# Submission of Household Hazardous Waste Element and Siting Element to the California Department of Resource Recovery and Recycling

Sonoma County Waste Management Agency

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SONOMA COUNTY
Waste
Management
Agency

# Household Hazardous Waste Element

# CHAPTER 5

# HOUSEHOLD HAZARDOUS WASTE ELEMENT

## 5.1 INTRODUCTION

Hazardous Waste is defined as material that meets criteria set forth in the Federal Resource Conservation and Recovery Act (RCRA). In simple terms it is a material that can cause harm to human health or the environment through its reactivity, flammability, corrosivity, or toxicity. Since many materials have these characteristics, the law has defined limits for each hazard class (reactivity, flammability, corrosivity, and toxicity). Any material falling within those limits is considered characteristically hazardous and must be handled as hazardous waste. California law requires that any waste material that meets RCRA hazardous characteristics or California's stricter limits must be handled as hazardous waste regardless of who generated the waste. Waste generated by residents is called Household Hazardous Waste (HHW).

By law, a hazardous waste is created when a generator determines that a product is no longer useful, thereby determining that the product is a waste. Most HHW was formerly common household products. Householders generate hazardous wastes while performing regular household activities such as cleaning, painting, making repairs, gardening, working on hobbies, and maintaining autos. The following are examples of some common types of HHW:

- Household cleaners
- Pesticides
- Car batteries
- Wood preservatives
- Auto and furniture polish
- Pesticides
- Automotive products
- Adhesives and sealants
- Paints and coatings
- Photographic chemicals
- Pool chemicals
- Motor oil
- Anti-freeze

The hazards associated with HHW are the same as those associated with industrially generated hazardous waste. Hazardous waste can burn or irritate skin and eyes and make people both acutely and chronically ill. Hazardous waste can poison people, pets and wildlife. Hazardous wastes can cause or fuel fires. Hazardous waste can contaminate soil, water and air. Specifically there is concern about hazardous waste: 1) leaching out of landfills into ground water; 2) being poured down the drain (i.e., when the waste water treatment plant is unable to treat such waste); and 3) being poured down storm drains, which lead straight to creeks and rivers.

## 5.2 GOAL AND OBJECTIVES OF THE HHWE

### 5.2.1 Goal

As stated in Chapter 2, the following goal addresses household hazardous waste management:

> The County and the Cities and/or the SCWMA will provide cost-effective and environmentally sound waste management services, including special waste and household hazardous waste handling and disposal, over the long term to all community residents and promote access to the services.

### 5.2.2 Objectives

The following objectives address this goal:

- The SCWMA will distribute HHW educational material to all county households and businesses at least annually.
- The SCWMA will monitor and evaluate, at the end of the short and medium terms, educational programs outlined in the SRRE and the HHWE to improve their effectiveness.
- The SCWMA, County and the Cities will achieve participation in the County's Household Hazardous Waste (HHW) collection program of 3 percent annually of the county's households.
- The SCWMA will achieve measurable reduction of landfill disposal of prohibited wastes documented by waste characterizations studies at the end of the short term and medium term planning periods.

## 5.3 EXISTING CONDITIONS

### 5.3.1 History of HHW Management in Sonoma County

#### 5.3.1.1 Household Hazardous Waste Collections

HHW collections started in Sonoma County in 1985 in the City of Santa Rosa. Gradually each of the jurisdictions starting offering annual collections provided by their solid waste hauler. In 1993 the SCWMA assumed responsibility for HHW management and started offering Household Toxics Roundups (HTRs) countywide making all collections available to any county resident. Collection services for qualified businesses, referred to as CESQGs (Conditional Exempt Small Quantity Generators), started in 1994. A reuse program started in 1995 to redistribute reusable products to the public – a program that the public appreciates and provides a significant cost savings to the SCWMA. A door-to-door collection was added in 1998 in conjunction with the HTRs. Construction began on an HHW Facility in 2001, and opened January 2005.

#### 5.3.1.2 Recycle Only Collections

There has been a significant increase in recycle only collection centers, referred to as BOPs (Battery, Oil, Paint). Oil recycling started at some county disposal sites in 1990. Beginning in 1990 the recycling center at the Central Disposal Site offered a latex paint exchange. This program was duplicated at three of the County's transfer stations. When the State offered grant funds for oil recycling, businesses were recruited to collect oil and more public drop-offs were created for a total of 70 oil collection locations countywide in 2001. Starting in 1996, the SCWMA asked the oil collection centers to accept antifreeze and oil filters; in 2001, 16 centers collect antifreeze and 33 collect oil filters. Curbside oil and filter collection was added in the Cities of Rohnert Park, Santa Rosa, Sonoma and the unincorporated county in 2000.

#### 5.3.1.3 Load Checking

A load checking program was started at county disposal facilities in 1990. The program consists of spot checking commercial and residential self-haul loads for hazardous waste. The load check program emphasizes education of residents about proper HHW disposal opportunities. Identified hazardous wastes are removed from the waste stream. When a generator is not evident, waste is stored in hazardous waste lockers awaiting proper packing and disposal.

#### 5.3.1.4 Education

A variety of educational campaigns have been implemented to encourage use of Household Toxics Roundups, oil and filter recycling, Integrated Pest Management, use of safer alternatives and not to dispose of HHW in garbage cans. Nearly all residents and businesses generate HHW. Much of the education and public information efforts have been focused towards the public as a whole. In some cases, campaigns have been directed to specific populations including boaters, Spanish speakers, sports fans, children, high school students, landfill users, and government employees. Examples of a few of the efforts undertaken include: oil recycling (multiple campaigns and target audiences), Household Toxics Roundup promotion, A Health Environment Begins at Home (children); "No Toxics" garbage can stickers; Our Water Our World IPM Store campaign; and IPM Workshops (government employees).

### 5.3.2 HHW Generation Rates

There is little known about how much HHW is generated annually. Sales of hazardous products do not equal the hazardous waste, since products put to their intended use are not considered wastes. Since HHW is created when the generator determines that a product is no longer useful, it is difficult to distinguish between products and wastes in storage. In practice, residents tend to store products past their useful life, which can create hazards in the home through the growth in quantities and the destabilization of some hazardous products with age. Additionally, it is unknown how much HHW is improperly disposed of in storm drains, down sewers or to the soil. What is quantified are estimates of how much is disposed of in the landfill and how much is collected in HHW collection programs.

In 1990 and 1995/96 solid waste characterization studies were conducted at Sonoma County disposal sites. Table 5-1 illustrates the HHW measured in Sonoma County's waste stream. While this chapter focuses on HHW, waste from businesses is also disposed of illegally as illustrated in Table 5-1. Businesses that generate small quantities of hazardous waste (known as CESQGs) may and are served by the HHW program in accordance with State and Federal law. Therefore, the programs listed are also designed to target some unknown portion of the hazardous waste being disposed of by businesses. It is an unknown portion as the law limits the businesses that HHW programs may serve, and it is unknown where business hazardous waste found in the waste stream is generated. Businesses that generate large quantities of hazardous waste are addressed through stringent hazardous waste regulations at the State and Federal level.

Table 5-2 illustrates how much HHW and CESQG waste was collected in Sonoma County by program type from 1996 to 2001. Table 5-3 illustrates the quantities of waste collected by waste type.

## 5.4 EVALUATION OF ALTERNATIVES

While Section 5.3.1 provides the program description for each of the evaluated alternatives, the evaluation is conducted in Table 5-4 Alternative Program Evaluation using criteria set forth in Title 14, Section 18751.3. This chapter evaluates all programs required to be evaluated by Title 14 and additional programs that the SCWMA considers appropriate.

### 5.4.1 Alternative Program Descriptions

#### 5.4.1.1 Periodic Collection

A temporary collection center is set up in a paved, accessible location (e.g., a parking lot) for a short period (usually one or two days). Residents are encouraged to bring their household hazardous materials to the site on collection days. The center is staffed by trained personnel who collect, sort, and pack the HHW into 55-gallon drums. Wastes are transported by a licensed hauler to licensed hazardous waste facilities for recycling, treatment, or disposal. The hours, dates and locations must be advertised for each collection in advance. Periodic Collections can be very successful, but there are limitations. The residents may not be able to make the date selected or find it inconvenient. Residents are asked to store material until an event is held. Residents who are moving are often caught in the situation of not being able to move the material or properly dispose of it within their limited time frame. Rain or other situations can arise that impact participation, which can increase cost. Sites acceptable for locating Periodic Collections can be limited and/or limiting.

**Table 5-1: Waste Characterization Studies at Sonoma County Disposal Sites (1992 and 1995/96)**

| Waste Type | 1990 (tons annually) | | 1995/96 (tons annually) | |
|---|---|---|---|---|
| | Residential | Non-Residential | Residential | Non-Residential |
| Paint | breakout unavailable | | 219 | 54 |
| Automotive Fluids | | | 243 | 75 |
| Household Batteries | | | 158 | 57 |
| Vehicle Batteries | | | 217 | 118 |
| Remainder Composite HHW | | | 368 | 288 |
| *Subtotal* | *119* | *976* | *1,205* | *592* |
| **TOTAL** | **1,095** | | **1,797** | |

**Table 5-2: Hazardous Waste Collected by Sonoma County HHW Programs**
(reported in pounds by fiscal year)

| Program | 00-01 | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|---|
| Household Toxics Roundups | 736,793 | 721,141 | 637,542 | 504,243 | 665,200 |
| BOPs | 596,104 | 579,418 | 504,290 | programs not tracked | |
| Load Checking | 36,667 | 48,517 | 34,558 | | |
| Door-to-Door | 52,105 | 79,844 | 16,188 | no program | |
| Curbside Oil & Filter Recycling | 125,733 | no program | | | |
| Vendor Collection | 485,700 | 574,262 | 773,140 | program not tracked | |
| **TOTAL** | **2,035,102** | **2,003,182** | **1,965,718** | **504,243** | **665,200** |

**Table 5-3: Waste Collected by HHW Programs by Waste Type**
(reported in pounds)

| Waste Category | 2000-2001 | 1999-2000 |
|---|---|---|
| Flammable solid/liquid | 133,964 | 133,711 |
| Bulked flammable liquids | 59,296 | 98,805 |
| Oil-base paint | 206,577 | 164,249 |

| | | |
|---|---|---|
| Poison (excl. Aerosols) | 55,937 | 55,114 |
| Reactive and explosive | 28 | 92 |
| Inorganic acid | 8,318 | 7,347 |
| Organic acid | 263 | 683 |
| Inorganic base | 12,274 | 11,001 |
| Organic base | 733 | 0 |
| neutral oxidizers | 0 | 308 |
| Organic peroxides | 100 | 131 |
| Oxidizing acid | 348 | 91 |
| Oxidizing base | 3,247 | 5,221 |
| PCB-containing paint | 0 | 0 |
| Other PCB waste | 3,674 | 2,981 |
| Corrosive aerosols | 1,663 | 1,556 |
| Flammable aerosols | 11,636 | 10,865 |
| Poison aerosols | 3,322 | 3,101 |
| Antifreeze | 14,497 | 16,700 |
| Car Batteries | 143,130 | 166,975 |
| Fluorescent bulbs | 7,068 | 3,806 |
| Latex paint | 176,582 | 192,115 |
| Motor oil/oil products | 1,141,018 | 1,062,782 |
| Oil filters | 27,227 | 25,693 |
| Mercury | 82 | 300 |
| Medical waste (syringes) | 497 | 459 |
| Household batteries | 4,439 | 4,957 |
| Other | 15,147 | 28,921 |
| Asbestos | 4,035 | 5,215 |
| **TOTAL POUNDS** | **2,035,101** | **2,003,178** |
| Total tons | 1,018 | 1,002 |

| Table 5-4: Alternative Program Evaluation | | | | |
|---|---|---|---|---|
| **Criteria (1= high; 5= low)** | **Periodic Collections** | **HHW Facility** | **Mobile Collections** | **Vendor Collection** |
| **Potential Hazard** | 2 | 4 | 2 | 4 |
| **Accommodate Change** | 2 | 5 | 2 | 3 |
| **Implementation Lead Time** | Three months | Three years | Six months | Four months |
| **New or Expanded Facility(s)** | None | Yes | Uses HHW Facility | None |
| **Consistent with Local Conditions** | Yes | Yes | Yes | Yes |
| **Institutional Barriers** | None | CEQA review and mitigations; neighbor opposition | None | None |
| **Cost** | $30,000 - $110,000/event | ±$850,000 annually | $2,000 - $5,000/collection | $500/site annually |
| **End Use of Waste** | 75% recycled 25% incinerated | 75% recycled 25% incinerated | 75% recycled 25% incinerated | Recycled |
| **Effectiveness** | Good | Excellent | Good | Fair - Excellent |
| **Criteria (1= high; 5= low)** | **Curbside Collection** | **Door-to-Door Collection** | **BOPs** | **E-waste Recycling** |
| **Potential Hazard** | 2 | 4 | 5 | 5 |
| **Accommodate Change** | 2 | 2 | 2 | 1 |
| **Implementation Lead Time** | Six months | Six months | Two months | Two months |
| **New or Expanded Facility(s)** | None | Recommend use with HHW Facility | Minimal, optional | None |
| **Consistent with Local Conditions** | Yes | Yes | Yes | Yes |
| **Institutional Barriers** | Perceived danger of spills and vandalism | None | None | None |
| **Cost** | $0.05 - $0.15/hh/mo | ±$60.00/pickup (collection only) | Varies on volume $3,000 - $20,000 | Varies on volume. $750/ton |
| **End Use of Waste** | Recycled | Same as HHW Facility | Recycled | Recycled |
| **Effectiveness** | Fair | Good | Excellent | Good |
| **Criteria (1= high; 5= low)** | **CESQG** | **Load Checking** | **Reuse Exchange** | **Disaster Response** |
| **Potential Hazard** | 4 | 1 | 3 | 3 |
| **Accommodate Change** | 2 | 1 | 1 | 1 |
| **Implementation Lead Time** | One month with existing program. | Two Months | One week | Days |
| **New or Expanded Facility(s)** | Uses facility(s) used for other programs | Hazardous waste lockers | None | None |
| **Consistent with Local Conditions** | Yes | Yes | Yes | Yes |
| **Institutional Barriers** | None | None | Waiver of liability | None |
| **Cost** | Costs passed through to businesses | $175,000 annually | Net cost savings vary $6,000 - $22,000 | Varies |
| **End Use of Waste** | Same as HHW Facility | Same as HHW Facility | Used as product | Same as HHW Facility |
| **Effectiveness** | Fair | Poor | Not applicable | Varies |

#### 5.4.1.2 HHW Facilities

HHW Facilities provide an ongoing means for residents to properly manage HHW. These facilities vary from small, often prefabricated structures. HHW Facilities entail larger capital costs than other HHW collection options. Because of their storage and waste-handling capacity, however, these facilities can help control long-term program costs through greater flexibility and economies of scale in waste handling and disposal.

#### 5.4.1.3 Mobile Collection

A Mobile Collection is a smaller version of a Periodic Collection and is operated in conjunction with the HHW Facilities. The HHW Facilities that supports Mobile Collections may or may not provide service directly to the public. The idea behind a mobile program is to provide convenient, local service while still reaping the flexibility and economies of scale that a HHW Facilities provides. Wastes collected by Mobile Collections can be consolidated, bulked, and/or reused at the HHW Facilities. Typically Mobile Collections are smaller and more frequent than Periodic Collections.

#### 5.4.1.4 Vendor Collection

Since some businesses already manage hazardous wastes, they can be cost-efficient and convenient collection centers for HHW. Methods to increase vendor participation in HHW collection include identifying additional materials and vendor types (e.g., paint stores for collection of paint wastes) and providing education and/or incentives to vendors. Waste collection opportunities are specific to the product or material that each type of vendor sells (e.g., battery vendors could collect used batteries) and may be limited by cost and potential liability. SCWMA advertises participating vendors, who would benefit from increased customer traffic at their locations. In 2001, 61 vendors collect oil, 33 collect oil filters and 16 collect antifreeze. There is a State law that requires automotive battery vendors to accept trade-in batteries or collect a core charge with the new battery if a trade-in is not received. Rechargeable Battery Recycling Corp (RBRC) provides for collection of rechargeable batteries at many chain stores such as Radio Shack, Sears, Cellular One, Ace Hardware and others. In 2001, Best Buy stated they would develop a program to accept waste electronics. Several large computer manufactures have developed fee programs for recycling of their computers (e.g., Dell, HP, IBM). Extended Producer Responsibility (EPR) efforts are working to increase management of wastes by retailers and manufacturers.

#### 5.4.1.5 Curbside Collection

Curbside Collection programs are limited to collecting oil, filter and household battery recycling due to the potential hazards involved in placing hazardous waste on the curb. Curbside oil and filter recycling can be very successful programs when run in conjunction with curbside recycling programs. Oil and filters are left at the curb with other recyclables, thereby using the existing collection infrastructure.

#### 5.4.1.6 Door-to-Door Pickup Program

Door-to-Door Pickup programs involve pickups at residents' homes by appointment. The advantages are convenience, controlled and knowledgeable transport, early identification of

materials that pose an imminent danger, and service to non-mobile residents. However, these programs can be costly.

#### 5.4.1.7 Batteries, Oil, and Paint Programs

Batteries, Oil, and Paint Programs (BOPs) are recycling centers for HHW. By law, BOPs can only collect recyclable HHW: oil, oil filters, batteries, antifreeze, paint and fluorescent lamps. BOPs are typically operated with non-direct supervision, meaning the public places waste in well marked containers without assistance. It is best to have some supervision of the site to discourage potential abuses. BOPs are frequently located at disposal sites and municipal corporation yards.

