, plus additional time as outlined above, totaling an estimated 325 staff hours. Finally, a Program 1 regulated business site takes one engineer three days to complete, plus additional time as outlined above, which equates to approximately 35 staff hours per audit. Table 8 below shows total estimated audit times based on the number of regulated facilities and types of audits performed.

Table 8

CalARP Program Estimated Audit Hours

	Program 3 Audits	Program 2 Audits	Program 1 Audits
Inspection hours per audit	650	325	35
# CalARP regulated business sites	19	17	5.4*
Total audit hours	12,350	5,525	189

*One of the regulated businesses has five sites with essentially identical policies and procedures. The time to audit the five sites collectively takes about the time it would take to audit 1.4 of a Program 1 regulated site. For this reason, the five sites are shown as 1.4 sites in the table.

During Fiscal Year 2010-2011, six Program 3 audits, six Program 2 audits, and 2.4 Program 1 audits were completed, for a total of 5,934 in audit hours. Of the total audit hours, approximately 5,517 hours⁸⁰ were worked by CalARP Engineers in Fiscal Year 2010-2011 at their hourly rate of \$92.58⁸¹, at a salary and benefit cost of \$510,764. The remaining 417 in audit hours were worked by the CalARP Engineering

⁸⁰ A CalARP Engineer worked an average of 1,636 hours in Fiscal Year 2010-2011. This was determined by starting with the total number of working hours in a year (2,080 hours, based on 52 weeks per year and 40 hours per week) and then subtracting average vacation hours taken (102 hours), ten paid holidays (80 hours), average personal holiday time taken (24 hours), six furlough days (48 hours), and average sick leave taken (81 hours) to yield 1,745 hours. These averages were based on actual time off taken by all of the engineers in Fiscal Year 2010-2011. The 1,745 annual hours equates to 218 eight-hour days. Engineers are allowed two 15-minute breaks per day. Multiplying 30 minutes per day by 218 working days yields a total of 109 in annual break time hours per engineer. This amount is then subtracted from 1,745 to yield the total of 1,636 working hours per year. Five engineers worked for the HMP Division the first eight months of Fiscal Year 2010-2011, when one engineer resigned. This computes to an average of 4.67 engineers that worked for all of Fiscal Year 2010-2011. The 4.67 engineers, one of whom worked full-time in non-CUPA programs, collectively worked approximately 7,640 regular hours in Fiscal Year 2010-2011.

⁸¹ A salary and benefit rate of \$92.58 per hour is used for CalARP Engineers. This figure is calculated by adding the base pay and benefits for all engineers, dividing the total by the number of engineers, and dividing again by the number of working hours per year (1,636). This rate does not include overtime. Benefits are projected to be 59.2 percent of salaries. CalARP Engineers, who earn an average base salary of \$94,945 per year, all have at least a bachelor's degree in Chemical or Mechanical Engineering. Given the type of services they provide, this rate of pay is necessary and reasonable for these employees.

Supervisor⁸² at the rate of \$106.86⁸³ and cost of \$44,561, for a collective total of \$555,325.

(b) Other Time

In addition to audits, the CalARP Program engineers attend numerous meetings, including monthly staff meeting, CAER meetings, and meetings to discuss the result of the audits. These meetings took approximately 212 hours of the engineers' time in Fiscal Year 2010-2011. Collectively, the CalARP Engineers also underwent approximately 185 hours of training in chemical process safety. The engineers also spent 90 hours attending meetings to represent the HMP Division on the hazards that are present in the CalARP regulated businesses. This other time of the CalARP Engineers totaled 487 hours, at a cost of \$45,086. Each year, the CalARP Engineering Supervisor completes annual reviews of the staff, performs an annual self audit of the program, checks audits and documentation for quality and completeness and handles any personnel issues. This work took about 416 hours of the supervisor's time in Fiscal Year 2010-2011, at a cost of \$44,454.⁸⁴ In total, the Other Time worked in this program cost \$89,540 in Fiscal Year 2010-2011.

(2) *Administrative/clerical*

Of the \$559,482 in administrative and clerical salaries and benefits attributed to the CUPA for Fiscal Year 2010-2011, \$83,152 was allocated to the CalARP Program,

⁸² The CalARP Supervisor worked 1,666 hours in Fiscal Year 2010-2011. This was determined by starting with the total number of working hours in a year (2,080 hours, based on 52 weeks per year and 40 hours per week) and then subtracting her vacation hours taken (70 hours), ten paid holidays (80 hours), personal holiday time taken (32 hours), 12 furlough days (96 hours), and sick leave taken (25 hours) to yield 1,777 hours. These hours were based on actual time off taken by CalARP Supervisor in Fiscal Year 2010-2011. The 1,777 annual hours equates to 222 eight-hour days. The supervisor is allowed two 15-minute breaks per day. Multiplying 30 minutes per day by 222 working days yields a total of 111 in annual break time hours. This amount is then subtracted from 1,777 to yield the total of 1,666 working hours per year.

⁸³ A salary and benefit rate of \$106.86 per hour is used for the CalARP Supervisor. This figure is calculated by adding the base pay and dividing by the number of working hours per year (1,666). Benefits are projected to be 61.9 percent of the supervisor's salary. The CalARP Supervisor earned a base salary of \$109,968 in Fiscal Year 2010-2011.

⁸⁴ The supervisor, who worked approximately 1,666 hours in Fiscal Year 2010-2011, spent the remaining 833 hours in non-CUPA programs.

based on the formula discussed above. This amount is added to the \$644,865 in estimated CalARP Program engineering salaries and benefits to yield a total of \$728,017 in salary and benefit costs, as shown in Table 9 below. Because these functions and level of service provided are essential to the operation of the CalARP Program, these salary and benefit costs were reasonable and necessary costs of the CalARP Program in Fiscal Year 2010-2011.

Table 9

**CalARP Program Salary and Benefit Summary
Fiscal Year 2010-2011**

Category	Cost
CalARP Program Audits	\$555,325
Other Time/CalARP	\$ 89,540
Administration/Clerical (13.3% share)	\$ 83,152
Total CalARP Program	\$728,017

d. UST Program

(1) *Hazardous Materials Specialists*

(a) Annual inspections

Underground storage tanks are inspected annually. There are 1,115 such tanks in the CUPA's jurisdiction.

Tank inspection times vary based on the size of the tank inspected. A residential tank of less than 1,000 gallons, for example, takes only about 2 hours to inspect, because they lack the protective equipment and spill buckets required of large commercial tanks, and fewer regulatory requirements apply. There are currently no such tanks in the CUPA's jurisdiction.

Non-residential underground storage tanks of 50,000 gallons or less, including the tank, associated piping, monitoring equipment, and spill buckets, take an estimated

3.0 hours to inspect.⁸⁵ Additionally, there are various records to review to verify compliance with regard to these tanks, such as designated operator and training records. This work is required only once per each non-residential tank site, however, because, whether there are multiple tanks or a single tank at a site, the preparation and follow-up work needed with respect to underground storage tank inspections is typically the same. This work takes approximately two hours for each of the 422 sites in the CUPA's jurisdiction.

There are currently no underground storage tanks in Contra Costa County with capacities of greater than 50,000 gallons; however, an inspection time of six hours is estimated for tanks in that category.

Based on the estimated time to inspect tanks of different sizes, and the estimated time to complete associated preparation work applicable to each of the 422 non-residential UST sites in the CUPA's jurisdiction, set forth in Table 10 below, it took approximately 4,189 hours to perform the UST annual inspections in Fiscal Year 2010-2011.

Table 10

UST Program Estimated Inspection Hours

Tank Categories	# Tanks	# Non-Residential UST Sites	Inspection Hours/Tank or Site	Inspection Hours/Year
Residential tanks 1,000 gallons or less	0		2.0	N/A
Tanks 50,000 gallons or less	1,115		3.0	3,345
Tanks above 50,000 gallons	0		6.0	N/A
Non-residential UST sites		422	2.0	844
Totals	1,115	422		4,189

The Hazardous Materials Specialists also performed other types of inspections upon application by tank owners or operators, including inspections of tank lining

⁸⁵ For Fiscal Year 2009-2010, estimates of 3.5 inspection hours per tank and one hour of additional inspection time per facility were used to calculate costs. Upon review, staff determined that a better estimation of time spent inspecting an UST facility is 3.0 hours per tank and two hours of additional inspection time per facility.

upgrades, tank installations, tank and piping removals, field installed cathodic protection systems, tank linings, piping and tank upgrades, replacements of under dispenser containers, temporary tank closures and installation of new UST monitoring systems. The number of such inspections fluctuates from year to year, depending on the activities of tank owners and operators, projections of the number of these inspections to be performed are based on revenue received in the previous fiscal year. In Fiscal Year 2010-2011, the Hazardous Materials Specialists spent approximately 375 hours performing these inspections. The total inspection time in Fiscal Year 2010-2011 thus totaled approximately 4,564 hours, at a salary and benefit cost of \$527,188.

(b) Other Time

All Hazardous Materials Specialists are required to be certified UST inspectors, and once certified, must undergo a minimum of eight hours of training per year to keep up their certifications. The 18.75 specialists received a collective 150 hours of mandatory UST training in Fiscal Year 2010-2011. Miscellaneous other training, such as advanced UST training, specialized forms training, and other instruction, took another 150 hours. Additionally, the UST Program Lead spends approximately half of his time (803.5 hours) developing training, training other specialists, training businesses on the requirements of the program, reviewing inspection reports, attending UST Technical Advisory Group meetings and keeping abreast of proposed and new regulations and legislation. In total, this work will require about 1,103.5 hours, at a cost of \$127,465.

To this amount is added 21.3 percent of the CUPA-wide activities performed by the Hazardous Materials Specialists, which amounts to \$67,379. The total other time attributed to the UST Program thus adds up to approximately \$194,844 in salaries and benefits. Added to the \$527,188 amount for inspections, the total salaries and benefits for Hazardous Materials Specialists working in the UST Program comes to \$722,032 in Fiscal Year 2010-2011.

(2) *Administrative/Clerical*

Of the \$559,482 in administrative and clerical salaries and benefits attributed to the CUPA for Fiscal Year 2010-2011, \$93,103 was allocated to the UST Program. This amount is added to the \$722,032 in estimated salaries and benefits for hazardous materials specialists to yield a total of \$815,135, as shown in Table 11 below. Based on

the functions performed and the level of service provided, these salary and benefit costs were reasonable and necessary to operate the UST Program in Fiscal Year 2010-2011.

Table 11

**UST Program Salary and Benefit Summary
Fiscal Year 2010-2011**

Category	Cost
UST Inspections	\$527,188
Other Time/UST	\$127,465
Other Time/Multi-Program (21,3% share)	\$ 67,379
Administrative/Clerical (14.9% share)	\$ 93,103
Total UST Program	\$815,135

e. APSA Program

(1) *Hazardous Materials Specialists*

(a) Inspections

Facilities regulated under the Aboveground Petroleum Storage Act are inspected at different intervals based on the amount of petroleum storage capacity at the business site. Based on the inspection intervals and the estimated time to inspect tanks of different sizes in the CUPA's jurisdiction, set forth in Table 12 below (including the estimated time to complete associated preparation work), it takes an average of approximately 7.8⁸⁶ hours to perform an APSA inspection. In Fiscal Year 2010-2011, a total of 134 inspections were performed under this program. At the average of 7.8 hours per inspection, those inspections took about 1,039 hours, at a salary and benefit cost of \$120,022.

⁸⁶ See footnote 64.

Table 12

**Tank Facility Estimated Inspection Hours
Fiscal Year 2010-2011**

Tank Facility Category	# Facilities	Estimated Inspection Hours Per Facility	Average # Inspections Per Category (3 Years)	Inspection Hours Per Category (3 Years)
Storage capacity $\geq 1,320$ and $< 10,000$ gallons ⁸⁷	211	4	211	844
Storage capacity $\geq 10,000$ and $< 100,000$ gallons ⁸⁸	52	6	78	468
Storage capacity $\geq 100,000$ and $< 1,000,000$ gallons ⁸⁹	8	12	24	288
Storage capacity $\geq 1,000,000$ and $< 10,000,000$ gallons	6	16	18	288
Storage capacity $\geq 10,000,000$ and $< 100,000,000$ gallons	4	24	12	288
Storage capacity $\geq 100,000,000$ gallons	5	40	15	600
Totals	286		358	2,776

(b) Other Time

The 18.75 Hazardous Materials Specialists underwent a collective 150 hours of annual APSA Program training in Fiscal Year 2010-2011. Additionally, the APSA Program Lead spent approximately half of his time (803.5 hours) developing training, training other specialists, reviewing inspection reports, participating in the CUPA Forum APSA Working Group meetings and keeping abreast of proposed and new regulations and legislation. In total, this work took about 953.5 hours, at a cost of \$110,139.

⁸⁷ Facilities with a storage capacity of $\geq 1,320$ and $< 10,000$ gallons are inspected approximately once every three years.

⁸⁸ Facilities with a storage capacity of $\geq 10,000$ and $< 100,000$ gallons are inspected approximately once every two years.

⁸⁹ Facilities with a storage capacity of $\geq 100,001$ gallons are inspected approximately once every year.

To this amount are added 7.5 percent of the CUPA-wide activities performed by the Hazardous Materials Specialists, which amounts to \$23,689. The total other time attributed to the APSA Program thus adds up to approximately \$133,828 in salaries and benefits. Added to the \$120,022 amount for inspections, the total salaries and benefits for Hazardous Materials Specialists working in the APSA Program comes to \$253,850.

(2) *Administrative/Clerical*

Of the \$559,482 in administrative and clerical salaries and benefits attributed to the CUPA for Fiscal Year 2010-2011, \$32,733 was allocated to the APSA Program. This amount is added to the \$253,850 in estimated salaries and benefits for hazardous materials specialists to yield a total of \$286,583 as shown in Table 13 below. Based on the functions performed and the level of service provided, these salary and benefit costs were reasonable and necessary to operate the APSA Program in Fiscal Year 2010-2011.

Table 13

**APSA Program Salary and Benefit Summary
Fiscal Year 2010-2011**

Category	Cost
APSA Inspections	\$120,022
Other Time APSA	\$110,139
Other Time/All Programs (7.5% share)	\$ 23,689
Administrative/Clerical (5.2% share)	\$ 32,733
Total APSA Program	\$286,583

2. Services and Supplies

Services and supplies required to operate the CUPA are tracked in several categories. A full breakdown of the projected services and supplies needed to operate the CUPA in Fiscal Year 2010-2011 is contained in **Exhibit F**, which indicates a total of \$1,990,529 for the CUPA. These costs were necessary to operate the CUPA and therefore reasonable expenses to be funded by the CUPA Fees.

a. IR Team

Some services and supplies can be and are tracked to specific programs. Supplies and equipment used by the IR Team, for example, are assigned to the IR Team account and apportioned 100 percent to the IR Team component of the HMBP Program. In Fiscal Year 2010-2011, these included the \$32,909 cost of vehicles used by the IR Team. Additionally, costs incurred under the County's contracts with the City of Richmond to provide hazardous materials response services in the City of Richmond, (\$159,662 in Fiscal Year 2010-2011), were allocated 100 percent to the IR Team. These expenses of the IR Team totaled \$192,571.

b. Community Warning System

The CUPA also incurs costs for a variety of expenses arising from the Community Warning System, or CWS. The CWS was designed and built by CAER and paid for by industry, the largest contributors including the oil refineries in the County and Dow Chemical. The CWS was donated to the County in June 2001, and at that time the County took over operations of the system. It was understood at that time by representatives of the County, the refineries, Dow Chemical, Rhodia and others that, because the CWS is a response tool used by the CUPA to assist in the mitigation of hazardous materials incidents, businesses handling hazardous materials would pay to support the CWS, including the operations, maintenance and upgrades of the system, through HMBP Program Fees ("HMBP Fees"). Documents evidencing this agreement are attached as **Exhibit G**.