#### 5.4.1.8 E-waste Recycling

Electronic Waste (E-waste) can contain hazardous components, which require that the product be disposed of as hazardous waste. Cathode Ray Tubes (CRTs), the glass tubes found in TVs and computer monitors, contain four to eight pounds of lead. CRTs have been designated as Universal Waste by the State of California and must be recycled in accordance with the Universal Waste Rule. If they are not recycled as Universal Waste, then CRTs must be treated as hazardous waste. Many experts expect that other electronic wastes will also be designated as Universal Wastes, requiring hazardous waste management. The Universal Waste Rule allows for collection of Universal Wastes at facilities that do not have hazardous waste permits so long as certain handling requirements are met. Due to the size, weight, quantity and cost of managing E-waste, HHW programs could become overwhelmed. Therefore, it is recommended that E-waste be collected at disposal sites where bulky items can be more easily managed and fees can be charged to cover the recycling costs.

#### 5.4.1.9 Conditionally Exempt Small Quantity Generator

The law allows HHW programs to serve commercial generators that meet the regulatory definition of a Conditionally Exempt Small Quantity Generator (CESQG). A CESQG cannot generate more than 27 gallons of hazardous waste per month, excluding oil, antifreeze and latex paint if recycled. CESQGs in California must still handle their hazardous wastes like large quantity generators; however, it is sometimes difficult to find haulers that will haul small quantities and the cost per unit is more expensive. Providing hazardous waste disposal opportunities can be a very valuable service to local businesses. As shown in Table 5-1, it is necessary to serve businesses to eliminate hazardous waste from local landfills. CESQG's can be served using any of the collection programs evaluated in this chapter. The disposal cost may be passed on to the CESQG. Typically CESQGs are served on an appointment only basis and inventories of wastes are required. Transportation and disposal issues may be more involved than with the average resident. The California State Department of Toxic Substances Control offers a transportation variance for CESQG's that allow transport of up to 27 gallons if specific transportation information has been shared with the CESQG by the jurisdiction.

#### 5.4.1.10 Load Checking

Load Checking is necessary to identify hazardous materials in the solid waste stream and to reduce the amount of HHW being disposed of as solid waste. Load Checking seeks to ensure proper management of the hazardous wastes delivered to solid waste facilities, to identify generators who place hazardous wastes in the solid waste stream, and to require them to

assume responsibility for proper waste management through education and enforcement. Monitoring consists of questioning and educating self-haulers, stopping the dumping of hazardous waste when witnessed, retrieving hazardous waste identified in the solid waste, and spot checking and sorting random loads. Load Checking programs are mandated by law.

#### 5.4.1.11 Reuse Exchange

A good portion of the waste brought to a HHW collection program is still usable product (i.e., leftovers or unwanted product). Hazardous waste disposal is expensive, and even proper disposal has an environmental impact. Therefore, the best use of a hazardous product is to use it for its intended use. Reuse Exchange programs allow the public to take usable products at no cost, providing an avoided cost to the collection program. Experience has shown that the public likes Reuse Exchange programs.

#### 5.4.1.12 Disaster Response

Sonoma County has experienced three Federally declared natural disasters in the past decade. For each of those disasters, special programs to capture HHW were implemented. Should Sonoma County experience any natural disasters in the future, the HHW collection system, along with resources from emergency response agencies, will be utilized to mitigate the impact of HHW on health, the environment, and the landfill.

### 5.5 SELECTION, IMPLEMENTATION AND MONITORING OF PROGRAMS

All of the programs evaluated in Section 5.3 have been or are being implemented in Sonoma County. The SCWMA has chosen to provide the most convenient and comprehensive service to its residents and CESQGs (Table 5-5). The Periodic Collections were operated until the HHW Facility was built. HHW Facilities were selected as the most cost effective approach to the management HHW with the ability to offer weekly service. Additionally, the HHW Facilities allow for the operation of other programs that provide convenient service in each of the SCWMA member communities. The Mobile Collection program was selected to provide convenient collection in each of the jurisdictions. Sonoma County covers 1,500 square miles, and therefore, no single facility could provide convenient service. The HHW Facilities offers a place to most efficiently manage the waste from the Mobile Collections. Door-to-Door Collection is offered as a convenience for those residents and CESQGs that are willing to pay for the convenience. Additionally it addresses the issue of residents with limited transportation options. Curbside Collection, BOPs and Vendor Collection are used to collect recyclable HHW in the most cost effective manner possible so that other more costly HHW collection programs are not overwhelmed. CESQG's are served at cost to provide CESQG's a reasonable disposal option and in acknowledgment that CESQG's must be served in order to meet the SCWMA's goal of eliminating improper disposal of hazardous waste. The Load Checking program is implemented in accordance with law, and the Reuse Exchange program is implemented to save money and limit disposal liability. The collection capabilities of each program is found in Table 5-2.

The end use or disposal of hazardous waste is highly regulated. The SCWMA adheres to the US EPA's waste management hierarchy: Reduce, Reuse, Recycle, Treat, Incinerate, Landfill. As new technologies open up recycling markets for waste, the SCWMA adjusts its disposal methods. For implementation of the selected programs, HHW facilities will be built as needed and economically feasible.

Within the limitations and requirements of law, the SCWMA collects all HHW except radioactive materials, explosives, and biological wastes (excluding syringes). Should a resident bring a waste that a program does not manage, an assessment is made to determine if there is an imminent danger posed by the waste. If a danger is determined, then the appropriate agency is notified. If an imminent danger is not identified, the resident is provided with proper disposal information.

**Table 5-5: Selected Programs**

| Program | Implementation Dates | Responsible Agency |
|---|---|---|
| Periodic Collections | Started 1993 / Discontinued 2002 | SCWMA |
| HHW Facility | 2002 | SCWMA |
| Mobile Collection | 2002 | SCWMA |
| Vendor Collection | 1993 | SCWMA |
| Curbside Collection | 2000 | City/County |
| Door-to-Door Collection | 1999 | SCWMA |
| BOPs | 1990 | County |
| E-waste Recycling | 2002 | County |
| CESQG | 1994 | SCWMA |
| Load Checking | 1992 | County |
| Reuse Exchange | 1994 | SCWMA |
| Disaster Response | As Needed | County/SCWMA |

Each program is monitored annually. Waste volumes are reported annually to the State in the State's 303 Forms. Waste characterization analyses are conducted as necessary so that diversion progress can be tracked. Annually, the most recent waste characterization data and cost data are used to determine the success of programs and to modify programs accordingly. The minimal criteria used for evaluating a program's success are that it: 1) does not cost more than $1.00 per pound; 2) is collecting reasonable amounts of waste; 3) is mandated by law; and 4) is successfully supported by direct user fees.

The funding discussion for these programs is presented in Section 5.5.6 of this chapter.

## 5.6 EDUCATION AND PUBLIC INFORMATION

The SCWMA has conducted multiple educational and publicity campaigns on HHW and participated on State committees to improve HHW education. The SCWMA has been very successful at promoting programs and encouraging participation. However, in light of the efforts of the SCWMA and other jurisdictions, the SCWMA has concluded that significant reduction of HHW creation is outside of SCWMA's capability. The reality is that there are too many barriers to effectively educate the public about reducing the use of hazardous products, including:

1. Often there are not any non-toxic alternatives to toxic products.
2. Products are not required to list ingredients, limiting knowledge of a product's hazards.
3. Assessing "safer" toxics is a matter of debate as widely accepted standards do not exist.

4. There is not enough expertise to accurately guide the public to make better choices.

5. As a public entity, the SCWMA is limited in mentioning specific brands, which in the world of safer products can make a big difference. For example, one toilet bowl cleaner may be much safer than another, but they are both labeled as toilet bowl cleaners with no distinction.

6. There are vast numbers of product types and uses in the world of HHW.

7. The consequences of choosing one product over another is often too subtle to impact consumers. While products may not cause death or imminent cancer, the difference may still be significant. For example, one produce may cause immune system damage while a safer alternative may be just an irritant.

8. Sometimes better options are not the least toxic option. For example, a good insect control are baits. Baits are a better choice than sprays because of the containment of the toxics to a gel accessed only by the insect, yet the chemical composition of the bait can be equal or greater in toxicity to a spray.

9. Often when selecting less toxic options consumers are weighing one impacted ecosystem against another (i.e., air vs. water; mammals vs. aquatic life).

10. Current research on creating changes in behavior concludes that behaviors are simple and straight forward, and the public's barriers must be removed by the educational efforts.

King County, Washington recently conducted a lawn care campaign with a budget of $600,000 over three years. They established a baseline of sales data for targeted products, which was tracked throughout the campaign. The campaign was implemented in accordance with current research on creating behavior change. During the three-year campaign, sales of weed and feed and other targeted lawn care products increased faster than the population. There is no evidence that King County succeeded in changing any targeted behavior.

### 5.6.1 HHW Education Goals and Objectives

#### 5.6.1.1 Goal

Increase proper disposal of HHW and decrease the cost of HHW management, improper disposal of HHW, and the generation of HHW.

#### 5.6.1.2 Objectives

1. Promote HHW collection programs.

2. Work towards Extended Producer Responsibility (EPR) policies for any product that becomes an HHW upon disposal to reduce or eliminate the SCWMA's responsibility for HHW and to encourage redesign and reformulation.

3. Work towards the use of the Precautionary Principal (see Section 5.5.3.3) for the approval and continued use of chemicals.

4. Work towards State and national restrictions or bans on chemicals that create unnecessary harm to humans, wildlife or the environment.

5. Promote the five hazardous product management habits:

    1. Buy only what you need.
    2. Buy the least toxic option available.
    3. Use up what you have.
    4. Share what you cannot use.
    5. Properly dispose of what you cannot use or share.

6. Increase Integrated Pest Management (IPM) practices by SCWMA member jurisdictions.

7. Increase the use of safer janitorial supplies by SCWMA member jurisdictions through contractual agreements with janitorial contractors.

8. Participate and create regional and multi-agency campaigns on HHW or related topics (e.g. storm water).

### 5.6.2 Current and Historical HHW Educational and Public Information Efforts

#### 5.6.2.1 Annual Recycling Guide

The SCWMA has produced a Sonoma County Recycling Guide annually since 1993, providing a wealth of information on recycling and household hazardous waste, including Household Toxics Roundup (HTR) dates, locations for recycling oil and filters, antifreeze, paint, and other hazardous wastes.

#### 5.6.2.2 Eco-Desk

An information specialist answers the Eco-Desk hotline 3 hours a day, Monday through Friday. A 24-hour voice-mail system provides a variety of information such as oil and filter recycling centers (English and Spanish), HHW facility locations and operating hours, and paint recycling. Callers may leave messages in any of the information boxes and receive return calls.

#### 5.6.2.3 Website

The SCWMA has an extensive website, www.recyclenow.org. The SCWMA website has HHW Collection information, the IPM campaign fact sheets and all the oil and filter, antifreeze and automotive battery recycling centers.

#### 5.6.2.4 HHW Collection Programs Publicity

The SCWMA widely publicizes the HHW collection programs on an ongoing basis using a variety of methods including banners, utility bill flyers, press releases, collection schedule flyers, load checking personnel, event signs, garbage can flyers, newsletters, email notices, and word of mouth.

#### 5.6.2.5 Oil and Filter Recycling Publicity

The SCWMA receives annual grant funds to promote oil and filter recycling. Since 1994, the SCWMA has implemented numerous campaigns, including advertising in Auto Traders, bilge pad give-aways, banners, boater cards, bumper stickers, Car Club Show sponsorship, car racing programs, collection center signs, direct mail, dockwalkers, driver's education videos, Earth Day events; fairs/event booths, give-aways (pens, t-shirts, magnets, tickets, etc.), live radio remotes, mailers to boaters, minor league baseball (trash can ads, outfield banners, program ads, radio spots), multi-family posters/flyers, newspaper articles, newspaper ads, oil container give-aways, oil change window decals, posters, radio spots, radio talk shows, radio dramas, scratcher games, shelf talkers, Spanish outreach (radio, newspapers, newsletters, container give-aways, give-aways, hotline), storm drain stenciling, teacher packets, television commercials, and utility bill flyers.

#### 5.6.2.6 IPM Training Workshops

The SCWMA is conducting two workshops on Integrated Pest Management (IPM) techniques for City and County employees in the Winter of 2002. The workshops will focus on landscape pests and roadside maintenance. Depending on the outcome, future IPM workshops may be conducted.

#### 5.6.2.7 IPM Store Campaign

The SCWMA, Sonoma County Water Agency and City of Santa Rosa teamed for the local implementation of a Bay Area regional IPM store campaign. The campaign was conducted in local hardware stores and nurseries. The campaign consisted of training store employees and distributing fact sheets, special displays, and shelf labels.

#### 5.6.2.8 "No Toxics" Garbage Can Labels

To deter improper disposal of hazardous waste in garbage, "No Toxics" labels were applied to all residential garbage cans countywide. Stickers are applied to new cans as they are distributed.

#### 5.6.2.9 Resource Lists

Resource lists are created and maintained for hazardous waste haulers, oil recyclers, fluorescent lamp recyclers and other resources as necessary. Resource lists are primarily used by the Eco-Desk when responding to specific requests for information.

#### 5.6.2.10 Safer Alternatives Literature

The SCWMA has distributed a variety of brochures addressing safer alternatives to household hazardous wastes. Some of the brochure titles include: "Buy Smart, Buy Safe;" "Grow Smart, Grow Safe;" and "Recipes for Environmentally Friendly Cleaning."

#### 5.6.2.11 Fair Booths/Give-aways

The SCWMA participates annually in fairs using a special booth display. Publicity give-aways, such as magnets, pens, posters, and t-shirts, are distributed from the booths.

#### 5.6.2.12 General Media Coverage

The SCWMA receives a significant amount of press coverage for HHW issues. Each of the Roundups has been well advertised by the local media. Photos are not uncommon in print media, and there have been a handful of TV news spots and radio show spots. During the fall of 2001, HHW was the cover story on one issue of the Home and Garden section of the Press Democrat. HHW programs have also received coverage as some local hazardous waste dumping issues have arisen.

#### 5.6.2.13 Annual Reports

Annual reports are published for the HHW program listing the programs and their accomplishments and is distributed to the SCWMA members.

#### 5.6.2.14 Surveys

The SCWMA has conducted two telephone surveys that focused on HHW issues. The surveys have measured the public's knowledge of HHW issues and programs as high (70% or better).

#### 5.6.2.15 California Peer Review Committee

The SCWMA participated in a statewide committee aimed at producing researched information on safer alternatives for dissemination to the public. The committee produced two websites, a program managers manual, and a mock public brochure.

#### 5.6.2.16 Storm Drain Stenciling

The SCWMA initiated the storm drain stenciling programs in Sonoma County. The SCWMA continues to support ongoing labeling of storm drains.

#### 5.6.2.17 Bay Area Oil Contest (Scratchers)

The SCWMA participated in the Bay Area oil campaign in 1995/96, which included an extensive radio and television campaign and scratchers for prizes.

#### 5.6.2.18 Re-refined Oil Workshop

In 1997/98 the SCWMA sponsored two workshops conducted by the Community Environmental Council entitled *Re-refined Oil Workshop*: one for local government fleet managers and one for private fleet managers. The Cities of Petaluma and Santa Rosa use re-refined oil in their vehicle fleets. The SCWMA has printed bumper stickers to identify vehicles using re-refined oil.

#### 5.6.2.19 Teacher Packets

Drivers education and auto shop teachers were sent an oil recycling kit every year between 1994 and 1997, including oil recycling posters, brochures, oil change record window stickers and magnets. In 1995, each teacher also received a video, *Lean Green Drivin' Machine*.

#### 5.6.2.20 GREEN

In 1997, the SCWMA worked with 13 other local agencies, Government Resources Environmental Education Network (GREEN), to develop a campaign called *A Healthy Environment Begins at Home.* GREEN first developed a brochure that covers oil and antifreeze recycling, Household Toxics Roundups, pesticide use, hazardous waste spill clean-up, latex paint clean-up, and lead paint management, in addition to other environmental issues. GREEN expanded the campaign to include an interactive booth at the Thursday Night Market, a local weekly fair. Each week the booth was staffed by a different agency with a different emphasis. GREEN continues as a networking committee that has led to other collaborative efforts, including the IPM campaign described below.

### 5.6.3 Program Descriptions of New HHW Educational and Public Information Programs

#### 5.6.3.1 HHW Program Promotion

The SCWMA will continue to promote HHW programs using the methods historically found successful, including utility bill flyers, press releases, banners, newsletters, emails, newspaper ads, radio spots, flyers, the annual Recycling Guide and the SCWMA website.

#### 5.6.3.2 Extended Producer Responsibility (EPR) Policies

The SCWMA will continue to work for implementation of EPR policies by manufacturers. The SCWMA will join coalitions working towards EPR and lobby administrative and legislative representatives as necessary. EPR policies incorporate the life-cycle costs of a product, including recycling or disposal, into the manufacturing and sale price of a product. EPR policies promote redesign and reformulation to make recycling or disposal more cost effective. The SCWMA has already passed a resolution in support of EPR policies, joined the Product Stewardship Institute, and written a letter of support for the California Integrated Waste Management Board's 2002 Strategic Plan, which incorporates EPR policies.

#### 5.6.3.3 Promote the Precautionary Principal

The Precautionary Principal states that decisions should be made based on a weight of scientific evidence. Currently, precedent requires proof of harm after a product has met initial requirements for introduction. Unfortunately, that standard has allowed products to remain in the market for decades after they have been determined to cause harm using a weight of evidence standard. While weight of evidence can be demonstrated with strong and consistent correlations between cause and effect, proof requires a great deal more science. Proof of harm can be difficult to establish with chemicals that are so pervasive in our community that no control group is available, such as with many pesticides. In order to measure and address the threat of such products, the SCWMA will promote the use of the Precautionary Principle. The SCWMA will introduce the public to the Precautionary Principal through available media such as press releases, the annual Recycling Guide, SCWMA website, and brochures. The SCWMA will lobby administrative and legislative representatives to adopt the Precautionary Principal at the State and Federal level. The SCWMA will join coalitions promoting the Precautionary Principal as such coalitions arise. The SCWMA will use the Precautionary Principal in making its own policy decisions.

#### 5.6.3.4 Bans and Restrictions

Based on the Precautionary Principal, the SCWMA will work towards the ban and/or restriction of products that are demonstrated to pose harm to people, wildlife or the environment in Sonoma County. Due to the complexity of most hazardous product issues, it is far more effective to ban or restrict their distribution than to attempt to educate the public on appropriate use, disposal and alternatives. Therefore, products that pose particular or significant harm may be targeted for bans or restrictions. The SCWMA will introduce the public to the issues involving the product(s) of concern through available media such as press releases, the annual Recycling Guide, SCWMA website, and brochures. The SCWMA will lobby administrative and legislative

representatives to adopt bans or restrictions at the State and Federal level. The SCWMA will join coalitions promoting the bans or restrictions as such coalitions arise. The SCWMA will consider all desired bans and restrictions in making its own policies decisions.

#### 5.6.3.5 Promote the Five Hazardous Product Habits

The SCWMA will promote the following hazardous product management habits:

1. Buy only what you need.
2. Buy the least toxic option available.
3. Use up what you have.
4. Share what you can't use.
5. Properly dispose of what you can't use or share.

The SCWMA will use available media, including flyers, utility bill flyers, press releases, HHW Facility signage, newsletters, emails, newspaper ads, radio spots, flyers, the annual Recycling Guide, the SCWMA website, give-aways, and posters.

#### 5.6.3.6 Integrated Pest Management

Integrated Pest Management (IPM) incorporates a variety of management techniques to control pests. IPM does not exclude the use of pesticides, but seeks to find other solutions leaving pesticides as a last resort. IPM techniques are training intensive, and can generally not be well applied by the general public. Therefore, this program will target the training of public employees that maintain public properties to minimize the exposure of the public and the environment to pesticides and reduce disposal needs. It will also establish local government as a model and resource for other elements of the community.

#### 5.6.3.7 Safer Janitorial Supplies

Each of the SCWMA's member jurisdictions has contracted janitorial services. The SCWMA will create guidelines designed to lead to the use of safer products by janitorial contractors. Member jurisdictions can use the guidelines in their bidding process and contracts with janitorial service providers. Since the selection of products can be very complex and involved, the guidelines will consist primarily of lists of banned or restricted ingredients with the intent to eliminate carcinogens, mutagens and teratagens. The guidelines will also include recommendations on how to further reduce the impact of products.

### 5.6.4 Implementation of New HHW Educational and Public Information Programs

Table 5-6 addresses the six criteria of implementation as required by Title 14, Section 18751.7(4)(d).

### 5.6.5 Monitoring and Evaluation of New HHW Educational and Public Information Programs

Table 5-7 addresses the six criteria of monitoring and evaluation as required by Title 14 Section 18751.7(4)(e).

### 5.6.6 Funding

The HHW infrastructure has already been implemented using a variety of stable funding sources as presented in Table 5-8. An SCWMA staff person is assigned to manage the HHW program and further develop the program. Limited additional funding is necessary to implement the new education and public information programs selected in this Element. Funding requirements and sources are presented in Table 5-8. The SCWMA reserves the right to modify, limit or discontinue programs as necessitated by funding limitations.

| Table 5-6: Program Implementation: HHW Education and Public Information Programs | | | | |
|---|---|---|---|---|
| | **HHW Program Promotion** | **EPR Policies** | **Precautionary Principal** | **Bans & Restrictions** |
| **Audience** | Potential Program Users | Manufactures, State and Federal Agencies and Legislators, General Public | Manufactures, State and Federal Agencies and Legislators, General Public | Manufactures, State and Federal Agencies and Legislators, General Public |
| **Responsible Agency** | SCWMA | SCWMA | SCWMA | SCWMA |
| **Implementation Tasks** | · Vary with program | · Write letters· Attend meetings· Speak on topic· Network· Sit on committees | · Write letters· Attend meetings· Speak on topic· Network· Sit on committees· Create short educational writeups | · Write letters· Attend meetings· Speak on topic· Network· Sit on committees· Create short educational writeups |
| **Implementation Timeline** | Ongoing | Ongoing | Short-term | As necessary |
| **Implementation Cost** | Varies with Program | Staff time | Staff time | Staff time |
| **Safer Alternatives** | Possibly | No | Possibly | Indirectly, yes |
| | **Hazardous Waste Habits** | **IPM** | **Janitorial Supplies** | |
| **Audience** | Residents | City and County employees who do landscaping or roadside maintenance | City and County purchasing agents and janitorial contractors | |
| **Responsible Agency** | SCWMA | SCWMA and member jurisdictions | SCWMA and member jurisdictions | |
| **Implementation Tasks** | · Develop brochures· Develop signage· Indoctrinate employees | · Organize workshops· Create networks· Develop/purchase resources | · Develop guidelines· Meet with purchasing agents | |
| **Implementation Timeline** | Short-term | Short-term | Short-term | |
| **Implementation Cost** | $2,000 annually | $10,000 annually | Staff time | |
| **Safer Alternatives** | Yes | No | No | |

| Table 5-7: Program Monitoring and Evaluation: HHW Education and Public Information Programs | | | | |
|---|---|---|---|---|
| | **HHW Program Promotion** | **EPR Policies** | **Precautionary Principal** | **Bans & Restrictions** |
| **MeasurementMethods** | Participation in HHW programs being promoted | Success in establishing EPR policies | Success in changing legislative and legal mind set | Success in banning or restricting targeted products or effecting their redesign or reformulation |
| **Evaluation Criteria** | · Participation in HHW programs | · EPR policies adopted· Willing legislative sponsors · Strong coalitions | · Receptive CIWMB· Receptive legislators | · Ban/restrictions adopted· Willing legislative sponsors · Strong coalitions |
| **Responsible Agency** | SCWMA | SCWMA | SCWMA | SCWMA |
| **Funding Requirements** | None | None | None | None |
| **Shortfall Contingencies** | Modify approach being utilized | Modify "requests" | Long-term effortKeep up the pressure | Implement local bans and restrictions as necessary |
| **Schedule** | Varies with program | Flexible with legislative priorities | Long-term effortKeep up the pressure | Flexible with legislative priorities |
| | **Hazardous Waste Habits** | **IPM** | **Janitorial Supplies** | |
| **MeasurementMethods** | Phone Surveys | Increased knowledge and use of IPM techniques and active network | Inclusion of guidelines in janitorial contracts | |
| **Evaluation Criteria** | · Familiarity of public with five habits· Reported changes in behavior | · Attendance at training· Positive feedback from participants· Decrease in pesticide use | · Adoption of guidelines in contracts· Adherence of contractual requirements· Use of other recommendations | |
| **Responsible Agency** | SCWMA | SCWMA and member jurisdictions | SCWMA and member jurisdictions | |
| **Funding Requirements** | $30,000 every five years | None | None | |
| **Shortfall Contingencies** | Research new behavior change approaches | ·Modify training approachSeek Council mandates | Seek Council mandates | |
| **Schedule** | Annual HHW reportFive year report | Annual HHW report | Annual HHW report | |

| Table 5-8: Funding | | | |
|---|---|---|---|
| **Program** | **Funding Needs** | **Funding Sources** | **Contingency Funding** |
| **COLLECTION PROGRAMS** | | | |
| **Periodic Collections** | Program discontinued in 2001 | | |
| **HHW Facility** | $600,000 annually | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Mobile Collection** | $200,000 annually | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Vendor Collection** | $30,000 annually | Used Oil Block Grant | Larger Portion of Used Oil Block Grant |
| **Curbside Collection** | $0.05-$0.10/HH/month | Garbage Rates | Increase Garbage Rates |
| **Door-to-Door Collection** | $100/pickup | User Fees and SCWMA Tipping Fee Surcharge | Increase User Fees and SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **BOPs** | $15,000 annually | Landfill Tipping Fee | Increase to Landfill Tipping Fee and/or Reduce Service |
| **E-waste Recycling** | $750/ton, $150,000 annually | Recycling Fee | Increase Recycling Fee |
| **CESQG** | Varies | User Fees | Increase User Fees |
| **Load Checking** | $50,000 annually | Landfill Tipping Fee | Increase Landfill Tipping Fee |
| **Reuse Exchange** | Generates Cost Savings | Not Applicable | Not Applicable |
| **EDUCATION PROGRAMS** | | | |
| **HHW Program Promotion** | Varies, Unknown | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **EPR Policies** | Staff time | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Precautionary Principals** | Staff time | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Bans & Restrictions** | Staff time | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Hazardous Waste Habits** | $2,000 annually$30,000 every 5 years | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **IPM** | $10,000 annually | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Janitorial Supplies** | Staff time | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge |

# Siting Element

# CHAPTER 6

# SITING ELEMENT

Pursuant to the California Code of Regulations (CCR), Title 14, Division 7, Article 6.5, the Siting Element presents an integrated strategy to ensure the provision of long-term disposal capacity in Sonoma County. The County will prepare and adopt a strategy to provide 15 years of combined permitted disposal capacity from the submission date of this document. The goals, objectives, and policies established for the Siting Element will be used in conjunction with siting criteria developed by County staff, the Local Task Force (LTF), and the general public to guide the process for securing required disposal capacity, either through the expansion of existing disposal sites, the construction of new solid waste disposal facilities, and/or agreements with out-of-county disposal sites. Procedural mechanisms to assure use of the established siting criteria and documentation from local jurisdictions agreeing to use procedures specified are presented. The final product is a blueprint for the long-term provision of solid waste disposal capacity.

## 6.1 GOALS, OBJECTIVES, AND POLICIES

The Sonoma County Waste Management Agency (SCWMA), in cooperation with the County of Sonoma, incorporated Cities and the LTF have developed a number of goals, objectives, and policies designed to encourage a high level of public involvement in solid waste facility siting processes. These goals and objectives will serve as benchmarks to evaluate and monitor the effectiveness of local policies and selected diversion programs over the short- (2007 to 2010) and medium-term (2010 to 2030) planning periods. Under legislation enacted in 1992, non-disposal facilities (transfer stations, recycling facilities, and composting projects) are not subject to the goals, objectives, policies, and siting criteria in the Siting Element. Discussion of these facilities can be found in the Non-Disposal Facility Element (NDFE) (see Chapter 7). Non-disposal facilities are mentioned in the following goals, objectives and policies only as needed for clarification.

### 6.1.1 Goals for the Safe Handling and Disposal of Solid Waste

The following goals are general statements regarding the siting and operation of solid waste disposal facilities.

- In order to help ensure the sustainability of our communities and to conserve natural resources and landfill capacity, the Sonoma County Waste Management Agency (SCWMA), County and the Cities will continue to improve their municipal solid waste management system through emphasis on the solid waste management hierarchy of waste prevention (source reduction), reuse, recycling, composting and disposal, with a goal of zero waste.

- The solid waste management system in Sonoma County will be planned and operated in a manner to protect public health, safety and the environment. Furthermore, all landfills that receive Sonoma County waste must be in compliance with State and Federal landfill regulations.

- Solid waste disposal facilities located in Sonoma County will be sited and operated in a manner to minimize energy use, conserve natural and financial resources, protect prime agricultural lands and other environmentally sensitive or culturally sensitive areas, and reduce greenhouse gas emissions.

- The County, in consultation with the Cities and the SCWMA, will develop a strategy for disposal capacity for solid waste not handled by other elements of the management hierarchy for at least fifteen-year horizon.

### 6.1.2 Objectives and Associated Programs for Achievement of Goals

The following objectives are intended to provide measurable events to document the County's progress in meeting the goals established above.

**Short-Term Planning Period (2007 to 2010) Objectives**

- Objective and consistent siting criteria and policies will be used for the siting of solid waste disposal facilities.

- Project proposers/owners will document the siting process and provide the public with information on a regular basis to ensure that the public and decision-makers are fully informed. Procedures for making siting decisions will be described in addition to the reasons for selection or elimination of potential sites.

- The County will estimate the need for countywide disposal capacity for the municipal solid waste stream after all feasible diversion programs are implemented and initiate efforts to establish and/or secure sufficient landfill capacity either in County and/or out of County to allow for achievement of the County's policy to provide at least fifteen years of disposal capacity.

- The County's existing transport and disposal agreements expire in August 2010. If necessary, on or before 2009, the County will initiate a process to either extend or bid new transport and disposal contracts which will secure the required landfill capacity before existing agreements expire.

**Medium-Term Planning Period (2010 to 2030) Objectives**

- If the County or other entities implement the siting process, it will provide public information to ensure that the public and decision-makers are fully informed. Procedures for making siting decisions will be described in addition to the reasons for selection or elimination of potential sites.

- The County, in consultation with the Cities, shall determine the necessary disposal requirements and shall ensure a minimum of 15 years of disposal capacity.

### 6.1.3 Policies to Facilitate Siting of Solid Waste Facilities

The following policy statements illustrate the intent and/or actions to be taken by the County

and/or the Cities to achieve the goals and objectives of the Siting Element.

- The County and/or the Cities will provide solid waste disposal facilities or transfer facilities within reasonable distances of the county's population centers. This policy will provide a means for achieving the goal of conservation of natural resources and energy and minimizing the cost of disposal.

- The County will cooperate with adjacent counties, considering their solid waste management planning and waste disposal needs. This includes possible export/import, as approved by the Board of Supervisors, of solid waste and encourages joint resolution of emergency problems.

## 6.2 DESCRIPTION OF EXISTING SOLID WASTE DISPOSAL FACILITIES

Landfilling of solid waste at the Central Disposal Site has been suspended. The decision of whether to use existing capacity or expand the disposal capacity will be made in the future.

The Santa Rosa Geothermal WMU Disposal Site, a Class III drilling muds disposal site owned and operated by Cal-Pine Operating Plant Services, is currently the only other landfill operating in Sonoma County. This privately-owned landfill does not accept municipal solid waste.

### 6.2.1 Description of the Central Disposal Site

The Central Disposal Site includes the Central Landfill, a Class III landfill. The following description briefly presents information regarding the Central Disposal Site, including disposal capacity, permitted capacity, permit constraints, and site characteristics:

| | |
|---|---|
| **Name:** | Central Disposal Site |
| **Address:** | 500 Mecham Road, Petaluma, CA 94952 |
| **Location:** | 2.8 miles southwest of the City of Cotati, in Sections 4 & 9, T5N, R8W, MDB&M |
| **Assessor Parcel No.:** | 024-080-19 & 24-080-018 |
| **SWIS No.:** | 49-AA-0001 |
| **Permitted Area:** | 398.5 acres |
| **Waste Types Landfilled:** | All non-hazardous wastes consisting of household and commercial wastes, agricultural and demolition wastes, sludge from wastewater treatment plants (as per Title 23, Subchapter 15, Section 2523[c]). |
| **Average Daily Loading:** | 1,461 tons per day; 2,435 cubic yards per day (in 2002) |
| **Permitted Daily Capacity:** | 2,500 tons per day; 4,167 cubic yards per day |

| | |
|---|---|
| **Site Owner:** | County of Sonoma, Department of Transportation and Public Works |
| **Site Operator:** | County of Sonoma, Department of Transportation and Public Works, Integrated Waste Division |

### 6.2.2 Description of other disposal sites

The following non-exclusive list presents information regarding the other disposal sites used for solid waste generated in Sonoma County:

| | |
|---|---|
| **Name:** | Redwood Sanitary Landfill |
| **Address:** | P.O. Box 793, Novato, CA 94947 |
| **Location:** | 8590 Redwood Highway, Novato, CA 94958 |
| **SWIS No.:** | 21-AA-0001 |
| **Permitted Area:** | 210 acres |
| **Waste Types Landfilled:** | Mixed municipal, Sludge (Biosolids), Agricultural, Construction/demolition, Asbestos, Tires, Ash, Wood waste, Other designated. |
| **Permitted Daily Capacity:** | 1,390 tons per day |
| **Site Owner:** | U.S.A. Waste of California |
| **Site Operator:** | Redwood Sanitary Landfill, Inc. |

| | |
|---|---|
| **Name:** | Potrero Hills Landfill |
| **Address:** | 3675 Potrero Hills Lane, Suisun City, CA 94585 |
| **SWIS No.:** | 48-AA-0075 |
| **Permitted Area:** | 190 acres |
| **Waste Types Landfilled:** | Agricultural, Ash, Construction/demolition, Industrial, Mixed municipal, Sludge (Biosolids), Tires. |
| **Permitted Daily Capacity:** | 4,330 tons per day |
| **Site Owner:** | Republic Services of California, L.L.C. |
| **Site Operator:** | Potrero Hills Landfill, Inc., P.O. Box 68, Fairfield, CA 94533 |

| | |
|---|---|
| **Name:** | Keller Canyon Landfill |
| **Address:** | 901 Bailey Road, Pittsburg, CA 94565 |
| **SWIS No.:** | 07-AA-0032 |
| **Permitted Area:** | 244 acres |
| **Waste Types Landfilled:** | Mixed municipal, Construction/demolition, Agricultural, Sludge (BioSolids), Other designated, Industrial. |
| **Permitted Daily Capacity:** | 4,330 tons per day maximum (3,400 tons per day average) |
| **Site Owner:** | Keller Canyon Landfill, 901 Bailey Road, Pittsburg, CA 94565 |
| **Site Operator:** | Keller Canyon Landfill, 901 Bailey Road, Pittsburg, CA 94565 |

| | |
|---|---|
| **Name:** | Vasco Road Sanitary Landfill |
| **Address:** | 4001 North Vasco Road, Livermore, CA 94550 |
| **SWIS No.:** | 01-AA-0010 |
| **Permitted Area:** | 222 acres |
| **Waste Types Landfilled:** | Contaminated soil, Industrial, Mixed municipal, Other designated, Green Materials, Construction/demolition. |
| **Permitted Daily Capacity:** | 2,218 tons per day |
| **Site Owner:** | Republic Services of California I, L.L.C., 4001 Vasco Road, Livermore, CA 94550 |
| **Site Operator:** | Republic Services of California I, L.L.C., 4001 Vasco Road, Livermore, CA 94550) |

| | |
|---|---|
| **Name:** | Hay Road Landfill |
| **Address:** | 6426 Hay Road, Vacaville, CA 95687 |
| **SWIS No.:** | 48-AA-0002 |
| **Permitted Area:** | 256 acres |
| **Waste Types Landfilled:** | Construction/demolition, Agricultural, Sludge (BioSolids), Tires, Ash, Mixed municipal, Asbestos. |

| | |
|---|---|
| **Permitted Daily Capacity:** | 2,400 tons per day maximum (1,200 tons per day average) |
| **Site Owner:** | Norcal Waste Systems, Inc., 6426 Hay Road, Vacaville, CA 95687 |
| **Site Operator:** | Norcal Waste Systems, Inc., 6426 Hay Road, Vacaville, CA 95687 |
| **Name:** | Yolo County Central Landfill |
| **Address:** | County Road 28H & County Road 104, Davis, CA 95616 |
| **SWIS No.:** | 57-AA-0001 |
| **Permitted Area:** | 473 acres |
| **Waste Types Landfilled:** | Tires, Sludge (BioSolids), Construction/demolition, Mixed municipal, Agricultural. |
| **Permitted Daily Capacity:** | 1,800 tons per day |
| **Site Owner:** | County of Yolo Public Works Department, 292 Beamer St., Woodland, CA 95695 |
| **Site Operator:** | County of Yolo Public Works Department, 292 Beamer St., Woodland, CA 95695 |
| **Name:** | Clover Flat Landfill |
| **Address:** | 4380 Clover Flat Road, Calistoga, CA 94515 |
| **SWIS No.:** | 28-AA-0002 |
| **Permitted Area:** | 44 acres |
| **Waste Types Landfilled:** | Agriculture, Construction/demolition, Industrial, Mixed municipal, Sludge (BioSolids), Tires. |
| **Permitted Daily Capacity:** | 600 tons per day |
| **Site Owner:** | Clover Flat Landfill, Inc., 1285 Whitehall Ln., St. Helena, CA 94574 |
| **Site Operator:** | Clover Flat Landfill, Inc., 1285 Whitehall Ln., St. Helena, CA 94574 |
| **Name:** | Sacramento County Landfill (Kiefer) |
| **Address:** | 12701 Kiefer Blvdl, Soughhouse, CA 95683 |

| | |
|---|---|
| **SWIS No.:** | 34-AA-0001 |
| **Permitted Area:** | 660 acres |
| **Waste Types Landfilled:** | Mixed municipal, Other designated, Sludge (BioSolids). |
| **Permitted Daily Capacity:** | 10,815 tons per day maximum (6,362 tons per day average) |
| **Site Owner:** | County Sacramento, Public Works Dept., 9850 Goethe Road, Sacramento, CA 95827-3500 |
| **Site Operator:** | County Sacramento, Public Works Dept., 9850 Goethe Road, Sacramento, CA 95827-3500 |