The CWS is used to alert and notify the public on the appropriate actions necessary to protect people from exposure to chemical releases. The CWS also alerts and notifies the emergency response agencies so that they are able to respond quickly and effectively. The system was developed in response to a series of releases in Contra Costa County, some of them with deadly consequences. Just a few of the incidents that led up to the CWS or occurred while the CWS was being developed are shown below:

- **Chevron Richmond Refinery Reactor fire, 1989:** Reactor fell over and smoke from the fire impacted the neighboring community.

- **Rhone Poulenc, Martinez, sulfuric acid spill and fire, May 1992:** One employee died, a second was injured, and the smoke from the fire and the decomposition products from the acid impacted the community.
- **General Chemical Richmond oleum release, July 1993:** A cloud of sulfuric acid enveloped a wide swath of the East Bay and caused more than 20,000 people to seek medical attention.
- **Unocal Rodeo Refinery Catacarb® release, August- September 1994:** More than 1,000 people sought medical treatment at a clinic set up by Unocal.
- **Unocal Rodeo Refinery tank fire, June 1995:** Smoke permeated the community and odors lasted for a week; more than 100 people moved to hotels to escape the smoke, with the costs paid by Unocal.
- **Shell Martinez Refinery fire, April 1996:** A major fire erupted in the catalytic gas unit, creating smoke that required people in parts of the city to shelter in place to avoid adverse health effects.
- **Unocal Rodeo Refinery Coker unit fire, May 1996:** Smoke from the fire required people in the community to shelter in place to avoid adverse health effects.
- **Tosco Avon Refinery, January 1997:** A hydrocracker run away reaction caused the failure of an outlet pipe from a reactor and an explosion and fire; one refinery employee was killed and 46 contractor workers were injured.
- **Tosco Avon Refinery, February 1999:** A flash fire broke out in a crude unit during equipment maintenance, killing four and seriously injury one person.
- **Chevron Richmond Refinery, March 1999:** After a 6-inch valve failed, a hydrocarbon release occurred, which ignited and caused severe onsite damage and smoke impact to the surrounding community, requiring people to shelter in place to avoid adverse health effects.

The CWS is a service provided by the Office of the Sheriff to the CUPA. The service expenses include salaries and benefits paid to a full-time manager and two full-

time staff⁹⁰. At least one of these employees is available 24 hours a day, seven days a week, to activate the system in the case of hazardous material releases at facilities that cannot activate the system directly. These employees also develop and keep current community alert protocols; oversee and verify the work of a contractor who maintains the system and trains system users, keeps the users of the system – including industry and response agencies – informed regarding changes in operation of the system, including upgrades; and evaluates new equipment for possible purchase and addition to the system. Additionally, these workers perform public outreach activities to educate the community on what to do in the event of an activation, and participate in discussions and meetings with the Federal Emergency Management Agency and California Emergency Management Agency regarding the manner in which public warnings should be given.

The CWS employees also oversee the Telephone Emergency Notification System contract. The Telephone Emergency Notification system, a component of the CWS, is used to make automated telephone calls to people in potentially impacted areas and provide them direction on keeping safe. The Hazardous Materials Specialists determine areas of the community to be notified in the event of an incident and gives this information to the CWS staff. The CWS staff also maintain a database of people who have signed up for warnings via cellular telephone calls and activates the system to make calls that are in that database when an incident occurs. The staff also keeps abreast of innovations in warning systems in order to improve the CWS' alert and notification capabilities, and meets with stakeholders of the system to determine their needs with respect to training personnel on the use of the CWS and modifications to the system.

Other CWS expenses include maintenance of the equipment, which includes 42 sirens, computers and radio equipment located at four refineries, Dow Chemical, Rhodia, the CUPA headquarters and in IR response vehicles, the Sheriff's Department dispatch center, CWS office, Bay Area Quality Management District, Contra Costa County Fire Protection District dispatch center, San Ramon Valley Fire Protection District dispatch center, California Highway Patrol dispatch center, television cable head ends, the nodes of five mountain tops and the Richmond, Pinole, Martinez, and Antioch police dispatch centers. Expenses also include the cost of training personnel at all of these locations in the proper use of the CWS. Other expenses of the CWS include software and hardware costs.

⁹⁰ In Fiscal Year 2010-2011, one of the staff positions was vacant.

In Fiscal Year 2010-2011, the total CWS service and supply costs were \$862,742. This amount was significantly less than projected, because the CWS Offices were short one personnel than projected and a major project to upgrade the CWS by replacing existing computer equipment with a web-based system was delayed. The CWS costs are shown in a separate column on Exhibit F. These expenses were reasonable and necessary to compensate and train personnel, maintain all of the equipment and keep the CWS functional so that it is available when needed to warn and notify the community when a hazardous material incident occurs. As the CWS is a key component of the HMBP Program, these costs are reasonable and necessary costs of the HMBP Program.

c. HMBP

The County contracts with the City of Richmond to have its firefighters perform HMBP inspections in the City of Richmond, where there are approximately 266 businesses regulated under the CUPA's HMBP Program. The sum of \$107,481 was paid to the City of Richmond for these services in Fiscal Year 2010-2011. This amount is allocated 100 percent to the HMBP Program and included as a professional/special service cost on Exhibit F.

d. Other Services and Supplies

Most of the supplies and services required to operate the HMP Division apply to all of the CUPA programs as well as the non-CUPA programs. Such costs include office supplies, rent, utilities, janitorial services, building maintenance and computer hardware and software. These costs are essential to the operation of the HMP Division office. Auto mileage reimbursements are a necessary travel cost associated with inspections and training. Communication equipment is needed so that staff can communicate with each other during emergencies and with staff in the field. Data imaging equipment is also necessary to make files available to emergency responders in the field and easier to retrieve. The total of these service and supply costs for the entire HMP Division was \$923,909 in Fiscal Year 2010-2011.

The existing accounting system is not configured to track the portion of the Division-wide expenses that are used by individual programs. Those service and supply expenses are instead allocated based on the same percentages used to allocate administrative and clerical costs (see Table 4 above). The amount allocated to the IR

Team for Fiscal Year 2010-2011 was \$145,739 and the amount allocated to the rest of the HMBP Program is \$149,249. Table 1 shows the total service and supply costs for each CUPA program. The CUPA's total share of these service and supply costs was \$827,735. These costs, as well as the program-specific service and supply costs detailed above, were a reasonable and necessary expense of the CUPA in Fiscal Year 2010-2011.

3. Indirect Administration

Indirect Administration expenses are Health Services Department overhead costs. They include the costs of the Office of the Director to oversee the various divisions within the department, costs of the Contracts and Grants Division to assist in preparing contracts and grants, costs of the Information Systems Division, which assists with computer equipment and software, costs of the Payroll and Personnel Division and costs of the Finance Division. Each division within the Health Services Department is allocated a portion of these projected costs, based on the percentage derived by dividing the total division budgeted expenses by the department expense budget. These services are essential parts of the day to day operations of the department and its various divisions.

The amount allocated to the HMP Division for Fiscal Year 2010-2011 was \$523,703. This amount was allocated based on the ratio of the projected expenses of the HMP Division (excluding County overhead and indirect administration allocation amounts) to the projected expenses of the Health Services Department (also excluding County overhead and indirect administration amounts). Of the \$523,703, a total of \$469,188 was allocated to the CUPA programs based on the allocation percentages set forth in Table 4 of this Report. The breakdowns of these numbers, by program, are shown in Table 1. The allocated totals for the IR Team and BP component of the HMBP Program are shown in Tables 14 and 15 below.

4. County Overhead

County overhead costs include those incurred by the County Administrator's Office in overseeing the Health Services Department. Included are costs incurred in the preparation of department or division agenda items for the Board of Supervisors, development of policies concerning the department or its divisions, labor negotiations, staffing Board committees to which the CUPA reports and assisting with the CUPA's reports to these committees. County overhead also includes costs incurred by other County departments that perform services for the Health Services Department or its divisions. They include Human Resources Department costs associated with contract negotiations with represented personnel, hiring personnel, developing policies, and handling grievances. Also included are the costs of services provided by the Auditor-Controller, Public Works Department, General Services, County Counsel and the Department of Information Technology. As with indirect administration costs, county overhead costs are essential to the day to day administration of the HMP Division, including the CUPA, and for that reason are reasonable and necessary.

The allocations of these overhead costs are determined according to an accounting process approved by the federal Office of Management and Budget and guidelines on determining best estimates. Amounts are allocated to each division in proportion to the cost of services received by the department from other County departments. The manner in which these proportional amounts are tallied varies depending on the type of services provided. Services provided by the Auditor-Controller, for example, are allocated based on the number of checks issued to the receiving department and number of employees in the receiving department. Services by the General Services Department, on the other hand, are allocated based on the square footages of the buildings they maintain and number of employees in the receiving department. For Fiscal Year 2010-2011, a total of \$189,305 was allocated to the HMP Division. This total was then allocated to the CUPA programs by the allocation percentages set forth in Table 4. The total allocated to the CUPA was \$169,599. Table 1 shows the specific amounts allocated to each CUPA program. Tables 14 and 15 show the totals allocated to the IR Team and BP component of the HMBP Program.

5. Uncollected Fees; Revenue Shortfalls

The final expense item includes uncollected fees and shortfall amounts. In Fiscal Year 2010-2011, the uncollected fee expense consists of revenues that should have been collected to cover costs in the HMBP Program and HWG Program in Fiscal Year

2009-2010 but were not be collected for various reasons. The actual amounts that were not collected from annual fees in these programs to cover costs in Fiscal Year 2009-2010 are shown in Table 1. But the expense amount for Fiscal Year 2011-2012 must be projected, and cannot be the actual amount, because the annual fees to cover costs of those two programs in Fiscal Year 2010-2011 have not yet been billed. As Table 1 indicates, the expense amounts in Fiscal Year 2010-2011 \$286,809, for the HMBP Program and \$139,586 for the HWG Program. The HMBP Program expense was allocated between the IR Team and BP components based on the percentages derived by dividing the total expenses of each component (excluding the uncollected fees) by the total expenses of the two components as a whole (also excluding the uncollected fees). The allocation amounts are shown in Tables 14 and 15.

Revenue shortfalls in the CalARP, APSA, and UST programs in Fiscal Year 2009-2010 also appear in Table 1, as they are an expense to be covered in Fiscal Year 2010-2011. These shortfalls resulted when the revenues received to cover costs in Fiscal Year 2009-2010 were insufficient to cover the expenses incurred. Some amount of these revenue shortfalls stemmed from fees that were not paid, but other amounts came about because fees were too low to cover the associated costs. The shortfall amounts were \$42,128 in the CalARP Program, \$18,640 in the APSA Program and \$491,645 in the UST Program, as shown in Table 1.

6. Expense Summary

Table 1 indicates the total expenses in all categories in each of the CUPA programs and the CUPA programs as a whole for Fiscal Year 2010-2011. As the HMBP Program expenses are broken down into separate components (the IR Team, the BP component and the CWS, which are funded differently, the expenses of those components must also be calculated. The expenses of the CWS are shown in Exhibit F. The expenses of the IR Team and BP components are summarized in Tables 14 and 15, respectively. As demonstrated above, the detailed expenses were reasonable and necessary to operate these programs in Fiscal Year 2010-2011.

Table 14

**IR Team Expenses
Fiscal Year 2010-2011**

Category	Cost
Salaries and Benefits	\$1,349,119
Services and Supplies	\$ 338,310
Indirect Administration (15.8% share)	\$ 82,610
County Overhead (15.8% share)	\$ 29,861
Uncollected Fees (58.9% of HMBP share)	168,976
Total IR Team	\$1,968,876

Table 15

**BP Component Expenses
Fiscal Year 2010-2011**

Category	Cost
Salaries and Benefits	\$ 883,225
Services and Supplies	\$ 256,730
Indirect Administration (16.2% share)	\$ 84,599
County Overhead (16.2% share)	\$ 30,580
Uncollected Fees (41.1% of HMBP share)	\$ 117,833
Total BP Component	\$1,372,965

B. Fiscal Year 2011 - 2012

The expense projections for Fiscal Years 2011-2012 are shown in Table 16 below, for the CUPA as a whole and the individual CUPA programs:

Table 16

CUPA Expense Projections Fiscal Year 2011-2012

Description	HMBP Program	HWG Program	Ca/ARP Program	UST Program	APSA Program	Total CUPA Programs
Salaries and Benefits	\$2,135,122	\$1,309,941	\$714,977	\$886,869	\$327,430	\$5,374,339
Services and Supplies	\$1,751,899	\$ 199,849	\$104,036	\$135,304	\$ 49,954	\$2,241,042
Indirect Administration	\$ 155,901	\$ 126,888	\$ 66,055	\$ 85,907	\$ 31,717	\$ 466,468
County Overhead	\$ 36,465	\$ 29,680	\$ 15,451	\$ 20,094	\$ 7,419	\$ 109,109
Uncollected Fees/ Shortfalls	\$ 286,809	\$ 139,588	0	\$185,907	0	\$ 612,304
Total	\$4,366,196	\$1,805,946	\$900,519	\$1,314,081	\$416,520	\$8,803,262

1. Salaries and Benefits

a. HMBP Program

(1) *Hazardous Materials Specialists and Technicians*

With retirements at the end of November 2011 and February 2012, the CUPA staff anticipates that a total of 17.083 Hazardous Materials Specialists will work for the CUPA and non-CUPA programs in Fiscal Year 2011-2012.⁹¹ This level of staffing represents the reduction of 1.67 of one Hazardous Materials Specialist from the previous fiscal year and a corresponding reduction in the collective number of hours

⁹¹ Sixteen Hazardous Materials Specialists have been employed full-time in Fiscal Year 2011-2012 to date. A seventeenth retired at the end of November 2011 and another retired at the end of February 2012. This computes to an average of 17.083 specialists projected to work for the HMP Division in Fiscal Year 2011-2012.

worked by the specialists.⁹² This change, along with other program changes, will result in revised salary and benefit numbers for Fiscal Year 2011-2012.⁹³

(a) Inspections

CUPA staff estimates that a total of 1,009 facilities will undergo HMBP inspections by Hazardous Materials Specialists in Fiscal Year 2011-2012.⁹⁴ Based on the average inspection time of approximately 4.1 hours,⁹⁵ calculated based on the numbers shown in Table 17, this represents approximately 4,151 hours. The inspection hours, multiplied by the a projected salary and benefit rate of \$122.51, will cost an estimated \$508,522.