## 6.3 DISPOSAL CAPACITY REQUIREMENTS

Currently, no waste is disposed of within Sonoma County, so all waste must be exported. Tables 1A and 1B show the total waste in tons and cubic yards generated in Sonoma County by jurisdictional area, as well as unadjusted projections until 2030.

Each jurisdiction's proportion of the total county's waste was determined using the 2003 Disposal Report, as 2003 was the most recent year that all of the jurisdictions were channeling the waste through the County system. These proportions were applied to the disposal totals from the 2008 Disposal Report, and projected until 2030. A growth rate of 0.95% per year is based on the Brown, Vence, and Associates (BVA) report (Reassessment of the Long-Term Solid Waste Strategy Management Plan).

## Table 1A: Sonoma County Disposal Projections in Tons 2008-2030

| Year | Disposal by Jurisdiction (Tons) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cloverdale | Cotati | Healdsburg | Petaluma | Rohnert Park | Santa Rosa | Sebastopol | Sonoma | Windsor | Unincorporated | Total |
| **2008** | 7,077 | 7,034 | 17,964 | 44,965 | 26,830 | 156,292 | 13,733 | 12,782 | 17,505 | 96,112 | 400,293 |
| **2009** | 7,144 | 7,101 | 18,134 | 45,392 | 27,085 | 157,777 | 13,863 | 12,903 | 17,671 | 97,025 | 404,096 |
| **2010** | 7,212 | 7,169 | 18,307 | 45,824 | 27,342 | 159,276 | 13,995 | 13,026 | 17,839 | 97,947 | 407,935 |
| **2011** | 7,280 | 7,237 | 18,481 | 46,259 | 27,602 | 160,789 | 14,128 | 13,150 | 18,008 | 98,877 | 411,810 |
| **2012** | 7,349 | 7,306 | 18,656 | 46,698 | 27,864 | 162,316 | 14,262 | 13,274 | 18,179 | 99,817 | 415,722 |
| **2013** | 7,419 | 7,375 | 18,833 | 47,142 | 28,129 | 163,858 | 14,397 | 13,401 | 18,352 | 100,765 | 419,672 |
| **2014** | 7,490 | 7,445 | 19,012 | 47,590 | 28,396 | 165,415 | 14,534 | 13,528 | 18,527 | 101,722 | 423,659 |
| **2015** | 7,561 | 7,516 | 19,193 | 48,042 | 28,666 | 166,986 | 14,672 | 13,656 | 18,703 | 102,688 | 427,683 |
| **2016** | 7,633 | 7,587 | 19,375 | 48,498 | 28,938 | 168,573 | 14,812 | 13,786 | 18,880 | 103,664 | 431,746 |
| **2017** | 7,705 | 7,659 | 19,559 | 48,959 | 29,213 | 170,174 | 14,952 | 13,917 | 19,060 | 104,649 | 435,848 |
| **2018** | 7,778 | 7,732 | 19,745 | 49,424 | 29,491 | 171,791 | 15,094 | 14,049 | 19,241 | 105,643 | 439,988 |
| **2019** | 7,852 | 7,805 | 19,933 | 49,894 | 29,771 | 173,423 | 15,238 | 14,183 | 19,423 | 106,647 | 444,168 |
| **2020** | 7,927 | 7,880 | 20,122 | 50,368 | 30,054 | 175,070 | 15,383 | 14,317 | 19,608 | 107,660 | 448,388 |
| **2021** | 8,002 | 7,954 | 20,313 | 50,846 | 30,339 | 176,733 | 15,529 | 14,453 | 19,794 | 108,682 | 452,648 |
| **2022** | 8,078 | 8,030 | 20,506 | 51,329 | 30,628 | 178,412 | 15,676 | 14,591 | 19,982 | 109,715 | 456,948 |
| **2023** | 8,155 | 8,106 | 20,701 | 51,817 | 30,918 | 180,107 | 15,825 | 14,729 | 20,172 | 110,757 | 461,289 |
| **2024** | 8,233 | 8,183 | 20,898 | 52,309 | 31,212 | 181,818 | 15,976 | 14,869 | 20,364 | 111,809 | 465,671 |
| **2025** | 8,311 | 8,261 | 21,096 | 52,806 | 31,509 | 183,546 | 16,127 | 15,011 | 20,557 | 112,872 | 470,095 |
| **2026** | 8,390 | 8,339 | 21,297 | 53,308 | 31,808 | 185,289 | 16,280 | 15,153 | 20,752 | 113,944 | 474,561 |
| **2027** | 8,469 | 8,419 | 21,499 | 53,814 | 32,110 | 187,049 | 16,435 | 15,297 | 20,950 | 115,026 | 479,069 |
| **2028** | 8,550 | 8,499 | 21,703 | 54,325 | 32,415 | 188,826 | 16,591 | 15,442 | 21,149 | 116,119 | 483,620 |
| **2029** | 8,631 | 8,579 | 21,909 | 54,841 | 32,723 | 190,620 | 16,749 | 15,589 | 21,350 | 117,222 | 488,215 |
| **2030** | 8,713 | 8,661 | 22,118 | 55,362 | 33,034 | 192,431 | 16,908 | 15,737 | 21,552 | 118,336 | 492,853 |
| **Total** | | | | | | | | | | | 10,235,975 |

## Table 1B: Sonoma County Disposal Projections in Cubic Yards 2008-2030

| Year | Disposal by Jurisdiction (Cubic Yards) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cloverdale | Cotati | Healdsburg | Petaluma | Rohnert Park | Santa Rosa | Sebastopol | Sonoma | Windsor | Unincorporated | Total |
| **2008** | 11,794 | 11,723 | 29,938 | 74,939 | 44,715 | 260,476 | 22,887 | 21,302 | 29,173 | 160,180 | 667,128 |
| **2009** | 11,906 | 11,835 | 30,223 | 75,651 | 45,140 | 262,951 | 23,104 | 21,504 | 29,451 | 161,702 | 673,466 |
| **2010** | 12,019 | 11,947 | 30,510 | 76,369 | 45,569 | 265,449 | 23,324 | 21,709 | 29,730 | 163,238 | 679,864 |
| **2011** | 12,133 | 12,061 | 30,800 | 77,095 | 46,002 | 267,970 | 23,545 | 21,915 | 30,013 | 164,789 | 686,323 |
| **2012** | 12,249 | 12,175 | 31,092 | 77,827 | 46,439 | 270,516 | 23,769 | 22,123 | 30,298 | 166,354 | 692,843 |
| **2013** | 12,365 | 12,291 | 31,388 | 78,567 | 46,880 | 273,086 | 23,995 | 22,333 | 30,586 | 167,935 | 699,425 |
| **2014** | 12,482 | 12,408 | 31,686 | 79,313 | 47,325 | 275,680 | 24,223 | 22,546 | 30,876 | 169,530 | 706,069 |
| **2015** | 12,601 | 12,526 | 31,987 | 80,067 | 47,775 | 278,299 | 24,453 | 22,760 | 31,170 | 171,141 | 712,777 |
| **2016** | 12,721 | 12,645 | 32,291 | 80,827 | 48,229 | 280,943 | 24,685 | 22,976 | 31,466 | 172,766 | 719,548 |
| **2017** | 12,842 | 12,765 | 32,598 | 81,595 | 48,687 | 283,612 | 24,920 | 23,194 | 31,765 | 174,408 | 726,384 |
| **2018** | 12,964 | 12,886 | 32,907 | 82,370 | 49,149 | 286,306 | 25,156 | 23,415 | 32,066 | 176,064 | 733,285 |
| **2019** | 13,087 | 13,008 | 33,220 | 83,153 | 49,616 | 289,026 | 25,395 | 23,637 | 32,371 | 177,737 | 740,251 |
| **2020** | 13,211 | 13,132 | 33,535 | 83,943 | 50,088 | 291,772 | 25,637 | 23,862 | 32,679 | 179,426 | 747,283 |
| **2021** | 13,337 | 13,257 | 33,854 | 84,740 | 50,563 | 294,544 | 25,880 | 24,088 | 32,989 | 181,130 | 754,382 |
| **2022** | 13,463 | 13,383 | 34,176 | 85,545 | 51,044 | 297,342 | 26,126 | 24,317 | 33,302 | 182,851 | 761,549 |
| **2023** | 13,591 | 13,510 | 34,500 | 86,358 | 51,529 | 300,167 | 26,374 | 24,548 | 33,619 | 184,588 | 768,784 |
| **2024** | 13,720 | 13,638 | 34,828 | 87,178 | 52,018 | 303,018 | 26,625 | 24,781 | 33,938 | 186,342 | 776,087 |
| **2025** | 13,851 | 13,768 | 35,159 | 88,006 | 52,512 | 305,897 | 26,878 | 25,017 | 34,261 | 188,112 | 783,460 |
| **2026** | 13,982 | 13,899 | 35,493 | 88,843 | 53,011 | 308,803 | 27,133 | 25,254 | 34,586 | 189,899 | 790,903 |
| **2027** | 14,115 | 14,031 | 35,830 | 89,687 | 53,515 | 311,737 | 27,391 | 25,494 | 34,915 | 191,703 | 798,417 |
| **2028** | 14,249 | 14,164 | 36,171 | 90,539 | 54,023 | 314,698 | 27,651 | 25,736 | 35,246 | 193,524 | 806,001 |
| **2029** | 14,385 | 14,298 | 36,514 | 91,399 | 54,537 | 317,688 | 27,914 | 25,981 | 35,581 | 195,363 | 813,658 |
| **2030** | 14,521 | 14,434 | 36,861 | 92,267 | 55,055 | 320,706 | 28,179 | 26,228 | 35,919 | 197,219 | 821,388 |
| **Total** | | | | | | | | | | | 17,059,276 |

### 6.3.1 Existing Countywide Disposal Capacity

The existing disposal capacity is 9,160,293 cubic yards (5,496,176 tons) as of September 25, 2006. The decision to utilize the remaining landfill capacity will be determined in the future.

### 6.3.2 Anticipated Countywide Disposal Capacity Needs

Tables 1A and 1B display the projected countywide disposal capacity needs until 2030 in terms of tons and cubic yards, respectively. Strategies involving disposal outside of Sonoma County are discussed further in Section 6.7.

## 6.4 CRITERIA FOR ESTABLISHING NEW OR EXPANDING EXISTING SOLID WASTE FACILITIES

The siting criteria included in this section are based on federal, state, and local laws and policies regarding solid waste facilities. Siting criteria were developed according to Title 14, Chapter 9, Article 6.5 for preparing the Siting Element of the County Integrated Waste Management Plan (CoIWMP). The state guidelines outline specific categories of criteria to be used for establishing new, or expanding existing, solid waste facilities for ultimate disposal (landfills and transformation or incineration facilities). Several criteria were based on federal (Environmental Protection Agency) landfill locational restrictions (40 CFR 258), which are generally exclusionary in nature. It should be noted that exclusionary criteria do not necessarily exclude an entire site from consideration, but may only pertain to portions of a site.

### 6.4.1 Siting Criteria Development

The 1985 CoSWMP stated that public acceptance is the primary practical consideration in siting solid waste disposal facilities. The County actively sought to involve the public in the development of the siting criteria. An initial list of siting criteria was developed and presented to the public in a series of ten public workshops, five held in November, 1992 and five in February, 1993. The Sonoma County Permit Resource Management Department (PRMD) then reviewed and commented on the draft siting criteria. Based on PRMD comments and input from the LTF, the process for developing the siting criteria was revised to provide for a greater opportunity for public input into the development of the criteria. Should a public or private entity seek to create a new or expand an existing landfill, the expanded process will involve subjecting the criteria to more extensive public review during identification of specific landfill locations, an effort that was not undertaken during development of the Siting Element.

The siting criteria in this Siting Element reflect the community's interests, based on the public workshops conducted, as well as regulatory and technical considerations. The siting criteria listed provide a sound foundation for moving forward with a public process through the Siting Study and associated California Environmental Quality Act (CEQA) activities to locate new landfill site capacity.

### 6.4.2 Siting Criteria and Their Application

Siting criteria can be categorically defined as either exclusionary or comparative. Exclusionary criteria are generally regulatory land use restrictions created at the federal, state, or local level. Exclusionary criteria are designed to detect and eliminate clearly inappropriate sites from further consideration before undertaking the more costly and time consuming process of applying comparative criteria.

The exclusionary criteria define parameters that need to be satisfied for a piece of land to be considered for a landfill site. For example, a parcel that is located entirely in a flood plain would be excluded from further consideration as a candidate landfill site. The exclusionary criteria do not restrict development of a parcel as a landfill if only a portion of the parcel is excluded. If the land located in a flood plain included other property that would be suitable for a landfill, the portion in the flood plain could be used as landfill buffer. As a result, a property could have a portion that is excluded and not used for landfill and the remainder potentially suitable as a landfill site.

The exclusionary criteria will be applied to the entire county to identify those broad areas of the county that are not suitable for siting a new landfill prior to beginning the CEQA process. Should any public or private entity decide to resume in-County waste disposal, that entity will conduct a Siting Study to accomplish the following:

- Review the means that are available for achieving at least fifteen years of disposal capacity.
- Provide for extensive public participation in the landfill siting process, including low-income and minority populations to ensure environmental justice concerns are addressed.
- Refine the comparative criteria to reflect the public's considerations.
- Adopt the final comparative siting criteria by the Board of Supervisors at a public hearing before the criteria are used to identify potential sites.
- Seek nominations from property owners for land to be considered as a potential site.
- Apply the comparative criteria to each of the sites nominated or identified in this review by the County. Rank the sites to identify the best ones to be evaluated in a process to comply with CEQA.

The development of comparative criteria is the primary mechanism available to local constituents to influence site selection prior to the public hearing process. It is essential that local citizens be included in the process of defining local comparative criteria to minimize protracted conflict over various sites as different projects arise. The comparative criteria in this Siting Element were developed through such a public process – input received from the public at workshops, input from the LTF, and review at the public hearings conducted to adopt the 1996 CoIWMP. Comparative criteria will be further structured with numeric values and modified, as needed, in the Siting Study prior to the evaluation of any proposed landfill site.

The comparative criteria, further refined into environmental, community, economic, engineering, and administrative categories, are described in more detail in the following discussion. Should the County ever decide to pursue a new landfill site, Figure 6-2 graphically depicts the process envisioned for siting landfill capacity in Sonoma County.

### 6.4.2.1 Exclusionary Criteria

The first set of criteria are the exclusionary criteria. These criteria identify constraints that make

the siting of a landfill so difficult that further analysis or evaluation would be unproductive. The criteria are useful in the initial screening to identify general areas of the county which may have potentially suitable sites. The following list contains the exclusionary criteria selected by Sonoma County or required by local, state, and federal laws and regulations. Figure 6-3 is a map showing the areas of the county remaining after application of the exclusionary criteria which are reflected as the shaded portions of the county.