⁹² A Hazardous Materials Specialist is projected to work an average of 1,664 hours in Fiscal Year 2011-2012. This was determined by starting with the total number of working hours in a year (2,080 hours, based on 52 weeks per year and 40 hours per week) and then subtracting the projected average vacation hours taken (134 hours), 10 paid holidays (80 hours), average personal holiday time taken (18 hours), average overtime comp hours taken (19 hours), average sick leave taken (47 hours) and average flex time taken (7 hours) to yield 1,775 hours. These projected averages were based on actual time off taken by all of the specialists from July 1, 2011, to January 31, 2012. The 1,775 annual hours equates to 222 eight-hour days. Specialists are allowed two 15-minute breaks per day. Multiplying 30 minutes per day by 222 working days yields a total of 111 in annual break time hours per specialist. This amount is then subtracted from 1,775 to yield the total of 1,664 working hours per year. The 17,083 specialists collectively will work approximately 28,427 regular hours in Fiscal Year 2011-2012.

⁹³ A salary and benefit rate of \$122.51 per hour applies to the Hazardous Materials Specialists in Fiscal Year 2011-2012. This figure is calculated by adding the base pay and benefits for all specialists, dividing the total by the number of specialists, and dividing again by the number of working hours per year (1,664). This rate does not include overtime. Benefits are projected to be 78.8 percent of salaries.

⁹⁴ Based on the current number of regulated facilities and the inspection schedule, the average number of inspections in the HMBP Program is 1,002.5 per year. The projected number of inspections for Fiscal Year 2011-2012 is higher than the average because of an unanticipated delay in a project to transition to a new data management system; i.e., time that staff had intended to devote to that project was instead spent on inspections. Staff plans to reduce the number of inspections in Fiscal Year 2012-2013 in order to rebalance the routine inspection schedule.

⁹⁵ See footnote 64.

Table 17

Estimated HMBP Program Inspection Hours
Fiscal Year 2011-2012

# Employees	Pounds of Material	# Facilities ⁹⁶	Estimated Inspection Hours Per Facility	Average # Inspections Per Category (2 Years)	Inspection Hours Per Category (2 Years)
N/A	<1K	222	1.50	222	333
0-19	1K ≤ x <10K	726	2.00	726	1,452
0-19	10K ≤ x <100K	235	3.00	235	705
0-19	100K ≤ x <250K	218	4.00	218	872
0-19	250K ≤ x <500K	85	5.00	85	425
≥20	1K ≤ x <10K	167	5.75	167	960.25
≥20	10K ≤ x <100K	164	6.75	164	1,107
≥20	100K ≤ x <250K	35	7.75	35	271.25
≥20	250K ≤ x <500K	13	8.75	13	113.75
N/A	500K ≤ x <2.5M	46	11.25	92	1,035
N/A	2.5M ≤ x <10M	8	19.00	16	232
N/A	10M ≤ x <100M	9	24.00	18	342
N/A	100M ≤ x <1B	2	28.00	4	96
N/A	1B ≤ x <5B	2	N/A	4	112
N/A	≥5B	0	32.00	N/A	N/A
Refineries		3		6	192
Totals		1,935		2,005	8,248.25

(b) IR Team

IR Team costs will change in Fiscal Year 2011-2012 due to the change in personnel discussed above and other changes that are discussed below. With a projected 17.083 members on the IR Team, a decrease in the time needed to satisfy certain medical requirements is projected (from 150 hours to approximately 137 hours).

⁹⁶ The facility numbers shown in Table 17 exclude facilities inspected by the Richmond Fire Department.

The team's point person will spend about 832 hours fulfilling those duties (an increase from 803.5 hours the previous year), and hours spent in incident response training activities are projected to increase from 858 hours in Fiscal Year 2010-2011 to 888 hours. The hours spent debriefing incidents is expected to decrease from 900 hours to 820 hours in Fiscal Year 2011-2012. As there are no new IR Team members in Fiscal Year 2011-2012, there is no projected need for the 240 hours of California Specialized Training Institute (CSTI) training that was required in Fiscal Year 2010-2011; for the same reason, the 136 hours that a new member spent in Fiscal Year 2010-2011 to respond to incidents along with the rest of the team will not be needed in Fiscal Year 2011-2012. IR Team time will also be reduced by another 300 hours, as the Contra Costa County Fire Protection District will not need the IR Team to assist with First Responder Operations and Decontamination training. However, hours spent by the IR Team leader are projected to increase to 832 hours in Fiscal Year 2011-2012, an increase of 28.5 hours from the previous fiscal year.

These changes will decrease the number of IR Team regular hours worked by the specialists from 5,177 hours in Fiscal Year 2010-2011 to a projected 4,495 hours in Fiscal Year 2011-2012, which will cost an estimated \$550,682. Added to this amount will be the \$104,409 in estimated salaries and benefits of the technicians, projected on-call pay in the amount of \$502,941 and projected callback costs of \$22,731, resulting in a salary and benefit cost of the IR Team in the amount of \$1,180,763.

(c) Other Time

Other hours spent by the Hazardous Materials Specialists that don't involve HMBP inspections or IR Team activities but are specific to the HMBP Program are projected to increase by a net 11.375 hours from the 865.125 Other Time hours worked in Fiscal Year 2010-2011. Training hours will decrease by 10 hours to about 102.5 hours total with the reduction in staff to 17.08 Hazardous Material Specialists. However, time spent by the HMBP Lead is projected to increase by 21.375 hours to 624 hours in Fiscal Year 2011-2012. These changes will increase these Other Time hours to 876.5 hours. These hours will cost approximately \$107,380 in salaries and benefits.

Other specialist time that will apply to multiple to multiple CUPA programs is projected to increase in Fiscal Year 2011-2012. Time spent by the Enforcement Coordinator, Health and Safety Coordinator and the Training Coordinator is projected to increase by a total of 42 hours to 1,228 hours in Fiscal Year 2011-2012 due to their increase in working hours. Business outreach efforts, however, are projected to

decrease by 67 hours to 683 hours in Fiscal Year 2011-2012. Time spent on special projects, including the transition to the CUPA's new data management system, is projected to increase by 600 hours to a total of 1,400 hours Fiscal Year 2011-2012. Specialist time that will apply to multiple CUPA programs is thus projected to increase from 2,735.25 hours in Fiscal Year 2010-2011 to 3,310.25 hours in Fiscal Year 2011-2012, at a cost of \$405,539.

As with the cost of CUPA-wide work by the Hazardous Materials Specialists in Fiscal Year 2010-2011, the cost of this work is allocated among the HWG, UST and APSA programs, the IR Team component of the HMBP Program, and the rest of the HMBP Program ("BP"). The amount allocated to the IR Team is 18.5 percent of the total, or \$74,986, as shown in Table 18 below. Another 20.7 percent of the total Other Time cost (\$83,866) is allocated to the balance of the HMBP Program. These costs are necessary and reasonable because these efforts are essential to the operation of the HMBP Program in Fiscal Year 2011-2012.

Table 18

**Allocation of Hazardous Materials Specialist Other Time Expenses
Fiscal Year 2011-2012**

Program	Specialist Salaries and Benefits (Regular Hours)	% Allocation	Cost Allocation
HMBP			
• IR Team	\$ 550,682	18.5	\$ 74,986
• BP	\$ 615,902	20.7	\$ 83,866
HWG	\$ 860,541	28.9	\$117,179
UST	\$ 694,632	23.3	\$ 94,587
APSA	\$ 256,457	8.6	\$ 34,921
Total	\$2,978,214	100.0	\$405,539

(2) *Temporary Worker*

The Fiscal Year 2011-2012 cost of a temporary worker to assist in finding businesses that are not but should be in the HMBP Program is projected to be \$2,393.

(3) *Administrative/Clerical*

Administrative costs will decrease in Fiscal Year 2011-2012 because of two retirements and a greater percentage of the Chief Officer's time being allocated to the Environmental Health Division. The total administrative costs attributable to the HMP Division in FY 2011-2012 are projected to be \$595,289. As shown in Table 19 below, the CUPA share is \$530,231, the IR Team share is \$90,333 (15.2 percent) and the share allocated to the balance of the HMBP Program is \$86,879 (14.6 percent).

Table 19

**Administrative and Clerical Salary and Benefit Allocations
Fiscal Year 2011-2012**

Program	Total Salaries and Benefits (Regular Hours)	% Allocation	Cost Allocation to Program
HMBP			
• IR Team	\$ 730,077	15.2	\$ 90,333
• BP	\$ 702,161	14.6	\$ 86,879
HWG	\$1,165,708	24.2	\$144,233
CaIARP	\$ 606,838	12.6	\$ 75,084
UST	\$ 789,219	16.4	\$ 97,650
APSA	\$ 291,378	6.1	\$ 36,052
Total CUPA Programs	\$4,285,381	89.1	\$530,231
Non-CUPA	\$ 525,808	10.9	\$ 65,058
Total HMP Division	\$4,811,189	100.0	\$595,289

The collective \$177,212 amount allocated to the HMBP Program, including the IR Team, is added to the \$1,429,845 in estimated regular hour salaries and benefits for hazardous materials specialists and technicians attributed to the HMBP Program, the projected on-call and call back costs of \$525,672 and the projected temporary worker costs of \$2,393 to yield a total of \$2,135,122. Based on the functions performed and the level of service provided, these salary and benefit costs will be reasonable and necessary to operate the HMBP Program in Fiscal Year 2011-2012.

Table 20 below summarizes the salary and benefit estimates of the HMBP Program in Fiscal Year 2011-2012:

Table 20
HMBP Program Salary and Benefit Estimate Summary
Fiscal Year 2011-2012

Category	Total
HMBP Inspections	\$ 508,522
IR Team	\$1,180,763
Other Time/HMBP	\$ 107,380
Other Time/Multi-Program	
• IR Team (18.5% share)	\$ 74,986
• BP (20.7% share)	\$ 83,866
Administrative/Clerical	
• IR Team (15.2% share)	\$ 90,333
• BP (14.6% share)	\$ 86,879
Temporary Worker	\$ 2,393
Total HMBP Program	\$2,135,122

b. HWG Program

(1) *Hazardous Materials Specialists*

(a) Inspections

CUPA staff projects that 901 facilities will undergo HWG inspections in Fiscal Year 2011-2012.⁹⁷ Based on the average inspection time of approximately 4.6 hours,

⁹⁷ Based on the current number of regulated facilities in the different tonnage categories and the inspection schedule, the average number of inspections in the HWG Program is 829.5 in Fiscal Year 2011-2012, plus the inspections of facilities operating under permits by rule, conditional exemptions and conditional authorizations. The projected number of inspections for Fiscal Year 2011-2012 is higher than the average because of an unanticipated delay in a project to transition to a new data management system; i.e., time that staff had intended to devote to that project was instead spent on inspections. Staff plans to reduce the number of inspections in Fiscal Year 2012-2013 in order to rebalance the routine inspection schedule.

calculated based on the numbers shown below in Table 21, these 901 inspections will take about 4,163 hours. In addition, approximately 284 hours will be spent inspecting facilities that operate under “permits by rule” or are conditionally exempt or conditionally authorized under the Hazardous Waste Control Law. These inspection hours total approximately 4,447 hours, and will cost a projected \$544,833 in salaries and benefits.

Table 21

**Estimated Average HWG Program Inspection Hours
Fiscal Year 2011-2012**

Category	# Facilities	Estimated Inspection Hours/Facility	Average # Inspections/Category (2 Years)	Inspection Hours/Category (2 Years)
<5 tons	1,266	3.00	1,266	3,798
5 tons ≤ x <12 tons	146	3.75	146	547.5
12 tons ≤ x <25 tons	81	5.35	81	425.25
25 tons ≤ x <50 tons	56	7.50	56	420
50 tons ≤ x <250 tons	56	11.25	56	630
250 tons ≤ x <500 tons	13	22.50	26	585
500 tons ≤ x <1000 tons	5	30.00	10	300
1000 tons ≤ x <2000 tons	3	40.00	6	240
≤2000 tons	6	60.00	12	720
Subtotal	1,632		1,659	7665.75
Permit by Rule	16	10	32	320
Conditional Authorization	11	10	22	320
Conditional Exemption	7	4	7	28
Subtotal	34		61	568
Total	1,666		1,720	8,233.75

(b) Other Time

Non-inspection time worked by Hazardous Materials Specialists in the HWG Program in Fiscal Year 2011-2012 is projected to increase by 15.75 hours over the non-inspection time in Fiscal Year 2010-2011. Training on HWG regulations will decrease by about 27 hours, to a total of 273 hours by the specialists collectively, with the

reduction in staffing. The Site Mitigation Coordinator will spend about 14.25 more hours on work associated with site mitigation (a total of 416 hours in Fiscal Year 2011-2012). The HWG Lead's duties will also require more hours in Fiscal Year 2011-2012 due to the increase in working hours (832 hours, an increase of 28.5 hours). This will increase the total Other Time specific to the HWG Program from 2,561.25 hours in Fiscal Year 2010-2011 to a projected 2,577 hours in Fiscal Year 2011-2012, at a salary and benefit cost of \$315,708. To this amount is added a 28.9 percent share of the CUPA-wide activities to be performed by Hazardous Materials Specialists in Fiscal Year 2011-2012, or \$117,179, for a total of \$432,887. These projected salary and benefit costs will be necessary and reasonable costs in Fiscal Year 2011-2012 because these services are essential to the operation of the HWG Program.

(2) *Green Business Staff*

The Hazardous Waste Reduction Manager retired in November 2011 but continued on in a temporary capacity to transition to her replacement, who was hired in January 2012. With this change, the salary and benefit total is projected to be \$176,754 in Fiscal Year 2011-2012.

(3) *Temporary Workers*

Based on the first seven months of the year, the projected cost of a temporary student and retiree in the HWG Program is \$11,234 in Fiscal Year 2011-2012.

(4) *Administrative/Clerical*

Of the \$595,289 in administrative and clerical salaries and benefits attributed to the CUPA for Fiscal Year 2011-2012, \$144,233 is allocated to the HWG Program. This amount is added to the \$1,165,708 in estimated salaries and benefits of hazardous materials specialists, the student worker costs and the Green Business Program staff to yield a total of \$1,309,941, as shown in Table 22 below. Based on the functions performed and the level of service provided, these will be reasonable and necessary costs to operate the HWG Program in Fiscal Year 2011-2012.

Table 22

**HWG Program Salary and Benefit Estimate Summary
Fiscal Year 2011-2012**

Category	Cost
HWG Inspections	\$ 544,833
Other Time/HWG	\$ 315,708
Other Time/Multi-Program (28.9% share)	\$ 117,179
Green Business Program	\$ 176,754
Administrative/Clerical (24.2% share)	\$ 144,233
Temporary Worker	\$ 11,234
Total HWG Program	\$1,309,941

c. CalARP Program

(1) *Engineers*

(a) Audits

During Fiscal Year 2011-2012, it is estimated that five Program 3 audits, four Program 2 audits, and two Program 1 audits will be completed, for a total of 4,620 audit hours. Of the total audit hours, approximately 4,199 are projected to be worked by CalARP engineers in Fiscal Year 2011-2012⁹⁸ at their hourly rate of \$105.55⁹⁹, resulting

⁹⁸ A CalARP Engineer will work approximately 1,605 hours in Fiscal Year 2011-2012. This was determined by starting with the total number of working hours in a year (2,080 hours, based on 52 weeks per year and 40 hours per week) and then subtracting projected average vacation hours taken (168 hours), ten paid holidays (80 hours), projected average personal holidays taken (30), projected average comp time taken (13), and projected average sick leave taken 77 hours) to yield 1,712 hours. These projections were based on actual time taken in the first seven months of Fiscal Year 2011-2012 by all of the engineers. The 1,712 annual hours equates to 218 eight-hour days. Engineers are allowed two 15-minute breaks per day. Multiplying 30 minutes per day by 214 working days yields a total of 107 in annual break time hours per engineer. This amount is then subtracted from 1,712 to yield the total of 1,605 working hours per year. Three engineers are expected to work a collective 4,815 hours for the CalARP Program in Fiscal Year 2011-2012.

⁹⁹ A salary and benefit rate of \$105.55 per hour is used for CalARP Engineers. This figure is calculated by adding the base pay and differentials for all engineers, dividing the total by the number of engineers,

in a total cost of \$443,204. The remaining 421 in audit hours¹⁰⁰ are expected to be worked by the CalARP Engineering Supervisor at the rate of \$117.26¹⁰¹ and cost of \$49,366. Together, these audits will cost a projected \$492,570 in salaries and benefits.

(b) Other Time

It is projected that CalARP Engineers will work an estimated 129 hours more performing non-audit functions during regular hours. Additional non-audit hours will be spent reviewing revised Risk Management Plans, updating CalARP policies and procedures, reviewing potential CalARP modules to use in the new data management system, and public outreach regarding the program, audits and the Risk Management Plans. The CalARP Engineering Supervisor is projected to work 420 non-audit hours. The total Other Time to be worked in the CalARP Program during regular hours thus includes 616 hours by the engineers, at a cost of \$65,019, and 420 hours by the supervisor, at a cost of \$49,249, for a salary and benefit total of \$114,268.

In addition to the above, the engineers will earn an estimated \$33,055 in on-call payments in Fiscal Year 2011-2012. These payments compensate the engineers for being available during off-hours to provide expertise, if needed, to the IR Team during incidents. One engineer is on call during off-hours and paid one hour of salary for every four hours on call. This brings the total Other Time salary and benefit cost to \$147,323.

and dividing again by the number of working hours per year (1,605). This rate does not include overtime. Benefits are projected to be 58.3 percent of salaries.

¹⁰⁰ The CalARP Supervisor worked 1,682 hours in Fiscal Year 2011-2012. This was determined by starting with the total number of working hours in a year (2,080 hours, based on 52 weeks per year and 40 hours per week) and then subtracting projected vacation hours taken (98 hours), ten paid holidays (80 hours), personal holiday time taken (31 hours) and sick leave taken (78 hours) to yield 1,794 hours. These projections were calculated based on actual time off taken by CalARP Supervisor in first seven months of Fiscal Year 2011-2012. The 1,794 annual hours equates to 224 eight-hour days. The supervisor is allowed two 15-minute breaks per day. Multiplying 30 minutes per day by 224 working days yields a total of 112 in annual break time hours. This amount is then subtracted from 1,794 to yield the total of 1,682 working hours per year.

¹⁰¹ A salary and benefit rate of \$117.26 per hour is used for the CalARP Supervisor in Fiscal Year 2011-2012. This figure is calculated by adding the base pay and dividing by the number of working hours per year (1,682). Benefits are projected to be 74.0 percent of salaries.

(2) *Administrative/Clerical*

Of the \$595,289 in administrative and clerical salaries and benefits attributed to the CUPA for Fiscal Year 2011-2012, \$75,084 is allocated to the CalARP Program, based on the formula discussed above. This amount is added to the \$639,893 in estimated CalARP Program engineering salaries and benefits to yield a total of \$714,977, as shown in Table 23 below. Because these functions and level of service provided are essential to the operation of the CalARP Program, these salary and benefit costs will be reasonable and necessary to operate the CalARP Program in Fiscal Year 2011-2012.

Table 23

**CalARP Program Salary and Benefit Estimate Summary
Fiscal Year 2011-2012**

Category	Cost
CalARP Program Audits	\$492,570
Other Time/CalARP	\$147,323
Administration/Clerical (12.6% share)	\$ 75,084
Total CalARP Program	\$714,977

d. UST Program

(1) *Hazardous Materials Specialists*

(a) Inspections

No changes are projected in the number of tanks to undergo annual inspections in Fiscal Year 2011-2012 or the average inspection times. These hours are therefore projected to total 4,189 hours. The same number of hours is also projected to be spent on other UST inspections in Fiscal Year 2011-2012 as were worked in Fiscal Year 2010-2011 (375 hours). The total projected inspection hours thus adds up to 4,564, and will cost an estimated \$559,136 in salaries and benefits in Fiscal Year 2011-2012.

(b) Other Time

The same level of mandatory UST certification training that was required in Fiscal Year 2010-2011 will also be required in Fiscal Year 2011-2012. The 17.083 Hazardous Materials Specialists thus are expected to undergo eight hours of mandatory training apiece, for a total of 137 hours. Miscellaneous other training will take another eight hours per specialist, bringing the training total to 274 hours. The UST Program Lead's time will increase to 832 hours in Fiscal Year 2011-2012. This brings the total of other UST Program hours to 1,106 hours, which will cost approximately \$135,496 in salary and benefits.

To this amount is added 23.3 percent of the CUPA-wide activities projected to be performed by the Hazardous Materials Specialists in Fiscal Year 2011-2012, which amounts to \$94,587. The total other time attributed to the UST Program thus adds up to approximately \$230,083 in salaries and benefits. Added to the amounts for annual inspections, the total salaries and benefits for Hazardous Materials Specialists working in the UST Program comes to \$789,219.

(2) *Administrative/Clerical*

Of the \$595,289 in administrative and clerical salaries and benefits attributed to the CUPA for Fiscal Year 2011-2012, \$97,650 is allocated to the UST Program. This amount is added to the \$789,219 in estimated salaries and benefits for hazardous materials specialists to yield a total of \$886,869 as shown in Table 24 below. Based on the functions performed and the level of service provided, these costs are reasonable and necessary to operate the UST Program in Fiscal Year 2011-2012.

Table 24

**UST Program Salary and Benefit Estimate Summary
Fiscal Year 2011-2012**

Category	Cost
UST Inspections	\$559,136
Other Time/UST	\$135,496
Other Time/Multi-Program (23.6% share)	\$ 94,587
Administrative/Clerical (16.4% share)	\$ 97,650
Total UST Program	\$886,869

e. APSA Program

(1) *Hazardous Materials Specialists*

(a) Inspections

CUPA staff projects that 145 facilities will undergo APSA inspections in Fiscal Year 2011-2012.¹⁰² The specialists' time to complete these inspections will total an estimated 1,124 hours, which adds up to a projected salary and benefit cost of \$137,745.

(b) Other Time

APSA training hours will decrease by a net 13 hours in Fiscal Year 2011-2012 to 137 hours, reflecting the change in the number of Hazardous Materials Specialists from 18.75 to 17.083 for Fiscal Year 2011-2012. In addition, the APSA Lead will spend an additional 28.5 performing his duties as lead (a total of 832 hours). Other than these

¹⁰² The average number of inspections per year, based on the numbers in Table 12, is approximately 119. A greater than average number of inspections are projected in Fiscal Year 2011-2012 because many of the inspections will take place at facilities recently added to the program. All facilities are inspected upon or soon after their entry into the APSA Program.

changes, non-inspection hours worked by the Hazardous Materials Specialists in the APSA Program in Fiscal Year 2011-2012 are projected to remain the same as the non-inspection hours worked the previous fiscal year. This works out to an increase of 15.5 hours in Other Time from the 953.5 hours worked the previous fiscal year, for a total of 969 hours, at a salary and benefit cost of \$118,712.

To this amount is added 8.6 percent of the CUPA-wide activities projected to be performed by the Hazardous Materials Specialists in Fiscal Year 2011-2012, which amounts to \$34,921. The total other time attributed to the APSA Program thus adds up to approximately \$153,633 in salaries and benefits. Added to the amounts for annual inspections, the total salaries and benefits for Hazardous Materials Specialists working in the APSA Program comes to \$291,378.

(2) *Administrative/Clerical*

Of the \$595,289 in projected administrative and clerical salaries and benefits attributed to the CUPA in Fiscal Year 2011-2012, \$36,052 is allocated to the APSA Program for Fiscal Year 2011-2012. This amount is added to the \$291,378 in Hazardous Materials Specialists salaries and benefits to yield a total of \$327,430, as shown in Table 25 below. Based on the functions performed and the level of service provided, these costs are reasonable and necessary to operate the APSA Program in Fiscal Year 2011-2012.

Table 25

**APSA Program Salary and Benefit Estimate Summary
Fiscal Year 2011-2012**

Category	Cost
APSA Inspections	\$137,745
Other Time/APSA	\$118,712
Other Time/All Programs (8.6% share)	\$ 34,921
Administrative/Clerical (6.1% share)	\$ 36,052
Total APSA Program	\$327,430

2. Services and Supplies

The service and supply costs to be incurred by the CUPA in Fiscal Year 2011-2012 are projected to total approximately \$2,241,042. These costs are detailed in **Exhibit H** attached hereto.

a. IR Team

Service and supply costs of the IR Team are projected to total \$312,244 in Fiscal Year 2011-2012, and are shown in Exhibit H. The CUPA's cost to pay the City of Richmond to perform hazardous materials response work is projected at \$159,662, the same as the actual cost incurred in Fiscal Year 2010-2011. The response vehicles that are attributed to the IR Team costs are projected at \$27,418, a decrease from the previous fiscal year.

To the above costs of \$187,080 is added to the IR Team share of the miscellaneous services and supplies, which will total a projected \$125,164 in Fiscal Year 2011-2012. This adds up to \$312,244.

b. Community Warning System

The projected cost of the CWS is budgeted by the Office of the Sheriff, and will increase to \$1,269,277 in Fiscal Year 2011-2012. The increase from Fiscal Year 2010-2011 is necessary to pay for an upgrade to a web-based interface that will assist in transmitting hazardous material incidents information more quickly and to more agencies and businesses, as well as the salary and benefits of a new staff person.

c. BP Component

The County's cost under its contract with the City of Richmond to perform HMBP inspections is projected to be \$50,000 in Fiscal Year 2011-2012. While this is less than the maximum payment authorized, it is consistent with actual payments in past years. The BP component share of the miscellaneous services and supplies, which will be a projected \$120,378 in Fiscal Year 2011-2012, brings the total service and supply costs of this component of the HMBP Program to \$170,378.

d. Other Services and Supplies

The miscellaneous service and supply costs budgeted for the HMP Division in Fiscal Year 2010-2011 were used to project CUPA-wide service and supply costs in Fiscal Year 2011-2012. No significant changes in these costs are expected in Fiscal Year 2011-2012.

The projected miscellaneous costs of the CUPA were calculated by first allocating the miscellaneous costs of the HMP Division as a whole (\$824,829, which is the sum remaining after subtracting the specific costs of the IR Team, BP component of the HMBP Program and the CWS from the total service and supply costs). This amount was then allocated to the CUPA and non-CUPA programs by the percentages calculated in Table 19. The allocation amounts to the IR Team and the BP component of the HMBP Program are \$125,164 and \$120,378, respectively, as discussed above; the totals for the other CUPA programs are shown in Table 16 and Exhibit H. The allocated totals of these service and supply costs for the entire CUPA add up to \$734,685.

3. Indirect Administration

The Indirect Administration costs allocated to the HMP Division for Fiscal Year 2011-2012 total \$523,703, which has not changed from Fiscal Year 2010-2011. This amount has been allocated to CUPA and non-CUPA programs according to the percentages calculated in Table 19. The CUPA's total share is \$466,468. Table 16 shows the specific amounts allocated to each CUPA program for Fiscal Year 2011-2012.

4. County Overhead

For Fiscal Year 2011-2012, a total of \$122,496 in county overhead costs are allocated to the HMP Division. The total was allocated to the CUPA and non-CUPA programs according to the percentages calculated in Table 19. The CUPA's total share is \$109,109. Table 16 shows the specific amounts allocated to each CUPA program for Fiscal Year 2011-2012.

5. Uncollected Fees; Revenue Shortfalls

Uncollected fee totals projected for the HMBP and HWG programs in Fiscal Year 2011-2012 are the same as the projected totals in Fiscal Year 2010-2011. These amounts – \$286,809 and \$139,588, respectively – are shown in Table 16.

The UST program experienced funding shortfalls in Fiscal Year 2010-2011, in the amount of \$185,907. These amounts are also shown in Table 16.

6. Expense Summary

The projected expenses of each CUPA Program and the CUPA as a whole for Fiscal Year 2011-2012 are shown in Table 16 above. As demonstrated above, these costs are reasonable and necessary expenses of the CUPA.

VII. PROJECTIONS OF REQUIRED REVENUES

A. Revenue Sources

After expenses for a fiscal year have been projected, the next step is to project revenues for that fiscal year. The CUPA revenue sources include not only annual fees but also permit fees, late payment penalties, fines, payments for incident response, and grants. Annual fee payments are the primary revenue source.

Some revenues are collected on an intermittent basis. These include monies collected for underground storage tank plan checks and inspections after repairs or modifications. The same is true of revenues resulting from cost recovery for services provided by the IR Team (apart from amounts incorporated into the annual HMBP and HWG fees). Fines, late penalties and grants fall into the same category. The totals of these revenues received during Fiscal Year 2010-2011 were used to tally actual revenues required to fund Fiscal Year 2010-2011 costs and projected revenues needed to fund program expenses in Fiscal Year 2011-2012. To these revenue amounts are added any other fee payments collected and shown in the revenue column for the fiscal year in question. These amounts typically consist of late payments of fees for prior fiscal years or excess revenues collected in the previous fiscal year and carried forward to the fiscal year in question.

The totals of the revenues described above in the various programs are then subtracted from the total expenses to determine the remaining revenues needed to operate the programs for the applicable fiscal year. These remaining fees are collected from regulated businesses in the form of annual permit fees. A single fee is charged to each regulated business, with the total broken down by program on the annual invoice. The amount of the fee applicable to a particular facility depends on the type of programs applicable to that facility, the number of regulated facilities within the jurisdiction of the CUPA, and numerous other factors that include the size of the regulated business site, the amount of hazardous waste generated by that regulated business site the previous calendar year, projected inventories of hazardous materials to be handled in the current calendar year, and aboveground and underground storage tank capacities.