- Lands within 10,000 feet of a runway used by jet aircraft, or 5,000 feet of a runway used by propeller-driven aircraft
- Lands within a FEMA designated 100-year flood plain
- Lands restricted by State and Federal regulatory requirements over earthquake fault zones.
- Lands within channels of USGS designated perennial streams
- Lands within the urban boundary of an incorporated city
- Lands within designated Community Separators
- Lands within designated Critical Habitat
- Lands within the Coastal Zone
- Lands designated with the following land use in the County General Plan
    - Urban Residential
    - Rural Residential
    - General or Limited Commercial
    - Recreation and Visitor Serving Commercial
    - General and Limited Industrial
    - Public/Quasi-Public (unless the designation is applied to accommodate a landfill)

### 6.4.2.2 Comparative Criteria

The comparative criteria would be used to evaluate sites which are not located in exclusionary areas and that are suitable based on their physical attributes. These criteria would be used to evaluate across a wide spectrum of environmental, engineering, socio-political, and economic factors. These Comparative Criteria, with the Exclusionary Criteria, form the basis of the Siting Study. During the Siting Study these Comparative Criteria will be modified, new criteria added, and a ranking and weighting system developed.

**Environmental**

| | | |
|---|---|---|
| 1. | Groundwater Flow System: | In accordance with the County General Plan, watersheds and groundwater basins should be preserved by avoiding the placement of potential pollution sources in areas with high percolation rates. Therefore, sites located outside of recharge areas are the most desirable for landfill construction and operation. |
| 2. | Proximity to Surface Water: | The proximity of a site to surface water and existing or beneficial uses of the surface water is of obvious importance. A candidate site which is far from a surface water body would be a highly rated site. A poorly rated site would be one that is near a surface water body. |
| 3. | Depth to Groundwater: | The water table depth in the underlying sediments is important for both landfill operational considerations (such as placement of groundwater monitoring wells) and also from a standpoint of potential groundwater contamination. |
| 4. | Existence of Wetlands: | Federal regulations for siting landfills (40 CFR 258) prohibit the location of landfills in wetlands unless the construction and operation of the landfill will not cause or contribute to violations of state water quality standards, violate toxic effluent standards under the Clean Water Act, violate the Marine Protection Act, jeopardize endangered species, or cause degradation of wetlands. Data sources to be evaluated will include those from the California Department of Fish and Game, California Native Plant Society, and the Corps of Engineers. |
| 5. | Air Quality - Non-Attainment for Particulates | This criterion will measure whether an area is in attainment $PM_{10}$ and ozone. A site in a non-attainment area would be less desirable than one in an attainment or unclassified area. Wind direction and distance to nearby sensitive receptors will also be considered in evaluating this criterion. |
| 6. | Proximity to Threatened or Endangered Species - Animals: | In accordance with federal regulations the operation of a landfill at a site which would cause or contribute to the taking of any endangered species of plant, fish, or wildlife could constitute a fatal flaw. Similarly, the facility or operation cannot result in the destruction of critical habitat of endangered or threatened species. Data sources to be evaluated will include the State Department of Fish and Game, Federal Fish and Wildlife Service, and General Plan Open Space Element, Critical Habitat designations. |
| 7. | Proximity to Threatened and | This criterion is similar to the criterion above, except that it |

Endangered Species- Plants: covers threatened or endangered plant species. Data sources to - Plants be evaluated will include the State Department of Fish and Game, California Native Plant Society, and General Plan Open Space Element, Critical Habitat designations.

**Community**

1. Population Density Near Site: This criterion is used as one measure of the proposed landfill's potential impact on people.

2. Compatibility with Adjacent Land Uses: Existing and proposed land uses are considered. Also considered is the site's potential for impact mitigation.

3. Residents Along Access Routes/Road Safety: This criterion reflects the number of residents being affected by haul traffic to a potential site.

4. Schools and Hospitals Along Access Routes: This criterion measures the impact of solid waste truck haul traffic, including noise, traffic congestion, and safety considerations, on sensitive receptors such as schools and hospitals.

5. Proximity to Parks or Resource Lands: Landfills would generally be excluded from within a Federal Recreation Area, State Park, Department of Natural Resources – Natural Resources Conservation Area, County Park, etc. Sites valued for their pristine environment or held in reserve for use at a future time and are incompatible with a landfill.

6. Presence of Cultural, Historic, or Archaeological Resources: This criterion excludes locations which would interfere with the County General Plan's goal of preserving sites with significant archaeological, historical, or cultural resources. These resources include sites on the National and State Historic Register, areas identified as being of archaeological importance to Native Americans, and those sites/buildings/trees that have been identified as significant by the County Landmarks Commission.

7. Visual Impacts of Site: The magnitude of the landfill visual impacts relates to the location and topography of the site and to the availability of buffers to screen the operations. Aesthetics impacts are also important to consider.

8. Proximity to Major Transportation Corridors: This criterion considers the effects of landfill traffic on local roads, as well as the costs of hauling waste to a landfill. Those sites that are close to major transportation corridors will be less likely to impact local roads and residents (traffic congestion, noise, safety concerns, etc.) than sites located farther from major roads. Those sites closer to major transportation corridors would require less fuel to reach; this would help meet the county's goal of conserving

energy.

**Engineering**

1. Soil Suitability: A more highly rated site would have both fine- and coarse-grained soils which could provide bottom soil liner, final soil cover and intermittent soil cover during operation. The use of on-site soils can reduce the cost of landfill construction and the impacts of importing off-site materials.

2. Geology: This criterion is a measure of the permeability/transmissivity of materials underlying a proposed site. The geologic materials that have been identified in Sonoma County can be generally divided up into two groups: (1) unconsolidated deposits and (2) semi-consolidated to consolidated rocks. The permeability and transmissivity of materials within these general groups can be an indication of site security in terms of leachate and gas containment and as an indication of barriers to groundwater movement.

3. Fault Areas: Proximity to active fault areas is an important criteria in terms of maintaining the integrity of the landfill control structures (such as leachate and gas collection) and the engineering measures that would be needed to prevent damage from seismic movements. State and Federal regulatory requirements for earthquake fault zones will be followed to evaluate potential landfill sites.

4. Unstable Areas: Locating landfills on sites that have unstable geological conditions is generally undesirable. Unstable areas are defined as those locations that are susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of those landfill structural components that are responsible for preventing releases to the environment (such as leachate or gas control structures). Criteria categories are:

   - Category A – Areas of greatest relative stability due to low slope inclination – dominantly less than 15%.
   - Category B – Areas of relatively stable rock and soil units on slopes greater than 15% containing few landslides
   - Category Bf – Locally level areas within hilly terrain - may be underlain or bounded by unstable or potentially unstable rock materials
   - Category C – Areas of relatively unstable rock and

soil units on slopes greater than 15% containing abundant landslides

- Landslide Area – Areas of lowest relative slope stability; failure and downslope movement of rock and soil has occurred or may occur

- Flood Hazard, 100-year Flood Plains: Federal regulations (40 CFR 258) prohibit the placement of a landfill within a 100-year flood plain. The hazard from floods is due primarily to potential erosion, washout of waste from the site and restrictions on reducing the water storage capacity of a watershed basin.

- Seismic Impact Zones: Federal regulations for siting landfills (40 CFR 258) prohibit development of a landfill in seismic impact zones unless it can be proven that all containment structures (leachate collection system, surface water collection system, etc.) have been designed to resist the maximum horizontal acceleration of the earth beneath the site.

- Annual Precipitation: This criterion measures how much water will need to be contained on the landfill site, both on the surface of the landfill property as runoff and within the landfill as leachate.

- Erosion Potential: Soil characteristics, slope, and surrounding topography may create conditions that are particularly susceptible to erosion (from rainfall). Erosion results in stormwater runoff having high levels of sediment with the potential for impacting water quality in surface waters. Extensive and costly engineering controls may be required to prevent stormwater runoff, and siltation and sedimentation impacts to nearby surface water.

**Administrative**

1. Site Capacity/Site Life: A potential site should have at least fifteen years of capacity. Sites with more capacity are ranked higher.

2. Agricultural Land: The General Plan recognizes the importance of agricultural land in the county stating that lands containing agricultural and productive woodland soils should be preserved, and conversion of this land to incompatible residential, commercial, or industrial uses be avoided.

| | | |
|---|---|---|
| 3. | Proximity to Existing Uses of Groundwater: | Landfill operations have the potential for contamination of groundwater. Therefore, it is important to protect beneficial uses as much as possible by choosing sites located further from these areas. |
| 4. | Airport Safety: | Federal Aviation Administration Order 5200.5 prohibits the development of landfills within 5,000 feet from a runway used by propeller-driven aircraft and 10,000 from a runway used by jet aircraft. |
| 5. | Site Parcel Assemblage: | This category compares the various sites as to the ease (availability of information, communications, ease of acquisitions and mitigation) with which the required parcels for the landfill site could be assembled. |
| 6. | Ownership/Acquisition Potential: | This category compares sites based the upon potential ease with which a selected property might be acquired. |

**Economic**

| | | |
|---|---|---|
| 1. | Total Operating Costs: | A number of elements would be combined for the total operation costs, including: (1) landfill operation costs (cost of daily and intermediate cover, and operation and maintenance of all landfill access roads and environmental monitoring systems), +(2) leachate treatment and control, (3) gas control, and (4) post-closure costs (maintaining the final cover, surface water management systems, gas control facilities, environmental monitoring facilities and the leachate treatment facilities). For all of these elements, planning level costs for labor, equipment and materials should be estimated and daily operational costs should be considered for the projected life of the selected landfill site. |
| 2. | Site Development Costs: | These are the capital expenditures at the site including the cost of building the landfill, equipment to begin operations, and other costs of opening a landfill. |
| 3. | Transportation Costs: | Based upon engineering and economic analysis, the cost of solid waste transport to each site would be estimated. The estimate for each site would include operation and maintenance costs incurred by the County, municipal haulers, and private/ commercial haulers for transport and transfer of solid waste. |
| 4. | Parcel Costs: | Using the assessed valuations maintained by the county and review of other county records, the purchase price for each potential site will be estimated as appropriate. |

### 6.4.3 Procedural Mechanisms To Assure Use Of Criteria In Siting Solid Waste Disposal

### Facilities

The preliminary Siting Criteria were adopted by the County and incorporated Cities when they approved the 1996 CoIWMP. In adopting the Siting Criteria in this CoIWMP, the County and Cities confirmed the procedural mechanisms described here that will be used by the public or private entity for siting a new landfill. These procedural mechanisms include a Siting Study, which will refine the siting criteria and provide weighting and ranking factors for the comparative siting criteria with input from the LTF and public. Once into the CEQA process, the Siting Criteria may also have a role in identification and evaluation of alternatives to the proposed project.

## 6.5 PROPOSED SOLID WASTE FACILITIES

There are no pending applications for a solid waste facility at this time.

## 6.6 CONSISTENCY WITH COUNTY GENERAL PLAN

There are no current proposals for new or expanded landfills in Sonoma County at this time.

### 6.6.1 Sites Reserved For Solid Waste Disposal or Transformation Facilities

The Central Disposal Site is currently the only site with a landfill reserved for solid waste disposal in Sonoma County.

### 6.6.2 Sites Tentatively Reserved For Solid Waste Disposal or Transformation Facilities

There are no sites tentatively reserved for solid waste disposal or transformation facilities in Sonoma County.

## 6.7 STRATEGIES FOR DISPOSING OF SOLID WASTE IN EXCESS OF CAPACITY WHEN NEW OR EXPANDED SITES ARE NOT AVAILABLE

Due to significant uncertainties, the County of Sonoma is considering out-of county disposal at this time, although potential sites for disposal may exist within Sonoma County. The SCWMA supports efforts to identify potential in-county disposal sites.

### 6.7.1 Short Term Disposal Strategy

Out-of-county disposal contracts are currently in place to ensure sufficient disposal capacity until 2010. The daily tonnage commitment with contracted landfills are detailed in the table below.

### 6.7.2 Medium Term Disposal Strategy

The County has released an RFP that is expected to be awarded in April 2010 that will secure out-of-county landfill capacity through August 2014. Beyond this, the County's medium term (2010 - 2030) disposal strategy will consider the following options:

- Out-of-county disposal with waste transport by truck
- Out-of-county disposal with waste transport by rail

- Resumption or expansion of disposal at the Central Disposal Site

| Day Type | Days per Year | TPD | Contract Capacity |
|---|---|---|---|
| Weekdays | 261 | 1,750 | 456,250 |
| Saturdays | 52 | 750 | 39,107 |
| Sundays | 52 | 300 | 15,643 |
| | | Total | 511,000 |

While the above options will secure, at minimum, 15 years of disposal capacity through contracts which specify maximum allowed daily tonnages, the options differ in capital investment and level of commitment required by participating jurisdictions. It is therefore necessary that the County work with the Cities to determine which are interested in each option. After the interest is determined, the County shall determine whether to reopen the Central Disposal Site or enter into a succession of medium term agreements (for example, ranging from two to five years) with haulers or landfills to secure at least 15 years of disposal capacity through the medium term planning horizon of 2030. Within six months of the expiration of a medium term disposal agreement, the County will begin a new RFP process or consider extending the existing agreement. At any point that the Central Disposal Site is permitted and operational, the County may make arrangements to resume disposal at the Central Disposal Site. The succession of agreements or arrangements will secure at least 15 years of disposal capacity. The selection of in-county or out-of-county disposal will depend in part on the result of any such agreements between the County, the Cities, and appropriate regulatory agencies.

Contracts between the County, haulers, and landfill owners would secure the County's ability to guarantee disposal capacity and the means with which to transport waste generated within Sonoma County. The BVA analysis and the analysis below indicate that there is adequate landfill capacity in the Bay Area for the next 15 years (source: Assessment of Long-Term Solid Waste Management Alternatives, BVA)

| Landfill | County, Roundtrip Distance | Permit Estimated Closure Date | Maximum Permitted Capacity (TPD) | Average Permitted Capacity (TPD) | Current Disposal (TPD) | Available Capacity (TDP) |
|---|---|---|---|---|---|---|
| Redwood | Marin County, 44 miles | 2024 | 1,390 | - | 1,200 | 190 |
| Potrero Hills | Solano County, 136 miles | 2011* | 4,330 | 3,400 | 3,049 | 351 |
| Keller Canyon | Contra Costa County, 147 miles | 2058 | 3,500 | 2,960 | 2,940 | 20 |
| Hay Road | Solano County, 162 miles | 2070 | 2,400 | 1,200 | 550 | 650 |
| Central Yolo | Yolo County, 180 miles | 2081 | 1,800 | - | 500 | 1,300 |
| Kiefer | Sacramento County, 210 miles | 2035 | 10,815 | 6,362 | 2,500 | 3,862 |
| | | | | | Total | 6,373 |

*The current permit estimated closure date for Potrero Hills Landfill is 2011; the landfill is applying to expand operations but those expansion plans are currently in litigation.

Sources: Estimated closure date, maximum permitted capacity, and average permitted capacity were acquired from the facility permits obtained from the California Integrated Waste Management Board's Facility/Site Search webpage (http://www.ciwmb.ca.gov/swis/Search.aspx) on October 22, 2009, and current disposal TPD were obtained from Brown, Vence, and Associates, Assessment of Long-Term Solid Waste Management Alternatives in Sonoma County, Final Report, January 2006. Appendix B, Table 2.

### 6.7.3 Waste Transport by Truck

In response to the lack of permitted landfill capacity, the County contracted for out-of-County haul and disposal through three separate companies for a five-year period beginning September 1, 2005.

The County is in a favorable position to haul to out-of-County landfills by truck. The County currently has five transfer stations that allow for transfer of solid waste to trucks to transport the waste to out-of-County disposal sites. Another positive factor is that the County owns the sites and is already permitted to operate these transfer facilities, so no additional site acquisition, regulatory, or permitting activities are anticipated. Although flow control is important for rail haul disposal commitments, it is less critical for the strategy involving truck haul and disposal. Little new capital investment is required for truck haul and the operating costs are more easily reduced should tonnage leave the disposal system.

The potential downside to out-of-County haul and disposal is the risk of losing disposal capacity sometime in the future. Although the County may contract for certain capacity, there is no assurance that this capacity will always be available. Furthermore, landfill options are more limited than with rail haul, as the cost effectiveness of truck hauling declines rapidly as distance from Sonoma County increases.

### 6.7.4 Waste Transport by Rail

The infrastructure requirements for development of hauling waste by rail (WBR) to out-of County disposal sites generally include the following five components:

- Transfer Station to collect, recover divertible materials, and load residual waste into intermodal containers or consolidate for loading gondola cars
- Local Rail Yard to load intermodal containers or gondola cars on spur track
- Rail Haul for transporting containers or gondola cars over rail lines to the remote rail yard
- Remote Rail Yard to off-load the containers or material in gondola cars to the landfill or transfer vehicles for haul to the landfill
- Landfill for disposal of residual solid waste

While WBR increases accessibility to a larger number of disposal sites than truck hauling, there is significant capital investment required. This necessitates an agreement between a significant number of Cities and the County to share the capital costs, and a long term commitment to WBR in the form of 20 to 25 year contracts with the North Coast Rail Authority (NCRA) and the destination landfill(s). Potential capital investments include the retrofit of existing transfer stations to accommodate the intermodal operating system, the purchase of sufficient intermodal containers to satisfy the disposal needs of Sonoma County, and the development of at least one or more loading stations along the rail line.

In an effort to promote waste diversion and zero waste, special care must be made with regard to tonnage commitments with the destination landfill(s). Agreements will be created with flexibility such that the County's landfill capacity commitments decrease in proportion to the success of our source reduction and recycling programs. Agreements which provide an economic disincentive for waste reduction will be avoided.

### 6.7.5 Divestiture of County Disposal System / Reopening Central Disposal Site

The County is considering a process in which another public or private organization may assume ownership of the County Disposal System, either in part or in whole, or may reopen the Central Disposal Site itself. A new owner may pursue actions which would allow for waste to again be deposited at the Central Disposal Site. Such actions would likely include additional remediation and waste discharge requirement efforts at the site, which would occur under the direction of the RWQCB and possibly other applicable agencies. In addition, any resumed or expanded landfilling operations at the Central Disposal Site would also be subject to applicable CEQA review requirements, and may require a County Use Permit.

## 6.8 SITING ELEMENT IMPLEMENTATION

### 6.8.1 Responsible Agencies

Since all solid waste facilities in Sonoma County are currently owned by the County of Sonoma, the Board of Supervisors is the responsible agency for implementing the Siting Element. DTPW will implement the Board's policies by working with the SCWMA, PRMD, LEA, and the LTF.

In the event that a private entity should seek to establish a new or expand an existing landfill, that entity would be required to implement the Siting Element as defined in this ColWMP. This entity would implement the Board's policies by working with the SCWMA, PRMD, LEA, and LTF.

### 6.8.2 Implementation Tasks

Should a public or private entity decide to expand an existing or create a new landfill within Sonoma County, the following task list summarizes the process for achieving the goal of maximizing disposal capacity.

Task 1. Siting Study/Options Evaluations

a. Siting Study will include the Board of Supervisors adopting the refined Siting Criteria and an environmental and economic consideration of various long-term disposal options.

b. Screen county for candidate sites and request public nomination of sites.

c. Apply first round siting criteria to candidate sites, develop ranking, and review criteria application.

d. Complete first round ranking of sites. It is expected that 8 to 13 sites may be identified at this step.

e. Second round of screening of sites with field confirmation of significant siting criteria.

f. Rank sites and recommend 3 to 5 sites as final candidates in report to Board of Supervisors. Board accepts report and gives direction to staff to proceed with preliminary design and CEQA.

Task 2. Preliminary Design

a. Issue RFP, hold interviews and execute contract for investigation of the final candidate sites. Work will include geotechnical and hydrogeotechnical research and biological reconnaissance of the sites.

b. Prepare preliminary design including geotechnical and hydrogeotechnical investigation and biological reconnaissance.

c. Review of preliminary design report and recommendation for selected site.

d. Prepare final preliminary design report and recommendation for selected site.

Task 3. CEQA

a. Issue RFP, hold interviews and execute contract for preparation of project level EIR for candidate site(s) and selected alternatives.

b. Prepare Initial Study, present to the Environmental Review Committee, issue Notice of Preparation (NOP), meet with regulatory agencies, and hold public meetings for input for the EIR.

c. Prepare Draft EIR (DEIR).

d. Issue and circulate Notice of Completion (NOC) to open public review period.

e. Planning Commission holds hearings on DEIR and Final EIR (FEIR).

f. Board of Supervisors certifies FEIR and adopts the project selecting the best site.

Task 4. Final Design

a. Prepare final design plans and specifications for first phase improvements.

b. Bid first phase improvements and award contract.

c. Complete first phase improvements.

Task 5. General Plan Amendment

To run concurrent with design and construction. Process general plan amendment to have scheduled site zoned Public/Quasi-Public or other appropriate zoning. Includes hearing before the Planning Commission and Board of Supervisors.

Task 6. Permits

To run concurrent with design and construction. Permitting agencies include the California Integrated Waste Management Board (CIWMB), Regional Water Quality Control Board, Air Quality Management District, and Sonoma County PRMD. Documents submitted to the CIWMB will include a Joint Technical Document, including a Report of Disposal Site Information, Preliminary Closure Plan, and Preliminary Post Closure Maintenance Plan.

### 6.8.4 Revenue Sources

Funding for the implementation of the Sonoma County Siting Element and all facility siting programs and procedures need to be identified for any proposal concerning solid waste facility siting. If the County of Sonoma makes the decision to site a new landfill, funds for implementing the siting element would come from a tipping fee surcharge. If another public or private entity intends to establish a new landfill site, either entity would be responsible for funding the implementation of the siting element.

# Notices of Public Hearings

SONOMA COUNTY
Waste Management Agency

*NOTICE OF PREPARATION OF*
*DRAFT SUPPLEMENTAL PROGRAM ENVIRONMENTAL IMPACT REPORT*

**Project Title:** Amendment to the Sonoma Countywide Integrated Waste Management Plan.

**Project Applicant:** Sonoma County Waste Management Agency

The Sonoma County Waste Management Agency (SCWMA) will be the lead agency under the California Environmental Protection Act (CEQA) and will prepare a Supplemental Program Environmental Impact Report (SPEIR) for the Amendment to the Sonoma Countywide Integrated Waste Management Plan (CoIWMP). The amendment includes modifications to the CoIWMP Household Hazardous Waste Element and the Siting Element. The modification to the Household Hazardous Waste Element would allow for the development of additional household hazardous waste collection facilities in addition to the one presently at the Central Disposal site. The modification to the Siting Element would allow for additional solid waste disposal strategies, including out-of-County disposal with waste transported by truck and/or rail, and divestiture of the County Disposal System to a private owner. An Initial Study that contains a more detailed description of the Amendment to the CoIWMP and summarizes the probable environmental effects that would be associated with it is contained in the attached materials.

If you are a responsible agency, we need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed Amendment to the CoIWMP. Your agency will need to use the SPEIR prepared by our agency when considering your permit or other approval for the proposed Amendment to the CoIWMP.

Due to the time limits mandated by State Law, your response must be sent at the earliest possible date, but not later than 30 days after receipt of this notice. Please send all written comments faxed or postmarked no later than May 26, 2008, to Patrick Carter, Sonoma County Waste Management Agency, 2300 County Center Drive, Suite B100, Santa Rosa, CA 95403. Comments may also be faxed to (707) 565-3701, attention Patrick Carter.

**Public Scoping Meeting:** The SCWMA will hold a public scoping meeting from 6:00 pm to 8:00 pm on May 5, 2008. This meeting will allow an opportunity for the public to express views regarding the scope of the environmental issues to be addressed in the EIR. The comments will be considered by the SCWMA during the preparation of the EIR. The meeting will be held at the Sonoma County Sheriff's Department Main Conference Room (2796 Ventura Avenue, Santa Rosa, CA 95403).

[redacted]

Date: April 24, 2008

Susan Klassen, Interim Executive Director
Sonoma County Waste Management Agency
Telephone (707) 565-2231

Attachments: Initial Study

SONOMA COUNTY
Waste Management Agency

*NOTICE OF AVAILABILITY OF*
*DRAFT SUPPLEMENTAL PROGRAM ENVIRONMENTAL IMPACT REPORT*
*AND PUBLIC HEARING*

**Project Title:** Amendment to the Sonoma Countywide Integrated Waste Management Plan.

**Project Applicant:** Sonoma County Waste Management Agency

**Date:** June 8, 2009

The Sonoma County Waste Management Agency (SCWMA), as the lead agency under the California Environmental Protection Act (CEQA), has prepared a Draft Supplemental Program Environmental Impact Report (SPEIR) for the Amendment to the Sonoma Countywide Integrated Waste Management Plan (CoIWMP). The Draft SPEIR identifies impacts and environmental issues related to the Amendment to the CoIWMP (proposed Amendment), and also discusses and analyzes alternatives to the proposed Amendment, as required by CEQA.

The proposed Amendment includes modifications to the CoIWMP Household Hazardous Waste Element and the Siting Element. The primary objectives of the project are to allow for: (1) the development of additional permanent Household Hazardous Waste collection facilities in the County; (2) out-of-County disposal of solid waste; and (3) the divestiture of the Central Disposal Site, which would most likely result in resumed disposal of refuse at the Central Disposal Site. The Draft SPEIR is intended to provide sufficient environmental documentation to inform the public and allow the SCWMA Board Members to make an informed decision concerning the adoption of the project.

The Draft SPEIR is available for a 45-day public comment period from June 8, 2009 through July 24, 2009. Copies of the 2009 SPEIR are available to the public for review or purchase at the SCWMA office in Santa Rosa (2300 County Center Drive, Suite B100, Santa Rosa, CA 95403) and at local libraries throughout the County. Electronic copies of the 2009 SPEIR are also available online at: **http://www.recyclenow.org/o_reports.html**.

The public may present comments and concerns regarding the proposed Amendment and the adequacy of the Draft SPEIR. Comments may be submitted in writing to:

Mr. Patrick Carter, Waste Management Specialist
Sonoma County Waste Management Agency
2300 County Center Drive, Suite B100
Santa Rosa, CA 95403
Fax: (707) 565-3701
pcarter@sonoma-county.org

Please be sure to include your name, address, and telephone number in your correspondence. Written comments on the Draft SPEIR must be postmarked or received by fax or e-mail no later than **4:00 pm, July 24, 2009**.

The SCWMA will also hold a **public hearing** on **Wednesday, June 17, 2009 at 9:00 a.m. in the Estuary Meeting Room, City of Santa Rosa, Utilities Department, Subregional Water Reclamation System Laguna Plan, 4300 Llano Road, Santa Rosa, California 95407**. This hearing will allow public comment on the Draft SPEIR for the Amendment to the Sonoma Countywide Integrated Waste Management Plan (ColWMP). Comments received during the comment period, including the public hearing, will be considered by the SCWMA during the preparation of the Final SPEIR.

**Sonoma County Waste Management Agency**
**Notice of Public Hearing and Availability of the Final Supplemental Program Environmental Impact Report and Final 2009 Amendment to the Sonoma Countywide Integrated Waste Management Plan**

Notice is hereby given that the Sonoma County Waste Management Agency (SCWMA) will hold a Public Hearing on the Final Supplemental Program Environmental Impact Report (SPEIR) and 2009 Amendment to the Sonoma Countywide Integrated Waste Management Plan (CoIWMP) project. The project proposes to (1) revise the CoIWMP Household Hazardous Waste Element to allow for the development of additional permanent household hazardous waste collection facilities in the County and (2) revise the CoIWMP Siting Element to allow for out-of-County disposal of solid waste and to allow for future public or private ownership of regional disposal facilities.

The Final SPEIR addressed program level impacts and analyzed alternatives to the proposed project. Potentially significant impacts include effects on Aesthetics, Air Quality, Noise, and Transportation and Traffic. Where potentially significant and unavoidable impacts have been identified, mitigation measures have been incorporated to reduce impacts to the maximum extent feasible.

The Final SPEIR and 2009 Amendment to the CoIWMP are available for public review on the SCWMA website at: **http://www.recyclenow.org/o_reports.html.** Copies of the documents are also available for viewing at the Sonoma County Public Libraries and at the SCMWA office at 2300 County Center Drive, Suite B100, Santa Rosa, CA 95403.

The SCWMA will conduct a public hearing at the Sonoma County Board of Supervisors Chamber, 575 Administration Drive, Room 100A, Santa Rosa CA 95403 on December 2, 2009 at 9 am. The SCWMA Board of Directors will consider a recommendation on the Final SPEIR. If you challenge the decisions on the project in court, you may be limited to raising only those issues previously raised at the hearing or in written form prior to the hearing.

# Resolutions Adopting the Household Hazardous Waste Element and Siting Element

RESOLUTION NO. 2010-003

RESOLUTION OF THE SONOMA COUNTY WASTE MANAGEMENT AGENCY CERTIFYING THE FINAL SUPPLEMENTAL PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE 2009 AMENDMENT TO THE COUNTYWIDE INTEGRATED WASTE MANAGEMENT PLAN; ADOPTING FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT; ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM.

The Sonoma County Waste Management Agency hereby finds and resolves as follows:

Section 1. The 2009 Amendment to the Countywide Integrated Waste Management Plan (the "CoIWMP") were initiated by the Sonoma County Waste Management Agency (the "SCWMA") to amend and update the 2003 CoIWMP in accordance with Assembly Bill 939 (the "Project"). The 2009 Amendment to the CoIWMP propose to: (1) revise the Household Hazardous Waste Element to allow for the development of additional permanent household hazardous waste collection facilities in the County; and (2) revise the Siting Element to allow for out-of-County disposal of solid waste and to allow for future public or private ownership of regional disposal facilities.

Section 2. On April 24, 2008, a Notice of Preparation ("NOP") was distributed to the State Office of Planning and Research and individual agencies. In addition, a public scoping meeting was held on May 5, 2008 to provide information on the Project and to receive comments on issues to be addressed in the Supplemental Program Environmental Impact Report ("SPEIR").

Section 3. In June of 2009, a Draft Supplemental Program Environmental Impact Report (the "Draft SPEIR") was prepared for the Project after consultation with responsible and trustee agencies. In accordance with the California Environmental Quality Act ("CEQA") (Cal. Pub. Res. Code §21000 *et seq.*) and the State Guidelines (the "Guidelines") (14 Cal. Code Regs. §15000 *et seq.*), and the SCWMA CEQA Procedures, the City analyzed the Project's potential impacts on the environment.

Section 4. The SCWMA published and distributed the Notice of Availability of the Draft SPEIR on June 8, 2009 to advise interested local, regional, and State agencies (including the California Integrated Waste Management Board), and the interested public, that a Draft SPEIR had been prepared and published for the Project.

Section 5. The SCWMA circulated the Draft SPEIR and the Appendices for the Project to the public and other interested parties for a 45-day comment period, consistent with the 45-day public comment period required by Guidelines Section 15105 from June 8, 2009 to July 24, 2009.

Section 6. On June 17, 2009, the SCWMA held a public hearing on the Draft SPEIR for the Project to allow all interested persons the opportunity to be heard and provide comment. Testimony from the speakers, and the SCWMA's responses to these oral comments are incorporated into the Final SPEIR.

Section 7. The SCWMA prepared written responses to all written comments received during the 45-day comment period on the Draft SPEIR and those responses to comments are incorporated into the Final SPEIR. The Responses to Comments were distributed to all public agencies that submitted comments on the SPEIR, at least 10 days prior to certification of the Final EIR.

Section 8. The Final SPEIR is comprised of the Draft SPEIR dated June 2009 and all appendices thereto, the Comments and Response to Comments on the Draft SPEIR, the Revisions to the Draft SPEIR, and the Mitigation Monitoring and Reporting Program.

Section 9. The findings made in this Resolution are based upon the information and evidence set forth in the Final SPEIR and upon other substantial evidence that has been presented to the Agency and in the record of the proceedings. The documents, staff reports, technical studies, appendices, and other materials that constitute the record of proceedings on which this Resolution is based are on file for public examination during normal business hours at the Sonoma County Waste Management Agency, 2300 County Center Drive, Suite B-100, Santa Rosa, California. Each of those documents is incorporated herein by reference.

Section 10. The SCWMA finds that agencies and interested members of the public have been afforded ample notice and opportunity to comment on the SPEIR and the Project.

Section 11. Section 15091 of the State CEQA Guidelines requires that the SCWMA, before approving the Project, make one or more of the following written finding(s) for each significant effect identified in the Final SPEIR accompanied by a brief explanation of the rationale for each finding:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects as identified in the Final SPEIR; or,

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency; or,

3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

Section 12. Section 15093 of the State CEQA Guidelines requires that if the Project will cause significant unavoidable adverse impacts, the SCWMA must adopt a Statement of Overriding Considerations prior to approving the project. A Statement of Overriding Considerations states that any significant adverse project effects are acceptable if expected project benefits outweigh unavoidable adverse environmental impacts.

Section 13. Environmental impacts identified in the Initial Study and Final SPEIR that are found to be less than significant and do not require mitigation are described in Sections III and IV, respectively of Exhibit A-1, attached hereto and incorporated herein by reference.

Section 14. Environmental impacts identified in the Final SPEIR as potentially significant, but that can be reduced to less than significant levels with mitigation, are described in Exhibit A-1, Section V, attached hereto and incorporated herein by reference.

Section 15. Environmental impacts identified in the Final SPEIR as significant and unavoidable despite the imposition of all feasible mitigation measures are described in Exhibit A-1, Section VI, attached hereto and incorporated herein by reference.

Section 16. Alternatives to the Project that might eliminate or reduce significant environmental impacts are described in Exhibit A-1, Section VII, attached hereto and incorporated herein by reference, which discussion includes findings regarding the various alternatives.

Section 17. A discussion of the Project benefits and a Statement of Overriding Considerations for the environmental impacts that cannot be fully mitigated to a less than significant level are set forth in Exhibit B, attached hereto and incorporated herein by reference.

Section 18. Public Resources Code section 21081.6 requires the SCWMA to prepare and adopt a mitigation monitoring and reporting program for any project for which mitigation measures have been imposed to assure compliance with the adopted mitigation measures. The Mitigation Monitoring and Reporting Program is attached hereto as Exhibits C-1 and C-2, and is hereby incorporated herein by reference.

Section 19. Prior to taking action, the SCWMA reviewed, considered, exercising its independent judgment, the Final SPEIR and all of the information and data in the administrative record, and all oral and written testimony presented to it during meetings and hearings and finds that the Final SPEIR is adequate and was prepared in full compliance with CEQA. No comments or any additional information submitted to the City constitute substantial new information requiring additional recirculation or additional environmental review of the Project under CEQA.

Section 20. The SCWMA hereby certifies the Final SPEIR, adopts findings pursuant to the California Environmental Quality Act, as set forth in Exhibit A-1 attached hereto and incorporated herein by reference; adopts the Statement of Overriding Considerations set forth in Exhibit B attached hereto and incorporated herein by reference; adopts the Mitigation Monitoring and Reporting Program attached hereto as Exhibits C-1 and C-2 and incorporated herein by reference, and imposes each mitigation measure as a condition of Project approval; and directs staff to file a Notice of Determination with the County Clerk in accordance with the provisions of CEQA and the State CEQA Guidelines. SCWMA staff shall implement and monitor the mitigation measures as described in Exhibits C-1 and C-2.

**PASSED, APPROVED AND ADOPTED** by the Sonoma County Waste Management Agency this 17th day of February, 2010.

EXHIBIT A-1

Findings and Facts in Support of Findings

# I. Introduction.

The California Environmental Quality Act ("CEQA") and the State CEQA Guidelines (the "Guidelines") provide that no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that will occur if a project is approved or carried out unless the public agency makes one or more of the following findings:

**A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects identified in the EIR.**

**B. Such changes or alterations are within the responsibility of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.**

**C. Specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR.**[1]

Pursuant to the requirements of CEQA, the Sonoma County Waste Management Agency (the "SCWMA") hereby makes the following environmental findings in connection with the proposed Amendments to the Sonoma Countywide Integrated Waste Management Plan (the "Project"). The SCWMA makes these environmental findings through a comparison of the environmental effects of the Project against two baseline scenarios, as more fully detailed in the SPEIR. Baseline Scenario 1 is the 2003 CoIWMP conditions when no out-hauling of refuse by truck occurred, and baseline scenario 2 is where out-hauling of refuse by truck is occurring as current existing conditions. Both baseline scenarios are considered in the air quality, noise, and transportation and traffic impact analyses associated with proposed revisions to the Siting Element and mitigations are identified when project activities compared to either of the two baseline scenarios result in a potentially significant impact. Regarding aesthetics related topics, impacts that would result using the two baseline scenarios would not differ substantially. Therefore, the setting used in the impact analysis for aesthetics is the physical conditions that existed as of the date that the Notice of Preparation (NOP) was published, which includes out-of-County haul by truck.