B. Revenue Projections

1. Fiscal Year 2010-2011

Revenues already collected to fund the CUPA programs in Fiscal Year 2010-2011, and revenues that are still needed to fund two of those programs in Fiscal Year 2010-2011, are shown in Table 26 below:

Table 26

Fiscal Year 2010-2011 Revenues

Description	HMBP Program	HWG Program	CalARP Program	UST Program	APSA Program	Total CUPA Programs
Misc. Permit Fees	0	0	0	\$ 111,729	0	\$ 111,729
Service Fees	\$ 92,078	\$ 491	\$ 270	\$ 302	\$ 106	\$ 93,247
Fines & Penalties	\$ 24,048	\$ 120,248	\$ 3,792	\$ 32,906	\$ 8,497	\$ 189,491
Intergovernment Revenue	\$ 150,000	0	0	0	0	\$ 150,000
Annual Permit Fees/Collected For FY 10-11	\$1,185,435	0	\$1,051,235	\$1,219,979	\$421,434	\$3,878,083
Fee Carryovers/To FY 10-11	\$ 59,067	0	0	0	0	\$ 59,067
Required Fee Revenue/ For FY 10-11	\$3,075,717	\$1,737,891	0	0	0	\$4,813,608
Borrowed Revenue/ From FY 11-12	0	0	0	\$ 185,907	0	\$ 185,907
Total Revenues	\$4,586,345	\$1,858,630	\$1,055,297	\$1,550,823	\$430,037	\$9,481,132
Total Expenses	\$4,204,585	\$1,858,630	\$ 988,106	\$1,550,823	\$391,022	\$8,993,166
Carryovers/To FY 11-12	\$ 381,760	0	\$ 67,191	0	\$ 39,015	\$ 487,966

In the HMBP Program, revenues are further broken down based on the expenses of the IR Team, CWS and balance of the HMBP Program (“BP”) in Fiscal Year 2010-2011 to yield the HMBP Fee amounts needed to fund the expenses of two of those program components in Fiscal Year 2010-2011.¹⁰³ The line item entitled “Required Fee Revenue For FY 10-11” is the total that must be funded with the annual fees for Fiscal Year 2010-2011. The breakdown of these revenues is shown in Table 27 below:

¹⁰³ The CWS component shown in Table 27 was fully funded with the Fiscal Year 2009-2010 HMBP Fees. The HMBP Fees for Fiscal Year 2010-2011 will include a component to cover CWS expenses in Fiscal Year 2011-2012.

Table 27

**HMBP Program
Fiscal Year 2010-2011 Revenues**

Description	IR Team	CWS	BP	Total HMBP Program
Misc. Permit Fees	0	0	0	0
Service Fees	\$ 91,750	0	\$ 328	\$ 92,078
Fines and Penalties	\$ 4,492	0	\$19,556	\$ 24,048
Intergovernment Revenue	\$150,000	0	0	\$ 150,000
Annual Permit Fees/Collected For FY 10-11	0	\$1,185,435	0	\$1,185,435
Fee Carryovers/To FY 10-11	0	\$ 59,067	0	\$ 59,067
Required Fee Revenue/ For FY 10-11	\$1,722,634	0	\$1,353,083	\$3,075,717
Total Revenues	\$1,968,876	\$1,244,502	\$1,372,967	\$4,586,345
Total Expenses	\$1,968,876	\$ 862,742	\$1,372,967	\$4,204,585
Fee Carryovers/To FY 11-12	0	\$ 381,760	0	\$ 381,760

2. Fiscal Year 2011-2012

The projected revenues needed to fund the CWS component of the HMBP Program and the CalARP, UST and APSA programs in Fiscal Year 2011-2012 are shown in Table 28 below.¹⁰⁴

¹⁰⁴ Projected revenues for the HWG Program and IR Team and BP components of the HMBP Program are not shown in this table, because those projections will not be made until the end of Fiscal Year 2011-2012, at which time fees to fund the operations of the HWG Program and IR Team and BP components of the HMBP Program will be set and billed to regulated facilities.

Table 28

Projected Revenues Fiscal Year 2011-2012

Description	HMBP Program (CWS only)	CalARP Program	UST Program	APSA Program
Misc. Permit Fees	0	0	\$ 90,114	0
Service Fees	0	\$ 101	\$ 132	\$ 49
Fines & Penalties	0	\$ 7,949	\$ 214,106	\$ 3,817
Intergovernment Revenue	0	\$ 3,760	\$ 4,890	\$ 1,805
Fee Carryovers/To FY 11-12	\$ 381,760	\$ 67,191	0	\$ 39,015
Required Fee Revenue/For FY 11-12	\$ 887,517	\$821,518	\$1,004,839	\$371,834
Total Revenues	\$1,269,277	\$900,519	\$1,314,081	\$416,520
Total Expenses	\$1,269,277	\$900,519	\$1,314,081	\$416,520

As can be seen in the above table, most of the projected revenues each year are generated through business fees, through the single fee system. This amount includes fee revenues carried over from the previous year. Other amounts are generated from penalties, permit fees, assessment revenues, grants and recovered costs of the IR Team.¹⁰⁵ Fines and penalties attributed to the UST Program in Fiscal Year 2011-2012 include a \$200,000 settlement payment awarded in a statewide prosecution against Equilon for UST violations.

It must be emphasized that, with the exception of fee revenues actually received, projections of fee revenues are merely estimates. The number of regulated businesses changes constantly, and the inventories of hazardous materials that they handle and the amount of hazardous waste that they generate vary from year to year. The revenue recovered from responding to incidents also fluctuates from year to year. The success rate in collecting the fee revenues from the businesses that are invoiced is also variable.

¹⁰⁵ Recovered costs include hourly fees charged to and collected from known responsible parties that cause hazardous materials incidents and \$150,000 in Measure H funding. Measure H was a Countywide measure passed by the voters in 1988 to provide for enhancements to the emergency medical system by imposing assessments on property in County Service Area EM-1. Approximately \$150,000 of the annual assessment revenue is allocated to the CUPA.

For these reasons, the actual revenues collected may be less or more than was projected, and less or more than the actual expenses incurred. If a program experiences a shortfall, funds are borrowed against that program's anticipated revenues the next year in order to cover the shortfall on an interim basis. The shortfall is made up the next year, in the form of increased fees to cover the increased cost of the program as well as the shortfall. Conversely, when there are excess revenues in a program, those revenues are carried forward to and factored in the projection of revenues needed to operate in the coming fiscal year.

In the past, some have criticized carry-over fee revenues as an "illegal profit," but nothing in the Health & Safety Code or the implementing regulations provides any legal support for this contention, or requires absolute perfection in establishing the amount of fees required to operate a regulatory program. On the contrary, regulatory agencies are accorded a great deal of flexibility in doing so because of the inherent complexity of such programs.¹⁰⁶ Because the CUPA operates *multiple* programs, even greater flexibility is in order here.

C. Fee Apportionment

The general rule as to the apportionment of regulatory fees is that the charges allocated to a payor must "bear a fair or reasonable relationship to the payor's burdens on or benefits from the regulatory activity."¹⁰⁷ However, regulatory fees are valid despite the absence of any perceived "benefit" accruing to the fee payors.¹⁰⁸ The Board "need only apply sound judgment and consider 'probabilities according to the best honest viewpoint of informed officials' in determining the amount of the regulatory fee."¹⁰⁹

Because each of the CUPA programs has a different purpose, different allocation methods have been tailored to each of the programs, as discussed below.

¹⁰⁶ *Cal. Assn. of Prof. Scientists v. Dept. of Fish and Game* (2000) 79 Cal.App.4th 935, 950.

¹⁰⁷ *Cal. Assn. of Prof. Scientists v. Dept. of Fish and Game*, *supra*, 79 Cal.App.4th at 945.

¹⁰⁸ *Pennell v. City of San Jose*, *supra*, 42 Cal.3d at 375.

¹⁰⁹ *United Business Com. v. City of San Diego* (1979) 91 Cal.App.3d 156, 166.

1. **HMBP Fee Allocations**

a. Methodology

In Fiscal Year 2010-2011, there were 2,326 facilities regulated by the HMBP Program within the CUPA jurisdiction. The HMBP Program is thus the largest of the CUPA programs. Because of the large number of businesses regulated by this program, their range in size from small establishments that handle only a few pounds of hazardous materials each year to oil refineries handling billions of pounds of hazardous materials annually, and the range of activities included in the HMBP Program, the allocation of these fees is significantly more complex than the allocation of fees for other CUPA programs.

(1) *Fee Components*

With the goal of allocating the HMBP Fees to fee payors in rough proportion to their benefits from or burdens on the CUPA, the total HMBP Fees that must be collected to fund the operations of the HMBP Program was first divided into three components: (1) The IR component, representing an estimate of the revenue needed to pay the unrecovered¹¹⁰ costs of the IR Team in Fiscal Year 2010-2011; (2) the CWS component, representing an estimate of the revenue needed to pay the cost of the CWS in Fiscal Year 2011-2012; and (3) the Base component, representing an estimate of the revenues needed to operate the balance of the HMBP Program in Fiscal Year 2010-2011. The totals of these three components are as follows:

CWS Component:	\$ 887,517
IR Component:	\$1,722,634
Base Component:	<u>\$1,353,083</u>
TOTAL:	\$3,963,234

(2) *Payor Categories*

CUPA staff evaluated the above three fee components to determine the most equitable way to allocate the fees in these categories to the payors in a proportional manner. Because all of the businesses regulated by the HMBP Program are required to

¹¹⁰ "Unrecovered" costs of the IR Team are the costs remaining after subtracting the recovered costs from the total IR Team costs.

submit business plans, and all of those businesses are subject to inspection, fees are properly and fairly allocated to all regulated businesses; however, the business plans of regulated businesses of different sizes vary in complexity, and the time to inspect their facilities varies with that complexity. The number of regulated facilities in this program and limitations imposed by the CUPA's accounting system, however, make it administratively infeasible to calculate individualized fees for each business based on an estimate of the time it may take the CUPA to regulate each business. Such an approach would also tend to create too much uncertainty within the regulated community as to the amount of the fees to which they might be subject in coming years, as these estimates likely would vary widely from year to year.

To avoid these problems, categories of fee payors have been developed, based on the size of a business's projected calendar year inventories of hazardous materials and the number of employees at the business. The inventory and employee factors were used because they have been shown over the years at this CUPA and CUPAs around the state to be good indicators of the complexity of a facility, which in turn is generally indicative of the burden it poses on the HMBP Program.

As a general principle, the more employees that a business has and the larger the inventory of hazardous materials that a business handles, the more complex the business plan will be; by extension, the more complex that a business plan is, the more time it will take for a Hazardous Materials Specialist to inspect the facility. For example, a regulated business site may have a small total quantity of hazardous materials on hand, but those materials may be spread over a large campus, such as a community college. It takes longer to inspect and verify the relatively small inventories of such facilities simply because the materials are spread throughout a large facility. Other CUPAs use one or another of these factors to determine their HMBP fees. The Solano County CUPA, for example, bases its fees on the number of employees at a facility, while the Marin, San Mateo, Santa Clara and Sonoma CUPAs base their fees on quantities of hazardous materials. The City of Berkeley uses a combination of the quantities and number of types of hazardous materials in a business' inventory in its HMBP fee schedule.

(3) *Fee Component Allocations*

With the HMBP Program Fee components and payor categories in place, the next step was to determine the amount of each fee component to allocate to each payor category.

(a) CWS Component

The CWS was developed in response to incidents at large facilities, as discussed *supra*, and is generally activated only in response to hazardous materials incidents at large facilities, because incidents at large facilities tend to pose a greater threat to the health and safety of the community. Since the CWS became available for use in November 1995, there have been 52 activations of the CWS for Level 2 and Level 3 incidents through the end of Fiscal Year 2010-2011.¹¹¹ Forty-two of those occurred at oil refineries, seven at facilities handling 2.5 million to 10 million pounds of hazardous materials, and two at facilities handling 500,000 to 2.5 million pounds of materials. Only one of those activations occurred because of an incident at a facility handling less than 500,000 pounds, and that particular activation occurred only in response to a special request from another public entity, and did not meet the standard for activation of the CWS. Thus, essentially 100 percent of the activations have been prompted by incidents at facilities that handle 500,000 or more pounds of hazardous material. Because the activations are a fair representation of the burdens posed by these facilities with respect to the CWS, staff determined that the cost of the CWS should be borne by the facilities in the categories where the CWS has historically been used.¹¹² A CWS component of the HMBP Program annual fee is therefore included in the fees applicable to the facilities in these categories to collect the funds needed to operate and maintain the

¹¹¹ Level 2 activations occur in the event of incidents that will have offsite impact and possible health impacts, and are characterized by any of the following: (1) Offsite impact where eye, skin, nose and/or respiratory irritation may be possible for individuals with respiratory sensitivities; (2) explosion with noise/pressure wave impact off-site; and/or (3) fire/smoke/plume (other than steam) leaving or expected to leave site.

Level 3 activations occur in the event of incidents that will have offsite impact, and are characterized by any of the following: (1) Offsite impact that may cause eye, skin, nose and/or respiratory irritation to the general population; (2) fire, explosion, heat or smoke with an offsite impact (example: on a process/unit/storage tank where mutual aid is requested to mitigate the event and the fire will last longer than 15 minutes); or (3) hazardous material or fire incident where the incident commander or unified command, through consultation with the IR Team, requests that sirens be sounded.

¹¹² Staff considered that the facilities where incidents occur that require CWS activation also derive benefits from having the CWS available, in the form of decreases in potential liability for personal injuries and by not having to fund their own individual warning systems. Such benefits are difficult for the CUPA to quantify; moreover, there is likely to be a direct correlation between burdens and benefits in this context. For this reason, CUPA staff determined that the CWS component of the HMBP Program annual fee should be allocated based on burdens and not benefits.

CWS. As well as being a component of the annual CUPA permit cost, the CWS component is considered a service fee, inasmuch as the operation of the CWS to warn of hazardous materials incidents is a service provided to the large facilities that pay for it.¹¹³

When there are large quantities of chemicals in storage, the potential for some of those chemicals to be released, and for the chemicals released to disperse to the extent that they impact the surrounding community, is greater than if there are smaller quantities of chemicals in storage. This is true simply because in the event of a release, all other things being equal, more chemicals can escape from a large inventory than could escape from a smaller inventory. The above statistics showing that the greatest number of incidents occurs at the refineries are consistent with this fact. However, the potential does not rise linearly with the quantity of hazardous materials, because there are many other factors at work, including the toxicity or flammability of the chemical(s) released, the type of processing that occurs at a facility, and the manner in which the chemical or smoke disperses. To some degree, all of these factors influence the manner in which chemicals disperse after being released, and whether a release will be large enough in volume to spread to surrounding neighborhoods.

To account for these different factors, staff considered both the number of pounds in the hazardous materials inventories and the volume of a potential release. Specifically, a quantity of hazardous material fills a particular volume. Volume is calculated by multiplying length by width by height. In the case of a perfect cube, each dimension would be the cube root of the total volume. Cube roots relate to the expansion to fill this volume. Staff determined that cube roots were a valid basis for comparison of inventories of different chemicals because all gasses and liquids will expand to fill the volume that is contained, or in the case of a release, not contained. Cube roots were calculated of the hazardous material inventory quantities reported by the businesses in these categories on their most recent business plans. For example, the cube root of the largest refinery, which reported a quantity of 7 billion pounds, is 1,913. Staff then added the cube roots of all the facilities to determine the cube root of all of the facilities combined, which is approximately 22,521. The cube root of each facility was then divided by the total cube root of all the facilities to determine the percentage of the total cube root applicable to each facility. These percentages are

¹¹³ In the statistically unlikely event that the CWS needs to be activated because of a hazardous materials release at a small facility not subject to the CWS component, that facility would be assessed an hourly fee to cover the cost of using the service.

shown in **Exhibit I** attached hereto. The percentages were then multiplied by the \$887,517 in fee revenue needed to fund the CWS in Fiscal Year 2011-2012 to determine the proportional cost applicable to the individual facilities. In the case of the above refinery, the percentage of the total cube roots applicable to the above refinery is approximately 8.49 percent. That percentage was then multiplied by \$887,517 to determine the refinery's proportional cost share, which is \$75,384, as shown in Exhibit I. Finally, within each category, the proportional costs were added together and then divided by the number of facilities within the category to calculate the average proportional cost for each facility in the category. This cost is the CWS component of the HMBP Program fee in each payor category. A complete breakdown of the CWS component of this fee is shown in Exhibit I.

(b) IR Component

All businesses that handle hazardous materials benefit by having the IR Team available to respond in the event of an incident. Businesses that lack the resources to fund their own response teams benefit by having the IR Team available 24 hours a day, seven days a week, to respond to a release when needed. When the IR Team responds to a release at a business that does not have its own team, that business benefits from the IR Team's assistance in containing a release and overseeing cleanups. Businesses that field their own response teams also benefit by the IR Team, which focuses its efforts at such facilities on coordination of response efforts, gathering information regarding environmental and public impacts, determining protective actions necessary, in the case of large-scale incidents, helping to contain releases.

Businesses in some categories benefit more than businesses in other categories, as indicated by data from calendar year 2003 through June 30, 2011. During that time period, there were 175 hazardous materials incidents at businesses regulated under the HMBP Program to which the IR Team responded. One hundred five of those incidents –60.0 percent of the total – occurred at facilities that handle 500,000 pounds or more of hazardous materials annually, and the remaining 70 incidents (40.0 percent) happened at facilities handling less than 500,000 pounds of hazardous materials. Table 29 below shows the breakdown of incidents:

Table 29

**Hazardous Materials Incidents
2003-June 2011**

# Employees	Pounds of Materials	# Incidents
N/A	<1K	7
0-19	1K ≤ x <10K	14
0-19	10K ≤ x <100K	9
0-19	100K ≤ x <250K	17
0-19	250K ≤ x <500K	3
≥20	1K ≤ x <10K	4
≥20	10K ≤ x <100K	11
≥20	100K ≤ x <250K	2
≥20	250K ≤ x <500K	3
N/A	500K ≤ x <2.5M	25
N/A	2.5M ≤ x <10M	8
N/A	10M ≤ x <100M	4
N/A	100M ≤ x <1B	15
Refineries	N/A	53
Totals		175

The facilities handling 500,000 or more pounds of hazardous material received the services of the IR Team more often than facilities in other categories, and therefore received more of the benefit provided by the IR Team; specifically, approximately 60.0 percent of the benefit. For this reason, staff determined that these facilities should pay that percentage of the \$1,722,634 unrecovered cost of the IR Team (\$1,033,580) and the facilities handling less than 500,000 pounds should pay the remaining 40.0 percent of the \$1,722,634 cost (\$689,054).

The same method used to allocate the CWS component was also used to allocate the IR component, since the potential for a release is equally relevant to both fee components. The cube roots of the reported inventories of each of the facilities in the 60.0 percent group were used to determine fees for those facilities, as set forth in **Exhibit J** attached hereto. Given the much larger number of facilities in the 40.0

percent group, cube roots were not calculated for each of those facilities. Instead, in each fee category within that group, average inventories were calculated based on the low and high ends of the category (for example, an average of 5,500 pounds was calculated in the category of equal to or less than 1,000 pounds but less than 10,000 pounds) and the averages were multiplied by the number of facilities in the category. Cube roots were then calculated based on these totals. The fees determined based on this methodology for this group of facilities is shown in **Exhibit K** attached hereto.

The IR component of the HMBP Fee is not only part of the cost of issuance of the annual CUPA permit, but also a service fee, inasmuch as the IR Team is a service provided to the facilities that pay for it.¹¹⁴

(c) Base Component

The base component of the HMBP fee funds the BP component of the HMBP Program that is not funded through other sources of revenue. The BP component expenses include the costs of HMBP inspections, which for purposes of this discussion includes the initial and follow up inspections, review of the plans themselves, follow-up paperwork and communications with regulated businesses regarding their plans. The costs of these inspections include the salaries and benefits of the Hazardous Materials Specialists in performing the inspections and miscellaneous related duties and undergoing training, as well as costs of administration and overhead.

In determining how best to allocate these costs among the payor categories, staff considered such factors as the inspection times applicable to facilities of different sizes (including the preparation time required prior to inspections, particularly of larger facilities); the frequency of inspections (businesses must be inspected at least every two years, but large facilities are inspected annually); and the number of facilities in each payor category. As noted previously, because of the multi-faceted functions of the CUPA and limitations of the CUPA's accounting system, it is impossible to calculate with mathematical precision the inspection time applicable to each facility in individual programs. For this reason, pinpoint average inspection times applicable to each category cannot be computed. It is therefore not possible to allocate the Base component in exact proportion to the time spent by the CUPA on HMBP inspections in the different categories. Moreover, even if it were possible, because there are

¹¹⁴ Services the IR Team may provide to entities other than regulated businesses are funded through recovered costs paid by responsible parties and Measure H revenue.

thousands of businesses regulated by the HMBP Program, and because the list of businesses regulated by the program changes constantly throughout the year, the administrative time it would take to pull time records, make these computations and reallocate the base component every year would be impractical, create additional costs to the CUPA that would need to be recouped through fees on businesses, and result in no discernible improvement in the regulatory effort. For these reasons, staff instead worked to develop allocations based on the estimated time it takes to inspect facilities in each category. This manner of allocation makes the base component of the HMBP Program Fee proportional to the burdens these facilities place on the HMBP Program in the form of required inspections.

Inspection times increase with every category, because of the increase in complexity of the facilities in each category. The times range from 1.5 hours at a facility that handles less than 1,000 pounds of hazardous materials per year to 32 hours for an oil refinery. Table 2 of this Report shows the estimated hours for facilities in each payor category.

The next step was to calculate an hourly cost associated with the inspections. Based on Table 2 and the estimated inspection time per facility discussed on Pages 18-19 of this Report, the inspections conducted in Fiscal Year 2010-2011 took about 5,190 hours. However, while this number of hours is based on a precise number of inspections, and is accurate for the purpose of projecting expenses, staff determined that this number cannot be used in the fee allocation calculations. The reason it cannot be used in the fee allocation calculations is because, while the fee will be spread over all fee categories based on average inspection times, the precise number of inspection hours worked will not necessarily correlate to the average number of annual inspections hours that would be required if inspections were conducted precisely on schedule every year. The number of actual inspection hours may be more than the average annual total inspection time, or less than that time. The expenses of the HMBP Program, however, do not rise and fall with the inspection schedule. The result of using the precise inspection hours thus would yield a sum that is either more or less than the cost that needs to be funded.

To avoid this problem, staff instead determined that the average number of annual inspection hours in all categories at all of the 2,326 regulated facilities in the CUPA's jurisdiction, including those in the City of Richmond¹¹⁵, should be used in the

¹¹⁵ For purposes of this calculation, it was assumed that inspections of the facilities in the City of

calculation. The average annual inspection hours total 4,965, or half of the two-year total shown in Table 30 below.

Table 30

**Estimated HMBP Program Inspection Hours/All Facilities
Fiscal Year 2010-2011**

# Employees	Pounds of Material	# Facilities	Estimated Inspection Hours Per Facility	Average # Inspections Per Category (2 Years)	Inspection Hours Per Category (2 Years)
N/A	<1K	466	1.50	466	699
0-19	1K ≤ x <10K	740	2.00	740	1,480
0-19	10K ≤ x <100K	260	3.00	260	780
0-19	100K ≤ x <250K	247	4.00	247	988
0-19	250K ≤ x <500K	86	5.00	86	430
≥20	1K ≤ x <10K	179	5.75	179	1,029.25
≥20	10K ≤ x <100K	194	6.75	194	1,309.5
≥20	100K ≤ x <250K	44	7.75	44	341
≥20	250K ≤ x <500K	19	8.75	19	166.25
N/A	500K ≤ x <2.5M	55	11.25	110	1,237.5
N/A	2.5M ≤ x <10M	11	14.50	22	319
N/A	10M ≤ x <100M	13	19.00	26	494
N/A	100M ≤ x <1B	6	24.00	12	288
N/A	1B ≤ x <5B	2	28.00	4	112
N/A	≥5B	0	N/A	N/A	N/A
Refineries		4	32	8	256
Totals		2,326		2,417	9,929.5

The base component cost of \$1,353,083 was then divided by the annual average inspection hours (half of the two-year total of 9,929.5, or 4,964.75 hours, resulting in a

Richmond take the same number of hours as inspections conducted by the Hazardous Materials Specialists.

cost of approximately \$272.54 per inspection hour. This rate was then multiplied by the average annual inspection hours for each facility in each category to calculate the Base component of the HMBP fee applicable to each facility. The base components in each category, along with the other components, are shown in **Exhibit L** attached hereto.

b. The HMBP Fees Are Set at a Level Sufficient to Fund the Estimated Costs of the HMBP Program

Collectively, as shown in Exhibit L, the three components of the HMBP Fees are expected to generate approximately \$3,962,982, based on the fees in each category and number of facilities in each category. Based on the projections and considering other revenues, the proposed HMBP Fees are thus set at the approximate level necessary to fund the Fiscal Year 2010-2011 costs of the IR and Base components of the HMBP Program and the Fiscal Year 2011-2012 cost of the CWS.¹¹⁶ These fee components constitute the cost of issuance of the HMBP Program portion of the annual Fiscal Year 2011-2012 CUPA permit that regulated facilities must obtain to legally operate in Contra Costa County.

c. Other Methods Considered

In determining the method of allocation of the HMBP Fees, CUPA staff considered but ultimately rejected several other methods, because they did not allow for a proportional allocation. They are detailed below.

- **Flat Fee.** A flat fee would apply across the board to all regulated businesses in the HMBP Program. Although easily calculated and applied, such a fee would not be proportional, because different sized facilities pose different burdens on the HMBP Program, as outlined above.

- **Fee per pound.** A flat fee for each pound of hazardous material in a business' inventory, without regard to the number of employees, was also considered. One problem with this method is that it does not take into account that benefits and burdens pertaining the CWS and IR Team pertain largely to the larger facilities. An additional problem is that the burdens on the HMBP Program tied to the HMBP

¹¹⁶ As a result of rounding, revenue amounts that would be derived from the proposed fees in the HMBP, HWG, UST and APSA programs are slightly different from the required revenue totals. Shortfalls or carryovers resulting from these minor differences are applied the following fiscal year.

inspections are not tied solely to quantities of hazardous material on hand. For example, two businesses may have the same number of pounds of material in their inventories, but one business may have multiple containers of different types of material on hand, and the other may have a single container of only one material. The first business will have a business plan that is far more complex than the second business, and past history has demonstrated that the first business will require more employees for the simple reason that the complexity of the facility requires more work to handle the materials properly.

Finally, if a flat fee per pound were charged for each pound of hazardous materials handled, the larger regulated business sites would pay more than 99 percent of the overall costs. Based on the number of regulated facilities in the CUPA jurisdiction in Fiscal Year 2010-2011 and their projected inventories (collectively, 17,881,037,216 pounds), and the \$3,963,234 in revenues needed to operate all components of the HMBP Program, the fee per pound would need to be set at approximately \$0.00022 per pound. At that rate, however, a facility with a small inventory such as 500 pounds would pay only 11 cents, but the largest refinery in the County, which handles an inventory of about 7 billion pounds, would pay \$1,540,000. While sufficient funds to operate the program could theoretically be raised in this manner, this is not a reasonable basis for apportionment, because it would allow smaller facilities to avoid paying their fair share of the cost of inspections and place most of the burden on larger facilities.

2. HWG Fee Allocations

a. Method

In the past, the HWG Fees applicable to most hazardous waste generators¹¹⁷ were set in an amount sufficient to operate the HWG Program and allocated based on the tonnage of hazardous waste generated. This manner of allocation was modeled on the allocations of generator fees charged by DTSC pursuant to Health & Safety Code section 25205.5. Section 25205.5 established categories of waste generators and a base rate that is adjusted from time to time by the state Board of Equalization to account for increases or decreases in the cost of living. The 2012 base rate is \$4,094 and the 2012 current state generator fee schedule, included in **Exhibit M** attached hereto, is shown in Table 31 below:

Table 31

DTSC Generator Fees

Generator Size	Rate	Fee
Less than 5 tons/year	0% base rate	0
5 but less than 25 tons/year	5% base rate	\$205
25 but less than 50 tons/year	40% base rate	\$1,638
50 but less than 250 tons/year	100% base rate	\$4,094
250 but less than 500 tons/year	5 x base rate	\$20,470
500 but less than 1,000 tons/year	10 x base rate	\$40,940
1,000 but less than 2,000 tons/year	15 x base rate	\$61,410
2,000 or more tons/year	20 x base rate	\$81,880

Generator fees are among the fees charged by DTSC to fund its administration and implementation of the Hazardous Waste Control Law¹¹⁸, and thus are comparable to the CUPA's HWG Fees. Given that the Legislature approved this fee allocation, and

¹¹⁷ Flat fees have historically been charged to facilities that operate under permits by rule, conditional authorizations or conditional exemptions.

¹¹⁸ See Health & Saf. Code, § 25174, subdivs. (a)(1) & (b)(1).

given that the state generator fees are comparable to the CUPA's HWG Fees, there is a reasonable basis for using this kind of structure to allocate the HWG Fees. A number of other CUPAs also use variations of this structure to allocate their HWG fees. For these reasons, staff concluded that the DTSC structure should continue to be used. The tonnage ranges for each category in the HWG Fees section of the CUPA's fee schedule are for the most part based on the tonnage ranges set by the Legislature as described above.¹¹⁹ Businesses are placed into the appropriate categories based on the tonnage they report to the CUPA, as verified during inspections by the Hazardous Materials Specialists.

(1) *Fee Components*

Except for fees charged for inspections of facilities operating under permits by rule, conditional authorizations and conditional exemptions, which are discussed below, the HWG Fees charged to generators consists of (1) an inspection component and (2) a tonnage component, as discussed below.

(a) Inspection Component

The inspection component of the HWG Program Fee is an approximation of the direct costs of HWG Program inspections of facilities in each category. These costs include the costs of the initial inspection, follow-up inspection, follow-up paper work and communications with the facilities, other inspection-related activities described in the Report, including training of the specialists. The inspection component is allocated based on a labor standard; i.e., the cost of the inspections conducted under the program, determined by estimating the time required inspecting facilities in the different categories, and considering the frequency of inspections in the different categories.