These findings are based upon evidence presented in the record of these proceedings, both written and oral, the Draft SPEIR, the Final SPEIR, and all of their contents, the Comments and Responses to Comments on the Draft SPEIR, and staff and consultants' reports presented through the hearing process, which comprise the Final SPEIR.

[1] Cal. Pub. Res. Code § 21081; 14 Cal. Code Regs. § 15091.

## II. Project Objectives.

As set forth in the EIR, the proposed Project is intended to achieve a number of objectives (the "Project Objectives") as follows:

A. To allow for the development of additional permanent Household Hazardous Waste collection facilities in the County;

B. To allow for out-of-County disposal of solid waste; and

C. To allow the divestiture of the Central Landfill, which would most likely result in resumed disposal of refuse at the Central Disposal Site.

## III. Effects Determined to be Less Than Significant/No Impact in the Initial Study/Notice of Preparation.

The SCWMA conducted a Notice of Preparation (NOP) and Initial Study to determine the potential environmental effects of the Project. In the course of this evaluation, the Project was found to have no impact in certain impact categories because a project of this type and scope would not create such impacts or because of the absence of project characteristics producing effects of this type. The following effects were determined not to be significant or to be less than significant for the reasons set forth in the Initial Study, and were not analyzed in the SPEIR because they require no additional analysis to determine whether the effects could be significant.

### A. AGRICULTURAL RESOURCES

1. The Project will not convert prime farmland, or farmland of statewide importance to non-agricultural use as the Project is merely amendments to the Sonoma Countywide Integrated Waste Management Plan and no specific project site is proposed.

2. The Project will not conflict with existing zoning for agricultural use or a Williamson Act contract, as the Project is merely amendments to the Sonoma Countywide Integrated Waste Management Plan and no specific project site is proposed.

3. The Project does not involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use, as the Project is merely amendments to the Sonoma Countywide Integrated Waste Management Plan and no specific project site is proposed.

### B. BIOLOGICAL RESOURCES

1. The Project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service, as the Project is merely

amendments to the Sonoma Countywide Integrated Waste Management Plan and no specific project site is proposed.

2. The Project will not have a substantial adverse effect on any riparian habitat identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service, as the Project is merely amendments to the Sonoma Countywide Integrated Waste Management Plan and no specific project site is proposed.

3. The Project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means, as the Project is merely amendments to the Sonoma Countywide Integrated Waste Management Plan and no specific project site is proposed.

4. The Project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

5. The Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

6. The Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

## C. CULTURAL RESOURCES

1. The Project will not cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5, as none are expected to be affected by the Project.

2. The Project will not cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5, as none are expected to be affected by the Project.

3. The Project will not, either directly or indirectly, destroy a unique paleontological resource or site or unique geologic feature, as none are expected to be affected by the Project.

4. The Project will not disturb any human remains, including those interred outside of formal cemeteries, as none are expected to be affected by the Project.

## D. GEOLOGY AND SOILS

1. The Project will not rupture a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault.

2. The Project would not result in seismic-related ground failure, including liquefaction.

3. The Project would not result in substantial soil erosion or the loss of topsoil, as the Project is amendments to the Countywide Integrated Waste Management Plan and no specific project site is proposed.

4. The Project will not cause landslides, as the Project is amendments to the Countywide Integrated Waste Management Plan and no specific project site is proposed.

5. The Project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, as the Project is amendments to the Countywide Integrated Waste Management Plan and no specific project site is proposed.

6. The Project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property, as the Project is amendments to the Countywide Integrated Waste Management Plan and no specific project site is proposed.

7. The Project will not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater, as the Project is amendments to the Countywide Integrated Waste Management Plan and no specific project site is proposed.

## E. HAZARDOUS AND HAZARDOUS MATERIALS

1. The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, as none would be transported as part of this Project.

2. The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, as none would be handled as part of the Project.

3. The Project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, as no specific project site is proposed.

4. The Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment, as the Project is merely amendments to the Countywide Integrated Waste Management Plan and no specific project site is proposed.

5. The Project is not located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, as the Project is

merely amendments to the Countywide Integrated Waste Management Plan and no specific project site is proposed.

6. The Project is not located within the vicinity of a private airstrip, as the Project is merely amendments to the Countywide Integrated Waste Management Plan and no specific project site is proposed.

7. The Project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

8. The Project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are subject to urbanized areas or where residences are intermixed with wildlands, as the Project is merely amendments to the Countywide Integrated Waste Management Plan and no specific project site is proposed.

## F. HYDROLOGY AND WATER QUALITY

1. The Project will not violate any water quality standards or waste discharge requirements.

2. The Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

3. The Project will not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site.

4. The Project will not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site.

5. The Project will not create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

6. The Project will not otherwise substantially degrade water quality.

7. The Project will not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

8. The Project will not place within a 100-year flood hazard area structures that would impede or redirect flood flows, as no specific Project site is proposed.

9. The Project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

10. The Project will not expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow, as no specific Project site is proposed.

## G. LAND USE

1. The Project will not physically divide an established community as no specific Project site is proposed.

2. The Project will not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the Project.

3. The Project will not conflict with any applicable habitat conservation plan or natural community conservation plan.

## H. MINERAL RESOURCES

1. The Project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

2. The Project will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

## I. POPULATION AND HOUSING

1. The Project will not induce substantial population growth in an area either directly or indirectly, as the Project is merely amendments to the Countywide Integrated Waste Management Plan.

2. The Project will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere, as no specific Project site is proposed.

3. The Project will not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere, as no specific Project site is proposed.

## J. PUBLIC SERVICES

1. The Project will not result in substantial adverse physical impacts associated with the provision or need of new or physically altered fire protection services, the construction of which could cause significant environmental impacts.

2. The Project will not result in substantial adverse physical impacts associated with the provision or need of new or physically altered police protection services, the construction of which could cause significant environmental impacts.

3. The Project will not result in substantial adverse physical impacts associated with the provision or need of new or physically altered schools, the construction of which could cause significant environmental impacts, because it would not generate any new students.

4. The Project will not result in substantial adverse physical impacts associated with the provision or need of new or physically altered parks, the construction of which could cause significant environmental impacts, because it would not generate any population increase with additional park use demand.

5. The Project is not anticipated to cause any environmental impacts related to any other type of public facility.

## K. RECREATION

1. The proposed Project will not increase the use of existing neighborhood or regional parks or other recreation facilities.

2. The proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

## L. UTILITIES AND SERVICE SYSTEMS

1. The Project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, as the project is merely amendments to the Countywide Integrated Waste Management Plan.

2. The Project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

3. The Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

4. The Project is merely amendments to the existing Countywide Integrated Waste Management Plan and thus there is no anticipated impact to result as to whether sufficient water supplies are available to serve the project from existing entitlements and resources.

5. The Project would not result in any impact to wastewater treatment demand as no specific project site is proposed, and the project is merely amendments to the existing Countywide Integrated Waste Management Plan.

6. The Project would not have any impact on landfills as the Project itself is the amendment to the existing Countywide Integrated Waste Management Plan that deals specifically with ensuring adequate landfill and disposal capacity.

7. The Project would comply with federal, state, and local statutes and regulations related to solid waste.

## IV. Effects Determined to be Less Than Significant Without Mitigation in the EIR.

The SPEIR found that the proposed Project would have a less than significant impact without the imposition of mitigation on a number of environmental topic areas listed below. A less than significant environmental impact determination was made for each of the following topic areas listed below, based on the more expansive discussions contained in the Final SPEIR.

### A. AIR QUALITY

1. The Project revisions to allow for new household hazardous waste collection facilities would not emit air pollutant emissions that exceed any significance criteria.

2. The Project would not cause any construction air impacts under the short-term strategy under either baseline scenario 1 or 2 from the revisions to the siting element.

3. The Project would not cause any operational impacts under the medium-term strategy of out-of-County transport by truck option, under baseline scenario 2.

### B. NOISE

1. The Project would not cause traffic noise from the out-of-County transport by truck option under either baseline scenario 1 or baseline scenario 2.

2. The Project would not cause traffic noise from the reuse of the Central Disposal Site through divestiture under either baseline scenario 1 or baseline scenario 2.

3. The Project would not cause any on-site operations noise from the out-of-County transport by truck option because no changes in existing operations or transfer stations would occur under either baseline scenario 1 or 2, and thus noise levels would not increase.

4. The Project would not cause any ground-bourne vibration from either transport option, divestiture, or under either baseline scenario.

### C. TRAFFIC

1. The Project would not cause any construction or operational related traffic impacts from the out-of-County transport by truck option under either baseline scenario 1 or 2.

2. The Project would not cause any traffic impacts related to divestiture under baseline scenario 1, but has the potential to cause traffic impacts under baseline scenario 2 as further discussed below.

## V. Potentially Significant Environmental Impacts Determined to be Mitigated to a Less Than Significant Level.

The SPEIR identified the potential for the Project to cause significant environmental impacts in the areas of aesthetics, air quality, noise and traffic. With the exception of those specific impacts to aesthetics, air quality, noise, and traffic as discussed in Section VI below, measures were identified that would mitigate all of these impacts to a less than significant level.

The SCWMA finds that the feasible mitigation measures for the Project identified in the Final SPEIR would reduce the Project's impacts to a less than significant level, with the exception of those unmitigable impacts discussed in Section VI below. The SCWMA will adopt all of the feasible mitigation measures for the Project described in the Final SPEIR as conditions of approval of the Project and incorporate those into the Project if approved.

### A. AIR QUALITY

1. Construction PM10

The Project has the potential to cause an increase in PM10 emissions from the construction of any new facilities that would be allowed with the amendments to the Countywide Integrated Waste Management Plan.

**(a) Findings**

Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen any construction PM10 emissions. Specifically, the following mitigation measure is imposed upon the Project to ensure a less than significant impact:

**Mitigation Measure 6-3 [2003 SPEIR Mitigation Measure 10-2]:**

The contractor shall reduce particulate emissions by complying with the dust control strategies developed by the NSCAPCD and the BAAQMD. The project sponsor shall include in construction contracts the following requirements:

1. The contractor shall water in late morning and at the end of the day all earth surfaces during clearing, grading, earthmoving, and other site preparation activities.

2. The contractor shall use tarpaulins or other effective covers for haul trucks that travel on public streets and roads.

3. The contractor shall increase the watering frequency for exposed and erodible soil surfaces whenever winds exceed 15 mph.

4. The contractor shall water exposed soil surfaces, including cover stockpiles, roadways, and parking and staging areas, to minimize dust and soil erosion.

5. The contractor shall sweep streets adjacent to the new and expanded non-disposal facilities at the end of each day.

6. The contractor shall control construction, operation, and site maintenance vehicle speed to 15 mph on unpaved roads.

**(b) Facts in Support of Findings**

Construction of new and expanded facilities and activities required to resume operations of the Central Disposal Site could create significant emissions of fugitive PM10. High emissions of PM10 may occur during earthmoving operations, travel on unpaved roads, or wind blown dust from unprotected stockpiles. If the Waste by Rail (the "WBR") disposal strategy is pursued, construction activities associated with development of a local rail yard and upgrades to existing transfer stations may be required. These activities may result in substantial fugitive PM10 emissions. The BAAQMD recommends Best Management Practices to reduce fugitive PM10 emissions during construction. With implementation of the above mitigation measure, PM10 emitted during construction activities would be reduced to a less than significant level. This is consistent with the guidance provided by the BAAQMD CEQA Guidelines and is consistent with the 2003 SPEIR, which concluded that construction impacts would be less than significant with mitigation.

## B. NOISE

1. Construction Noise – Non-Disposal Facilities and Local Rail Yard

The Project has the potential to cause construction noise associated with any new facilities that would be allowed based on the revisions to the Countywide Integrated Waste Management Plan.

**(a) Findings**

Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen any potential impacts from construction noise. More specifically, the following mitigation measure is imposed upon the Project to ensure a less than significant impact:

**Mitigation Measure 7-1 [Recommended Revisions to 2003 SPEIR Mitigation Measure 11-1]:**

1. Construction activities shall be limited to the hours between 7AM to 7PM to the extent practical.

2. Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise. Wherever possible,

noise-generated construction equipment shall be shielded from nearby residences by noise-attenuating walls, berms, or enclosures.

3. The contractor shall attempt to locate stationary noise sources as far away as possible from noise-sensitive land uses.

4. Idling of construction equipment engines shall be minimized; engines shall be shut off when not in use, where applicable.

**(b) Facts in Support of Findings**

Implementation of the proposed revisions to the Household Hazardous Waste Element (the "HHWE") would create the potential for additional permanent household hazardous waste facilities to be established in the County. Furthermore, revisions to the Siting Element may allow for the development of a rail yard and the future expansion of existing transfer stations. Construction of such facilities and activities required to resume operations of the Central Disposal Site could cause temporary increases in noise levels on, and around, the proposed facilities and the Central Disposal Site over the entire construction period. Noise impacts from construction would be less than significant with implementation of Mitigation Measure 7-1.

## C. TRAFFIC

1. Traffic Congestion Impacts Caused by Divestiture under Baseline Scenario 2

The medium-term (years 2010 through 2030) disposal strategy identified in the proposed revisions to the Siting Element includes an option to divest the County Disposal System to a private owner who may resume operation and possibly pursue expansion of the Central Disposal Site. This divestiture option under baseline scenario 2 has the potential to cause traffic impacts.

**(a) Findings**

Changes or alterations have been required in, or incorporated into the Project that ensure a less than significant traffic impact from divestiture. Specifically, the mitigation measure is imposed upon the Project to ensure any impact is less than significant.

**Mitigation Measure 8-3 [Recommended Revisions to 2003 SPEIR Mitigation Measure 9-4]**

If significant traffic impacts to the Stony Point Road/Roblar Road and Stony Point Road/West Railroad Avenue intersections continue beyond 2015, mitigation measures such as the following shall be implemented:

A. The Integrated Waste Division or the current Central Disposal Site operator will restrict truck traffic that is subject to County or current operator control so that trucks do not travel through the Stony Point Road/Roblar Road and/or the Stony Point Road/West Railroad Avenue intersections during peak traffic hours. This shall apply only to new truck trips associated with projects pursuant to the

CoIWMP and revisions to the CoIWMP (including Divestiture), and not existing traffic using the Central Disposal Site. The restriction shall apply to trucks subject to County or current operator control, such as those making deliveries for cover soil and liner materials, and trucks associated with construction at the site. This measure shall remain in effect until a traffic signal has been installed at these intersections.

B. Prior to construction of projects at the Central Disposal Site pursuant to the CoIWMP, the Integrated Waste Division or the current Central Disposal Site operator shall pay a traffic mitigation fee that includes a fair share contribution toward the installation of signals at the Stony Point Road/Roblar Road and Stony Point Road / West Railroad Avenue intersections.

C. Consider restricting hours of operation so that traffic is not added to the congested intersections during peak traffic hours. This restriction would remain in effect until these intersections are signalized.

D. Consider restricting the use of the site to commercial operators only, thereby reducing the number of vehicles using the Stony Point Road /Roblar Road and Stony Point Road /West Railroad Avenue intersection."

**(b) Facts in Support of Findings**

Under the current baseline conditions (Baseline Scenario 2), where out-of-County hauling of refuse by truck is occurring, if refuse disposal resumes at the Central Disposal Site due to implementation of the divestiture option, it is assumed that the transfer truck trips from Annapolis, Healdsburg, and Sonoma transfer stations that currently haul waste to out-of-County landfills directly would instead be routed to the Central Disposal Site. The estimated increase in daily truck trips that would occur at the Central Disposal Site due to resumption of disposal at the site are identified in Table 8-3 of the EIR. In addition to the trips identified in the table, it is anticipated that several daily automobile trips associated with additional commuting workers to the site would be required. Currently, there are no proposals to resume refuse disposal at the Central Disposal Site or to expand the Central Disposal Site, other than the proposal that was rejected by the County; therefore, project specific traffic congestion impacts cannot be determined until a site-specific project is proposed. However, on a program level, implementation of Mitigation Measure 8-3, identified in the 2003 SPEIR, would reduce traffic congestion impacts related to resumption of disposal activities at the Central Disposal Site to a level that is less than significant.

## VI. Environmental Effects that Remain Significant and Unavoidable After Mitigation.

In the environmental areas of aesthetics, air quality, noise and traffic there are instances where environmental impacts would remain significant and unavoidable after mitigation. These areas are discussed below.

## A. AESTHETICS

### 1. Litter Associated with Non-Disposal Facilities

The waste transported by truck haul option associated with the modifications to the Siting Element identified in the project description could degrade the existing visual character or quality through the inadvertent generation of litter along transportation routes.

#### (a) Findings

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen any significant and unavoidable litter impact associated with non-disposal facilities. More specifically, the following mitigation measure will be incorporated into the project to address this impact. Nevertheless, this impact will remain significant and unavoidable as discussed below.

**Mitigation Measure 5-1 [Recommended Revisions to 2003 SPEIR Mitigation Measure 14-2]**

A litter abatement program shall be developed and implemented by each non-disposal facility operator demonstrating how inadvertent litter that may be generated on- and off-site will be adequately controlled. Each facility's litter abatement program shall be submitted to, and approved by, the Local Enforcement Agency (LEA) prior to operations under the project.

Each non-disposal facility shall assign a litter coordinator who shall be responsible for implementing the litter abatement program and responding to any potential litter complaints by the public. The litter coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the litter coordinator shall be posted conspicuously at entrances to the non-disposal facilities.