A physically large regulated business site takes longer to inspect than a smaller regulated business site, for several reasons. First, the hazardous waste may be handled at different locations throughout a regulated business site. Inspecting multiple

¹¹⁹ One of the categories was split in two in order to separate the smaller generators in this category from the larger generators in the same category. This category – 5 but less than 25 tons – has been split into two categories because of the large number of facilities in the category and the fact that 92 of them – 64 percent – generated five to 12 tons per year. These facilities are small quantity generators, and the time to perform inspections at these facilities is less than the time it takes to perform inspections of facilities generating 12 to 25 tons per year. CUPA staff determined it was more equitable to place them in a separate category for this reason.

storage containers takes more time than inspecting only one container. Second, at facilities where large quantities of hazardous waste have been generated, it takes longer to verify the total tonnage generated, determine how long the waste has been stored onsite, inspect the storage facilities and labeling for compliance with applicable regulations, and verify that training requirements have been met. Not only does it take more time to physically locate the areas on a large site where hazardous wastes are stored, it also takes more time to view the larger quantity of manifests, labeling and documentation that such sites generate.

Based on a consideration of these factors, and inspection times reported by inspectors, staff estimated the inspection times applicable to each of the categories. The estimates, shown in Table 6, are based on the tonnage of waste generated by facilities in each category. The tonnage figures provide an indication of the size of the facilities, the number of shipments of hazardous waste leaving the facility and resulting manifests, and number of employees the facility needs to train and keep trained on how to handle hazardous waste properly. All of these variables factor into inspection times that tend to increase with the total of waste generated.

Staff then calculated the cost associated with all inspections, starting with salaries and benefits. In addition to the \$591,614 specialist salary and benefit cost associated with the inspection hours, the cost includes \$164,948 for inspection-related activities.¹²⁰ An additional \$77,868 – a proportional share of the CUPA-wide Other Time – is also included in the cost of inspections, bringing the specialist salary and benefit total to \$834,430.¹²¹ Proportional shares of other costs attributed to the HWG Program (administrative and clerical salaries and benefits and temporary worker pay, services and supplies, indirect administrative costs, county overhead and uncollected fees) were also calculated¹²² and added to the above cost, bringing the total cost of the inspections

¹²⁰ This cost is based on 1,428 hours of the HWG Program Other Time, which includes 485 hours of enforcement activities, 300 hours of annual specialist training and 643 hours of the HWG Lead's time.

¹²¹ The \$77,868 share was calculated by first adding the \$591,614 and \$164,948 in inspection costs and dividing the sum (\$756,562) by the total salary and benefit costs of the specialists attributed to the HWG Program inspections and Other Time (\$887,464). The resulting percentage (approximately 85.2 percent) was then multiplied by the CUPA-wide Other Time cost attributed to the HWG Program (\$91,341) to yield the amount of \$77,868.

¹²² The proportional shares were calculated by first dividing the \$834,430 in specialist salaries and benefits attributed to inspections by the total salaries and benefits of the specialists and temporary workers attributed to the HWG Program, and Green Business Program (\$1,171,855), yielding a percentage of approximately 71.2 percent. This percentage was then applied to the HWG Program

to \$1,323,454. These costs and the remaining costs of the HWG Program (shown as “Other”) are set forth in Table 32 below:

Table 32

**HWG Program Expense Allocations
Fiscal Year 2010-2011**

Category	Inspections	Other	Total HWG Program
Salaries and Benefits			
• Specialists	\$ 834,430	\$144,375	\$ 978,805
• Admin/Clerical	\$ 107,596	\$ 43,510	\$ 151,106
• Grn Business	0	\$191,347	\$ 191,347
• Temp Worker	0	\$ 1,703	\$ 1,703
	Total: \$ 942,026	Total: \$380,935	Total: \$1,322,961
Services and Supplies	\$ 159,185	\$ 64,371	\$ 223,556
Indirect Administration	\$ 90,231	\$ 36,488	\$ 126,719
County Overhead	\$ 32,617	\$ 13,189	\$ 45,806
Uncollected Fees	\$ 99,395	\$ 40,193	\$ 139,588
Total	\$1,323,454	\$535,176	\$1,858,630

The \$1,858,630 cost of the HWG Program, however, is not funded entirely by fee revenue, since \$120,739 of these costs will be funded by service fees, fines and penalties. Of the \$120,739, \$85,973 is allocated to inspections and \$34,766 to other expenses, based on the same percentages used to calculate the allocations in Table 32. Thus, the cost of the inspections to be funded by fee revenue is \$85,973 less than \$1,323,454, or \$1,237,481. Based on this cost, and the annual average 4,033.375 inspection hours (see Table 6), the fully burdened hourly rate associated with the inspections is approximately \$306.81.

allocations for direct administrative and clerical salaries and benefits, services and supplies, indirect administration, county overhead and uncollected fees to determine proportional shares to be allocated to inspections. The remaining percentage, 28.8 percent, was allocated to the balance of the HWG Program.

Of the 4,033.375 average inspection hours, 284 are spent on inspections of facilities operating pursuant to permits by rule, conditional authorizations and conditional exemptions. The approximate \$87,134 cost of those inspections is funded through flat fees charged to the facilities, discussed below. The remaining \$1,150,347 cost is to be funded through the inspection component of the HWG Program fee.

The final step was to determine how these costs should be allocated among the various categories. At the larger facilities, where inspections are generally conducted annually, staff determined that the annual fee should be based on the cost of one annual inspection. At facilities slated to be inspected once every other year, however, it was determined that the annual fee should be one-half the cost of an inspection. Based on the \$306.81 hourly rate and inspection times shown in Table 6, the inspection components of the HWG Fee were calculated for facilities in the different categories. They are shown in **Exhibit N** attached hereto.

(b) Tonnage Component

After subtracting the \$1,150,347 cost funded by the base component, and the \$87,134 cost of the other HWG Program inspections (discussed below), the remaining costs of the HWG Program to be funded with fee revenues are \$500,410. These costs are funded by the tonnage component of the annual HWG Program Fee. The tonnage component funds such costs as site mitigation work, the Green Business Program, land use application reviews and pollution prevention efforts, all of which are intended to further the CUPA's goal of hazardous waste reduction and thus are included in the overall cost of the HWG Program. The tonnage component also includes a proportional share of the cost of CUPA-wide Other Time hours worked by the specialists, administrative and clerical costs, services and supplies, indirect administration, county overhead and uncollected fees attributed to the HWG Program. These costs are allocated to payor categories based on the tonnage of hazardous waste generated. Inasmuch as the generation of hazardous waste is considered pollution even if it is handled and disposed of properly, this manner of allocation is essentially pollution-based.

A pollution-based allocation of the balance of the HWG Fees is consistent with the CUPA's goal of hazardous waste reduction, which is at the heart of the CUPA's pollution prevention efforts and Green Business Program. Such efforts by CUPAs are authorized by DTSC by regulation, consistent with the Legislature's intent that

hazardous waste generation be reduced in an effort to preserve the environment. Incentives were specifically cited by the Legislature as one means of encouraging generators of hazardous waste to “employ technology and management practices for the safe handling, treatment, recycling and destruction of their hazardous wastes prior to disposal.”¹²³ Pursuant to these authorities, the CUPA has incorporated pollution prevention into the HWG Program. Providing businesses with incentives to reduce their generation of hazardous waste is one of the tools this CUPA uses to get the job done. Since the reduction of hazardous waste generation is among the purposes of the CUPA, it is reasonable to allocate costs based on the premise that the more hazardous waste generated by a regulated business, the greater the job of the CUPA in general and of the HWG Program in particular.¹²⁴

Specifically, when more hazardous waste is generated, the job of the HWG Program increases with it. Experience has shown that inspection times rise along with a rise in hazardous waste generation. More hazardous waste generally means more shipping manifests to review, more employee training records to check and larger sites to inspect. Inspections of large generator sites also involve review of source reduction plans, which must be prepared only by facilities that generate more than 1,000 tons of hazardous waste annually. Increases in hazardous waste generation also correspond to increased efforts by the Green Business Program to reduce hazardous waste generation, through staff’s work with facilities to find alternative chemicals that can be used by a business that do not produce as much hazardous waste or produce waste that is not considered hazardous, and to find ways to reduce hazardous waste reduction through different forms of handling.

The tonnage component of the HWG Fees is based on a rate of \$9.75 per ton, which was calculated by dividing the costs of the HWG Program to be funded by this component of the HWG Fees by the total estimated tonnage generated in all categories. With the exception of the category of the biggest generators (i.e., businesses that generate more than 2,000 tons of hazardous waste annually), the tonnage generated by each category was determined based on the average tonnage in each category (for example, 8.5 tons in the category of greater than 5 but less than 12 tons). Because the top category is open-ended, and the quantities of hazardous waste actually generated

¹²³ Health & Saf. Code, § 25101.

¹²⁴ See *San Diego Gas & Electric Co. v. San Diego County Air Pollution Control Dist.* (1988) 203 Cal.App.3d 1132.

by businesses in that category vary so broadly that an average would not result in an equitable fee allocation, the tonnage applied in that category was set at 4,000 tons.¹²⁵

The tonnage component of the HWG Fee in each category is set forth in Exhibit N. This component, which provides an incentive to businesses to reduce their hazardous waste generation, is thus an important tool used to meet the CUPA's waste reduction goals, and for that reason is included in the cost of issuance of the annual CUPA permit.

(2) *Other HWG Program Fees*

Fees for inspections of facilities operating under permits by rule, conditional authorizations or conditional exemptions are charged based on the hourly estimates of the inspections of such facilities, as shown in Table 6 of this Report. The hourly estimates applicable to each type of facility are multiplied by the hourly rate applicable to inspections, \$306.81, discussed above, to yield the fee totals for inspections of each type of facility, some of which are annual and some of which are biannual. The fees applicable to each type of facility are shown in Exhibit N.

b. **The HWG Fees Are Set at a Level Sufficient to Fund the Estimated Costs of the HWG Program**

Under the current fee structure, the total HWG Fees range from \$520 for a business generating less than 5 tons per year to \$78,575 for a business generating 2,000 or more tons per year. The proposed HWG Fees are projected to generate \$1,738,378 in revenue for Fiscal Year 2010-2011 and, based on the expenses incurred and considering other revenues, are thus set at the approximate level necessary to fund the HWG Program for Fiscal Year 2010-2011. These fees constitute the cost of issuance of the HWG Program portion of the 2011-2012 CUPA permit that regulated facilities must have to legally operate in Contra Costa County.

¹²⁵ The reported generation of hazardous waste varies greatly from year to year. For example, the Tesoro Refinery generated more than 100,000 tons of hazardous waste several years ago, but in 2008 generated only 12,000 tons. The typical range for refineries is 4,000 tons to 12,000 per year.

In determining the fee amounts, CUPA staff considered that the HWG Fees in some categories exceed those of some other CUPAs and the state's generator fee. However, all CUPAs are not alike in terms of the size of their respective jurisdictions, the number and type of businesses regulated under their HWG programs, salary and benefit structures or levels of service provided. Because of these differences, comparing HWG fees from CUPA to CUPA without also comparing their costs of operation is not a particularly effective way of assessing the reasonableness of their respective fees. The same can be said of comparing the state generator fee to the CUPA HWG fee without also analyzing the costs funded by those fees.

c. Other Methods Considered

Other methods of allocating the HWG Fees were also evaluated by the CUPA staff.

- **Flat fee.** A flat fee would apply across the board to all regulated businesses in the HWG Program. Although easily calculated and applied, such a fee would not be proportional, because the burden on the HWG Program varies with the amount of hazardous waste generated.
- **Flat fee per ton.** The second method considered was a flat fee per ton of hazardous waste generated. As an initial matter, this method would be unworkable for practical reasons, because not all generators are reporting their exact tonnage figures to the CUPA. Some merely report the category in which they fall. For this reason, the CUPA does not have exact HWG tonnage data with which to determine a flat fee per ton. Based on an estimated tonnage of 51,324 tons, however, and the \$1,737,891 in HWG Program fee revenue that would be needed, the fee per ton for most facilities would come to \$32.16.¹²⁶ If this method were used, a facility generating less than five tons of hazardous waste a year would pay only \$80 per year, which would not fund the direct costs associated with inspecting those facilities. The largest facilities, on the other hand, would wind up paying more than their share. Based on the assumption that

¹²⁶ Persons operating facilities pursuant to a permit by rule, conditional authorization or conditional exemption would still pay fees based on an hourly rate under this alternative scenario, because those facilities treat waste onsite and therefore are not comparable to facilities generating waste that is shipped offsite to hazardous waste disposal sites. The \$87,134 cost to inspect these facilities was subtracted from the required fee revenue total of \$1,737,891, shown in Table 26, to yield the fee revenue total of \$1,650,757 that was used to calculate the fee per ton under this scenario.

a refinery generates about 4,000 tons per year, a refinery would be assessed a fee of \$128,640. Table 33 below shows what the HWG Fees would be in each category using this methodology.

Table 33

**HWG Fees Based on \$32.16 Flat Fee Per Ton
Fiscal Year 2010-2011**

Category	# Facilities	Estimated Average Tonnage	Fee/ Facility	Estimated Total Tonnage/ Category	Total Fee Revenue/ Category
< 5 tons	1,263	2.5	\$ 80	3,157.5	\$ 101,040
5 tons ≤ x <12.5 tons	150	8.5	\$ 273	1,275	\$ 40,950
12.5 tons ≤ x <25 tons	84	18.5	\$ 505	1,554	\$ 49,980
25 tons ≤ x <50 tons	59	37.5	\$ 1,206	2,213	\$ 71,154
50 tons ≤ x <250 tons	55	150	\$ 4,824	8,250	\$ 265,320
250 tons ≤ x <500 tons	9	375	\$ 12,060	3,375	\$ 108,540
500 tons ≤ x <1000 tons	6	750	\$ 24,120	4,500	\$ 144,720
1000 tons ≤ x <2000 tons	2	1,500	\$ 48,240	3,000	\$ 96,480
≥2000 tons	6	4,000	\$128,640	24,000	\$ 771,840
Totals	1,634			51,324	\$1,650,024
Permit By Rule	16		\$ 3,068		\$ 49,088
Conditional Authorization	11		\$ 3,068		\$ 33,748
Conditional Exemption	7		\$ 614		\$ 4,298
Total	1,668				\$1,737,158

The disparity would be even more pronounced, as well as unpredictable, if the CUPA were able to obtain accurate and precise tonnage data from all generators. One refinery, for example, reported generating 100,000 tons of hazardous waste a couple of years ago, but only 12,000 tons the following year. Such fluctuations would make it very difficult for the CUPA to accurately project fee revenues from year to year and set fee amounts in line with those projections. For these reasons, it was determined that this method would not result in an appropriate apportionment.

- **Fee based on cost of service.** Staff also evaluated a method where fees would be based solely on the cost of the inspections. But this “cost of service” method pays only for a portion of the program – i.e., the cost of the inspections – and not pollution prevention, the Green Business Program, site mitigation or collection of abandoned hazardous waste. This method thus would not allow for recovery of all of the costs of the HWG Program, and would be inconsistent with Health & Safety Code section 25404.5, which specifically requires the establishment of a single fee to fund the “necessary and reasonable costs incurred by the certified unified program agency. . .” Regulatory fees such as the CUPA single fee fund the cost of the entire agency, not merely the cost of inspections conducted by the agency. Since the cost of service method would not satisfy the statutory requirement, this method was rejected by staff.

- **Fee based on pure labor standard.** Finally, staff evaluated a method that would allocate all of the unfunded costs of the HWG Program to payors based on the proportional inspection time for each payor category. In other words, instead of the two-tiered approach that allocates direct costs by the labor standard and indirect costs by the pollution-based standard, all costs would be allocated by the labor standard, with amounts corresponding to the inspection hours in each category. But just as the fee per tonnage approach would result in a windfall for small facilities, using the labor standard to allocate all HWG Program costs would result in a windfall for large facilities. As shown below in Table 34, based on average annual inspection hours (see Table 6), in order to raise sufficient funds to pay for operations of the program in Fiscal Year 2010-2011, the hourly rate would need to be set at \$430.88. This would result in fees starting at \$646 for small facilities and \$25,852 for the largest generators. By removing the tonnage component, this method would also strip away the incentive the large facilities otherwise would have had through the HWG Fees to reduce their hazardous waste generation. Because this method of allocation would be inequitable, it was rejected in favor of the two-tier approach outlined above.

Table 34

HWG Fees Based on Labor Standard

Category	# Facilities	Inspection Hours Per Year/Facility	Inspection Hours Per Year/ Category	Annual Fee/ Facility	Annual Fee Revenue/ Category
<5 tons	1,263	1.50	1894.5	\$ 646	\$ 815,898
5 tons ≤ x <12.5 tons	150	1.875	281.25	\$ 808	\$ 121,200
12.5 tons ≤ x <25 tons	84	2.625	220.5	\$ 1,131	\$ 95,004
25 tons ≤ x <50 tons	59	3.75	221.25	\$ 1,616	\$ 95,344
50 tons ≤ x <250 tons	55	5.625	309.375	\$ 2,424	\$ 133,320
250 tons ≤ x <500 tons	9	22.50	202.5	\$ 9,695	\$ 87,255
500 tons ≤ x <1000 tons	6	30.00	180	\$12,926	\$ 77,556
1000 tons ≤ x <2000 tons	2	40.00	80	\$17,235	\$ 34,470
≥2000 tons	6	60.00	360	\$25,852	\$ 155,112
Totals	1,634		3,749.375		\$1,615,159
Permit by Rule	16	10	160.00	\$ 4,309	\$ 68,944
Conditional Authorization	11	10	110.00	\$ 4,309	\$ 47,399
Conditional Exemption	7	2	14.00	\$ 862	\$ 6,034
Total	1,668		4,033.375		\$1,737,536

3. CalARP Fee Allocations

a. Methodology

Because the purpose of the CalARP Program is to prevent the catastrophic accidental release of highly toxic or flammable chemicals, annual fees to fund this program are allocated based on the potential risk that exists at regulated business sites that handle a listed chemical above a certain threshold in a “process.” The risk determination is based on a Chemical Exposure Index developed by Dow Chemical. The Chemical Exposure Index includes indices for the following:

1. Toxicity of the chemical
2. Quantity of the chemical in the largest container
3. Distance between the largest container and the community
4. Volatility of the chemical

This formula has been modified by the addition of the following:

1. An index for flammable chemicals (replacing the above toxicity index for flammable chemicals)
2. An index based on the accident history of the regulated business site
3. An index based on the complexity of the regulated business site

This Modified Chemical Exposure Index (“MCEI), and explanation of how the various indices are determined, are described in **Exhibit O**.

The MCEI is applied as a factor in the following formula to determine the fee for a stationary source:

$$\text{Fee} = (\text{TC/TRF}) \times \text{RF}$$

TC = Total cost of the County’s CalARP Program

TRF = “Total Risk Factor,” or the sum of the Stationary Source Modified Chemical Exposure Indexes (SSMCEI) of all stationary sources in the County

RF = “Risk Factor,” or a stationary source SSMCEI

The formula is based on the potential risk presented by each facility. The fee calculation ensures that the higher a regulated site’s MCEI, the higher the associated fee. Since the higher the MCEI, the greater the risk of a chemical release, it is reasonable to allocate fees based on the degree of risk posed by each stationary source, because the degree of risk in most cases fairly represents their burden on the CalARP Program, the very purpose of which is to minimize that risk.

- b. The CalARP Fees Are Set at a Level Sufficient to Fund the Estimated Cost of the CalARP Program

The proposed CalARP Fees are projected to generate an estimated \$821,518 in revenue and, based on the expense projections, are therefore set at the level necessary to fund the CalARP Program in Fiscal Year 2011-2012. These fees constitute the cost

of issuance of the CalARP Program portion of the Fiscal Year 2011-2012 CUPA permit that regulated facilities must obtain to legally operate in Contra Costa County. **Exhibit P** attached hereto shows the estimated CalARP Fees for each stationary source based on the above formula.¹²⁷

c. Other Methods Considered

Fee structures of CalARP Programs operated by other CUPAs were also considered. Los Angeles County has a fee schedule that is similar to Contra Costa County. Los Angeles County staff developed risk units to determine the fee that a regulated business site would pay. Other CUPAs¹²⁸ determine fee amounts based on other criteria, including:

1. Flat rates
2. Program levels for the stationary source
3. Types of review or actions by the CUPA at the stationary source
4. Number of employees at the stationary source
5. Number of regulated chemicals at the stationary source

In evaluating these various methods, the CUPA staff determined that the current formula based on MCEI should remain in place, because the purpose of the CalARP Program is to reduce the potential of accidents that could impact the public and the MCEI is a way to measure the potential risk to the public from the chemicals that are handled.

4. UST Fee Allocations

a. Methodology

As with the vast majority of UST Fees charged by other CUPAs, the UST annual fees are allocated based on estimated annual tank inspection times. The fees for other UST Program functions are flat fees, but also based on historical average times associated with each of these functions.

¹²⁷ All index numbers are reviewed immediately prior to the issuance of invoices. Invoices may reflect minor changes from the amounts shown in the exhibit.

¹²⁸ Other CUPA CalARP program fee structures reviewed were those of Los Angeles, San Mateo, Sacramento, Solano, Sonoma, Alameda, and Santa Clara counties and the City of Berkeley

To determine the amount of the fees required to fund the cost of the UST Program, the projected Fiscal Year 2011-2012 revenues that will not be funded by annual fees to be collected this year (i.e., fines and penalties, fees for miscellaneous inspections and other services and intergovernment revenue, totaling \$309,242 collectively) were deducted from the total UST Program cost of \$1,314,081, to yield a subtotal of \$1,004,839. This amount was then divided by the number of annual inspection hours that are projected (4,189) to determine an hourly rate of \$239.88.

Annual fees were then calculated by multiplying the estimated tank inspection times shown in Table 10 of this Report by the \$239.88 hourly rate. An additional “first tank” fee to pay for the approximately two hours of preparation, travel and follow-up office time applicable to each of the 422 non-residential sites is also based on this \$239.88 hourly rate. This fee is only required on the first tank because, whether there are multiple tanks or a single tank at a site, the preparation, travel time, and follow-up office time needed with respect to underground storage tank inspections is typically the same. The total fees for the first tank thus include the cost of the annual inspection of that tank as well as all associated preparation and follow-up time, while fees for additional tanks at a site cover only the cost of the inspection.

Fees for the miscellaneous inspections and plan checks conducted by specialists in the UST Program are considered fees for services provided to the tank owners or operators who request these services. These fees are charged at the rate of \$257 per hour -- the fully burdened specialist salary and benefit rate applicable to miscellaneous services that may be provided by specialists in the HWG, HMBP, UST or APSA programs (see Miscellaneous Fees discussion, *infra*). It is projected that the CUPA will receive \$90,114 in revenue from these fees in the UST Program in Fiscal Year 2011-2012.

Allocating the fees in the above manner ensures that the cost of the annual tank inspections and other tank-related inspections and plan checks are paid by the owners or operators of those tanks. The fees are thus allocated to the payors in direct proportion to the benefits they receive from, and burdens they place on, the UST Program.

- b. The UST Fees and Accrued Revenues Are Set at a Level Sufficient to Fund the Estimated Costs of the UST Program

Based on the number of regulated business sites in the CUPA's jurisdiction and the number of additional tanks at these sites, the annual UST Fees set forth in the CUPA Fee Schedule are projected to generate a total of \$1,005,360. These fees, shown in **Exhibit Q** attached hereto, constitute the cost of issuance of the UST Program portion of the Fiscal Year 2011-2012 CUPA permit that regulated facilities must obtain to legally operate in Contra Costa County. Miscellaneous fees are projected to bring in an additional \$90,114 in fee revenue. Based on the projections these fees are thus set at approximately the level necessary to fund the UST Program in Fiscal Year 2011-2012.

5. APSA Fee Allocations

- a. Methodology

The APSA Program costs of \$371,834 that will be funded by fees¹²⁹ are allocated to fee payors in all categories based on estimated inspection times applicable to facilities in each category and average annual inspections hours in each category. This is the same method used to allocate the Inspection component of the HWG Program Fee. This method was used to account for three different inspection intervals and the fact that the inspection hours that are projected will not always match the average annual inspection hours.

Based on the 925.33 average annual inspection hours shown in Table 12, the hourly rate required to raise sufficient revenue to pay the unfunded \$371,834 costs of the APSA Program in Fiscal Year 2011-2012 is \$401.84. The associated fee amounts in each category, based on estimated annual inspection times, are shown in **Exhibit R**. The totals range from \$536 for the smallest tank facilities to \$16,074 at the largest tank facilities. Allocating the fees in this manner ensures that the cost of the APSA Program is borne by the tank facilities in proportion to their respective burdens on the program.

¹²⁹ The remaining \$44,686 in costs will be funded by \$5,671 in other revenues and \$39,015 fee carryover from Fiscal Year 2010-2011.

b. The APSA Fees Are Set at a Level Sufficient to Fund the Estimated Costs of the APSA Program

The APSA Fees are set at the level necessary to fund the APSA Program, along with other sources of revenue. Exhibit R shows the fees projected in each tank facility category and for the program as a whole. The revenues from these fees will total an estimated \$371,904. Based on the projections and considering other revenues, the annual fees are thus set at the approximate level necessary to fund the costs of the APSA Program in Fiscal Year 2011-2012 program. These fees constitute the cost of issuance of the APSA Program portion of the Fiscal Year 2011-2012 CUPA permit that regulated facilities must obtain to legally operate in Contra Costa County.

6. Miscellaneous CUPA Fees

While the bulk of the CUPA costs are funded through annual fees, a small amount of revenue is generated from fees that are charged for services performed by Hazardous Materials Specialists. These services include, but are not limited to, a broad range of non-annual inspections in the UST Program, services provided by the IR Team for which costs are recovered from responsible parties, and reviews of exemption applications pertaining to unstaffed remote facilities regulated under the HMBP Program. The projections of revenues derived from these types of services in Fiscal Year 2011-2012 are shown in Table 28.

A proposed hourly rate of \$257 would apply to such services provided by the specialists in the remainder of Fiscal Year 2011-2012. Fees applicable to these services are shown in the proposed fee schedule attached as Exhibit A. The fees are based on estimated hourly averages for the various types of inspections or other services. The hourly rate was calculated by adding to the specialists' \$122.51 hourly salary and benefit rate the hourly costs associated with the proportional shares of administrative, clerical and student costs, services and supplies, indirect administration, county overhead and uncollected fees attributable to the four programs where the specialists work.¹³⁰ A breakdown of this rate is shown in Table 35 below:

¹³⁰ The shares were calculated by dividing the administrative, clerical and student costs, service and supply costs, indirect administration costs, county overhead and uncollected fee totals allocated to the four CUPA programs where the specialists work by the regular hour specialist salaries and benefits in those programs (\$3,383,753). The results are percentages of the specialists' \$122.51 hourly rate. These percentages were then multiplied by the \$122.51 rate to yield hourly costs associated with each of these expense categories. The hourly costs were then added together to yield the fully burdened hourly rate of \$257.

Table 35

**CUPA-Wide Fully Burdened Hourly Rate
for Miscellaneous CUPA Services by Hazardous Materials Specialists
Fiscal Year 2011-2012**

Category	Expenses in CUPA Programs w/ Specialists	% of \$122.51 hourly rate	Hourly Rate
Specialist Salaries and Benefits (Regular Hours)	\$3,383,753	100.0	\$122.51
Administrative/Clerical/Temp	\$ 468,774	13.9	\$ 16.97
Services and Supplies	\$2,137,006	63.2	\$ 77.37
Indirect Administration	\$ 400,413	11.8	\$ 14.50
County Overhead	\$ 93,658	2.8	\$ 3.39
Uncollected Fees	\$ 612,304	18.1	\$ 22.17
Total	\$7,095,908		\$256.91

Miscellaneous CUPA services may also be performed by the CalARP engineers, such as the review of exemption applications, the annual verification of exemptions that have been granted, and providing assistance to the IR Team during hazardous materials incidents involving stationary sources. If such services are performed in the remainder of Fiscal Year 2011-2012, a new fee based on the fully burdened hourly rate of \$151 would apply, based on the costs attributable to the CalARP Program, calculated in a similar manner as the fully burdened rate for specialists. The proposed fee schedule attached as Exhibit A shows the fees for these services. Table 34 below shows a breakdown of the fee rate:

Table 36

**CalARP Fully Burdened Hourly Rate
for Miscellaneous CUPA Services by Engineers
Fiscal Year 2011-2012**

Category	Expenses in CalARP Program	% of \$105.55 hourly rate	Hourly Rate
Engineer Salaries and Benefits (Regular Hours)	\$606,838	100.0	\$105.55
Administrative/Clerical	\$ 75,084	12.4	\$ 13.06
Services and Supplies	\$104,036	17.1	\$ 18.10
Indirect Administration	\$ 66,055	10.9	\$ 11.49
County Overhead	\$ 15,451	2.5	\$ 2.69
Uncollected Fees	0	0	0
Total	\$867,464		\$150.89

Miscellaneous CUPA fees include a fee that would be applicable only to the facilities regulated by the HMBP Program whose annual fees do not include a CWS component – i.e., businesses that handle hazardous materials and have reported inventories of less than 500,000 pounds. In the event any of these facilities were to cause a release that required activation of the CWS, that facility would be charged a fee of \$101 per hour, from activation until the all-clear signal is given, based on the hourly cost of the CWS.¹³¹ Miscellaneous CUPA fees also include a \$60 initial permit processing fee, applicable to businesses that became subject to CUPA regulation or changed ownership during the permit period (Fiscal Year 2011-2012).

VIII. CONCLUSION

Based on the above analysis, staff has determined that (1) the expenses of the CUPA for Fiscal Year 2010-2011, as set forth in the Report, were reasonable and necessary; (2) the projected expenses of the CUPA for Fiscal Year 2011-2012 are a reasonable estimate of the necessary and reasonable costs the CUPA will actually incur

¹³¹ The hourly cost of the CWS for Fiscal Year 2011-2012 is \$101.04, calculated by dividing the required revenue total of \$887,517 by the number of hours in that year (8,784).

in Fiscal Year 2011-2012; (3) the fees for the five CUPA programs are set at a level sufficient to fund the necessary and reasonable costs of the respective programs in the applicable fiscal years; and (4) the proposed CUPA Fees have been reasonably apportioned based on the payors' benefits from or burdens on the various CUPA programs.

Staff therefore recommends adoption of Resolution No. 2012/184, adopting revised fees for the CUPA, effective immediately upon adoption.

RLS/