On-site Mitigation - Measures to be included and implemented within each non-disposal facility to control litter shall include, but not limited to, the following, as applicable:

A. Litter fences shall be established around new or expanded non-disposal facilities, as necessary to prevent litter blowing onto off-site areas.

B. Litter along on-site roads shall be collected and removed routinely.

Off-site Mitigation - Measures to be included and implemented to control off-site litter shall include, but not limited to, the following, as applicable:

C. Prior to project operations, and routinely during project operations, the litter coordinator shall inspect public roads immediately adjacent to the non-disposal sites to document litter presence.

If during operations, it is determined by the litter coordinator that an increase in off-site litter associated with the non-disposal facility is occurring compared to preproject conditions, the non-disposal facility operator shall routinely conduct litter removal (or increase its existing off-site litter removal effort) on these roadways.

D. Open cargo areas of vehicles (e.g., pick-ups, trucks, trailers, etc.) hauling waste shall be covered. This requirement will be enforced with financial penalties levied at the time of delivery to County Non-Disposal Sites and by the California Highway Patrol (CHP) in the areas near disposal sites.

E. To reduce litter accumulation resulting from the activities of commercial haulers, the litter abatement program could include, but not be limited to: 1) education of commercial haulers; and 2) requirements for thorough cleaning of debris boxes, covering emptied containers, or other similar measures, to reduce litter created upon exiting non-disposal facilities.

F. The litter abatement program shall consider limiting non-disposal facility operations to commercial or private (general public) haulers, including the co-location of disposal and non-disposal facilities to reduce roadside litter.

G. The litter abatement program shall require all commercial contractors to enclose, cover and /or seal all transfer vehicles to contain all solid waste and prevent spilling or scattering of solid waste during transportation thereof. If any material is spilled, whether on private or public property, the contractor shall clean it up within twenty four hours after the earlier of receipt of notice from County or contractor's first having actual knowledge of the spill. If contractor does not clean it up within the required time, the County may clean it up, and the County shall be made whole for any costs incurred for the cleanup by the contractor.

**(b) Facts in Support of Findings**

The 2003 SPEIR identified program level significant impacts related to litter along truck route roadways (2003 SPEIR Impacts 14-2); however, the proposed waste transported by truck haul option may substantially increase the severity of this previously identified impact by increasing the total truck haul mileage required to haul the waste out of the County. Implementation of Mitigation Measure 5-1 (recommended revisions to 2003 SPEIR Mitigation Measure 14-2) would be required to reduce this impact. As disclosed in the 2003 SPEIR, litter control measures cannot prevent all litter associated with truck travel related to non-disposal facilities, such as transfer stations. The same conclusion applies to litter generated during truck transport of waste from transfer stations to out-of-County landfills. While the mitigation measures identified above would be effective in preventing some amount of litter, as well as cleaning up litter, there would sometimes be a lag between the time the litter becomes a significant environmental effect and the time that the litter can be removed. This impact is considered significant and unavoidable.

2. Litter Associated with Waste by Rail (WBR)

The WBR option associated with the modifications to the Siting Element identified in the project description could degrade the existing visual character or quality through the inadvertent generation of litter along rail routes.

**(a) Findings**

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen the significant and unavoidable litter impact associated with waste by rail. More specifically, the following mitigation measure will be incorporated into the project to address this impact. Nevertheless, this impact is expected to remain significant and unavoidable.

**Mitigation Measure 5-2**

A litter abatement program shall be developed and implemented by each waste by rail facility operator demonstrating how inadvertent litter that may be generated on- and off-site will be adequately controlled. Each facility's litter abatement program shall be submitted to, and approved by, the LEA prior to operations under the project.

Each waste by rail facility shall assign a litter coordinator who shall be responsible for implementing the litter abatement program and responding to any potential litter complaints by the public. The litter coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the litter coordinator shall be posted conspicuously at entrances to the waste by rail facilities.

On-site Mitigation - Measures to be included and implemented within each waste by rail facility to control litter shall include, but not limited to, the following, as applicable:

A. Litter fences shall be established around new waste by rail facilities, as necessary to prevent litter blowing onto off-site areas.

B. Litter along on-site roads shall be collected and removed routinely.

Off-site Mitigation - Measures to be included and implemented to control off-site litter shall include, but not limited to, the following, as applicable:

C. Open cargo areas of intermodal containers or gondola cars hauling waste shall be covered.

D. A litter abatement program shall be implemented to reduce litter accumulation resulting from the activities of commercial rail haulers. The program could include but not be limited to: 1) education of commercial haulers; and 2) requirements for thorough cleaning and emptying of intermodal

containers or gondola cars, or other similar measures, to reduce litter created through waste by rail transport.

E. The litter abatement program shall consider limiting non-disposal facility operations to commercial or private (general public) haulers, including the co-location of disposal and non-disposal facilities to reduce litter along the railroad and roadside.

F. The litter abatement program shall require all commercial contractors to enclose, cover and /or seal all intermodal containers or gondola cars to contain all solid waste and prevent spilling or scattering of solid waste during transportation thereof. If any material is spilled, whether on private or public property, the contractor shall clean it up within twenty-four hours after the earlier of receipt of notice from County or contractor's first having actual knowledge of the spill. If contractor does not clean it up within the required time, the County may clean it up, and the County shall be made whole for any costs incurred for the cleanup by the contractor.

**(b) Facts in Support of Findings**

The waste by rail option was not addressed in the 2003 SPEIR. Litter at new or upgraded facilities associated with the hauling waste by rail option could result in a significant impact to the visual character or quality at both the waste by rail facilities (e.g., local rail yard) and along the railroad route(s). At the facility site(s), litter could be generated when waste would be loaded into intermodal containers or gondola cars at the local rail yard. Specific visual impacts of litter at these facilities cannot be assessed until they are proposed with complete design and site information. In addition, the waste transported by rail haul option may result in a significant liter impact to the visual character and quality along the railroad route(s). Further analysis related to the generation of litter that would be associated with the transportation of waste by rail option would be conducted when a specific project is proposed.

As mentioned above, the potential exists for significant visual impacts to occur associated with the potential for the waste by truck haul option to generate litter along transfer station haul routes. The waste by rail process would have similar potential to generate litter along the transfer station haul routes to the local rail yard. Implementation of Mitigation Measure 5-2 would be required to reduce this impact. Similar to as described above under Impact 5-1, litter control measures cannot prevent all litter associated with rail transport of waste. While the mitigation measures identified above would be effective in preventing some amount of litter, there would be no guarantee that all litter would be controlled to avoid a significant environmental effect. Therefore, this impact is significant and unavoidable.

## B. AIR QUALITY

1. Air Pollutant Emissions from Revisions to Siting Element (including emissions of criteria air pollutants and emissions of diesel particulate matter)

The proposed revisions to the Siting Element include a short-term disposal strategy and a medium-term disposal strategy. The short-term disposal strategy is to continue the out-of-

County transport by truck disposal with contracts that are currently in place, which would ensure sufficient disposal capacity until 2010, when the contracts are scheduled to expire. The medium-term (years 2010 through 2030) disposal strategy would consider the following three options: out-of-County disposal with waste transport by truck; out-of-County disposal with waste transport by rail (WBR); and divestiture of the County Disposal System to a private owner who may resume operation and possibly pursue expansion. There is the potential for air pollutant emissions impacts to remain significant and unavoidable even after mitigation as a result of: (1) the exceedance of emissions of criteria air pollutants under the waste by truck option in the short-term under baseline scenario 1; (2) the exceedance of emissions of criteria pollutants under either the waste by truck option under baseline scenario 1, or the waste by rail option under either baseline scenario 1 or 2; (3) and from the emission of diesel particulate matter under the waste by rail option from any operation of a local rail yard.

**(a) Findings**

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen the significant and unavoidable air emission impacts. More specifically, the following mitigation measures are imposed upon the Project to lessen the significant impact. Nevertheless, this air emissions impact will remain significant and unavoidable.

**Mitigation Measure 6-2 (a) [2003 SPEIR Mitigation Measure 10-1(a)]**

The County and cities shall consider air emissions when purchasing new equipment and when entering into agreements with solid waste operators. Cleaner vehicles shall be weighted more favorably than less clean vehicles.

**Mitigation Measure 6-2(b) [Recommended Revisions to 2003 SPEIR Mitigation Measure 10-1(b)]**

1. New facilities shall be sited to maximize separation between haul routes/facilities and sensitive receptors to the extent practical.

2. New facilities shall encourage the use of low emissions vehicles that control diesel particulates with engine filters or by using low emissions fuels such as compressed natural gas.

3. The contractor shall reduce NOx, ROG, and CO emissions by complying with the construction vehicle air pollutant control strategies developed by the BAAQMD and the NSCAPCD. The project sponsor shall include in construction contracts the following requirements:

a. Construction equipment operators shall shut off equipment when not in use to avoid unnecessary idling. As a general rule, vehicle idling should be kept below five minutes.

b. The contractor's construction equipment shall be properly maintained and in good operating condition.

c. The contractor shall utilize new technologies to control ozone precursor emissions as they become available and feasible.

d. The contractor shall substitute gasoline-powered for diesel-powered equipment where feasible.

4. Asphalt paving materials shall conform to the most recent guidelines by the air district having jurisdiction.

**Mitigation Measure 6-2(c) [Recommended Revisions to 2003 SPEIR Mitigation Measure 10-1(c)]**

1. Contracts for operation of proposed facilities described in the CoIWMP shall require contractors to limit idling time of diesel equipment to five minutes when practical. Contracts shall also require that equipment be serviced at regular intervals to keep engines operating with parameters that will prevent excessive emissions.

2. Contracts for operation of proposed facilities described in the CoIWMP shall include incentives for using electric motors instead of internal combustion engines in stationary equipment.

**(b) Facts in Support of Findings**

Short-Term Strategy

Under Baseline Scenario 1, when no out-of-County hauling of refuse occurred, project related NOx emissions from the short-term disposal strategy would exceed BAAQMD's emissions thresholds for NOx, resulting in an impact that would be potentially significant.

Medium-Term Strategy

As shown in Table 6-6 and Figure 6-2 of the EIR, when compared to Baseline Scenario 1, daily emissions in the local air basins could exceed the BAAQMD thresholds under implementation of the out-of-County haul by truck option. Therefore, criteria pollutant emissions that would be generated under the medium-term strategy would be potentially significant when compared to Baseline Scenario 1.

If the WBR option is pursued, operation of a local rail yard could result in significant diesel particulate matter from diesel truck and locomotive emissions that may result in health impacts to nearby sensitive receptors depending on where the rail yard would be located. CARB recommends that sensitive receptors not be located within 1,000 feet of a major service and maintenance rail yard and that consideration should be taken when siting sensitive uses within one mile of a rail yard. The rail yard that would be constructed under the medium-term strategy would be much smaller than the rail yards for which these criteria were developed. Nevertheless, impacts would be potentially significant depending on where the local rail yard is ultimately placed.

Substantial criteria pollutant emissions would occur outside of the local air basin if the WBR option is pursued. Locomotives used to haul waste would cross through a number of different air basins depending on the out-of-County landfill location. These emissions could impede attainment within these basins and therefore impacts would be potentially significant.

Implementation of the above mitigation measures from the 2003 SPEIR would reduce local area impacts related to emissions of criteria pollutants, TACs, and exposure of sensitive receptors to heightened pollutant concentrations. It is possible that construction and operation of a rail yard for the waste by rail option could result in regional emissions or in health impacts to nearby sensitive receptors that would be considered significant. The mitigation described above may not reduce impacts to less than significant, and so it must be concluded that such facilities may have a significant and unavoidable impact on air quality.

2. Odors

The Project has the potential to cause significant and unavoidable odor impacts.

**(a) Findings**

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen the significant and unavoidable odor impacts. More specifically, the following mitigation is imposed upon the Project to lessen the significant odor impacts. Nevertheless, the odor impacts are expected to remain significant and unavoidable.

**Mitigation Measure 6-4 [2003 SPEIR Mitigation Measure 10-3]**

A. Control of odors shall be implemented through the use of Best Management Practices utilized with Sonoma County such as the avoidance of compost disturbance in afternoon hours, regulating moisture content, and turning compost windrows.

B. If odor persists as a problem, compost piles or windrows shall be covered with soil or finished compost to reduce emissions of odors.

C. The landfill will be covered at the end of every day with plastic, soil or other appropriate material.

D. Any cracks in the landfill surface will be repaired as soon as practical.

E. Acidity levels in leachate ponds will be monitored and pH adjusted as necessary to reduce odor problems.

F. When new compost facilities are proposed, consideration will be given to operations that are conducted inside buildings using air filtration systems to prevent release of odors.

**(b) Facts in Support of Findings**

Program level significant and unavoidable odor impacts were identified in the 2003 SPEIR. The Central Disposal Site has received 29 unconfirmed odor complaints over the past five years. Of these complaints, 21 were received in 2004, four were received in 2005, three were received in 2006, and one was received in 2007. No complaints regarding odors originating from the Central Disposal Site were received in 2008. In 2005, landfilling of solid waste at the Central Disposal Site was suspended and since then all waste has been hauled by truck to landfills outside of Sonoma County. Therefore, the steady decline in odor complaints over the past five years appears to reflect the suspension of landfilling activities at the Central Disposal Site. No odor complaints have been received at any of the other transfer stations in Sonoma County over the past five years. Therefore, it is not anticipated that significant odor impacts would be generated at non-landfill facilities, including the existing transfer stations or at a local rail yard that could result under the waste by rail option. However, the proposed revision to the Siting Plan would allow for divestiture of the County Disposal System to a private owner who may then resume operation and possibly pursue expansion of the Central Disposal Site. Impacts associated with the divestiture option would be the same as those described in the 2003 SPEIR. Therefore, Mitigation Measure 6-3 would be applicable if divestiture is pursued.

As stated in the 2003 SPEIR, implementation of the mitigation measures outlined above would not guarantee that impacts would be reduced to a less-than-significant level. Therefore, this impact would be considered significant and unavoidable.

3. Emissions from On-Site Operations of Landfill under Divestiture

The resumption of operations or expansion of the Central Disposal Site that could occur under the divestiture option could cause significant onsite emissions of criteria pollutants. Also, diesel emissions from trucks and equipment would include TACs that could be potentially hazardous if sensitive receptors (e.g., homes, schools, hospitals, etc.) are located nearby.

**(a) Findings**

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen the significant and unavoidable emission impacts associated with the on-site operations of the Central Disposal Site. More specifically, the following mitigation is imposed upon the Project to lessen this significant and unavoidable impact. Nevertheless, the impact is expected to remain significant and unavoidable as discussed below.

**Mitigation Measure 6-5: [2003 SPEIR Mitigation Measure 10-4(b)]**

Same as Mitigation Measures 6-2(a), (b), and (c).

**(b) Facts in Support of Findings**

Onsite impacts associated with resuming waste disposal at the Central Disposal Site would be the same as those identified in the 2003 SPEIR, and therefore, Mitigation Measure 6-5 above

would be applicable to this option. Even with implementation of these measures, there would still be potential for onsite impacts to occur, particularly under Baseline Scenario 2, which assumes out-of-County hauling of refuse with no disposal operations occurring at the Central Disposal Site, because all emissions associated with resumed onsite disposal activities would be considered project related emissions and not part of the baseline scenario. Therefore, onsite impacts associated with landfill operations under the divestiture options would be significant and unavoidable even with implementation of Mitigation Measure 6-5.

4. Greenhouse Gas Emissions

Disposal strategies of the project may result in increased emissions of GHGs, which may conflict with the State's and local GHG reduction goals.

**(a) Findings**

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen the significant and unavoidable greenhouse gas emissions impacts. More specifically, the following mitigation is imposed upon the Project to lessen the significant greenhouse gas emissions impacts. Nevertheless, the impact is expected to remain significant and unavoidable as discussed below.

**Mitigation Measure 6-6: [2003 SPEIR Mitigation Measure 10-4(b)]**

Same as Mitigation Measures 6-2(a), (b), and (c).

**(b) Facts in Support of Findings**

The project would not conflict with the 39 Recommended Actions identified by CARB in its Climate Change Proposed Scoping Plan. In fact, the Central Disposal Site currently utilizes captured landfill gas (LFG) to generate power that contributes energy to Pacific Gas and Electric's (PG&E's) power grid. This action is consistent with CARB's actions to reduce emissions from landfill operations. To determine greenhouse gas emissions (CO2E) from transfer vehicle emissions, the total mileage amounts for the short-term disposal strategy, which is also the baseline scenario, were multiplied by emission factors for carbon dioxide and methane derived using the EMFAC2007 emissions model. Methane emissions from fuel combustion were then converted to CO2E and combined with the carbon dioxide emissions to determine total GHG emissions associated with the short-term disposal strategy. Based on these calculations, total GHG transfer vehicle emissions in 2007 were approximately 2,502 metric tons per year. Even though emissions associated with the short-term disposal strategy are considered to be part of the baseline conditions, these emissions would be well below the significance threshold of 25,000 metric tons per year.

GHG emissions from the medium-term disposal strategy were calculated based on estimated mileages as described under Impact 6-1 in the EIR. GHG emission rates for trucks were calculated using EMFAC2007 emission factors, and GHG emission rates for locomotives were estimated based on emission factors for distillate fuel combustion and average fuel economy for locomotives.

An emission reduction credit was applied for the divesture option. As mentioned previously, landfill gas (LFG) is captured at the Central Disposal Site and used to generate power. The contracted out-of-County landfills all capture LFG, but the gas is flared and not used for energy production. For the purposes of this analysis, it is assumed that the LFG capture efficiencies for Central Disposal Site and the out-of-County landfills are essentially the same. The combustion emissions associated with both flaring and power production are similar; therefore, it is assumed that there would be little difference in direct GHG emissions between flaring at out-of-County landfills and energy production at the Central Disposal Site. However, because the LFG power generation facility at Central Disposal Site contributes energy to PG&E's power grid, an annual GHG emission reduction credit has been estimated. The energy produced at the Central Disposal Site replaces energy that PG&E would otherwise produce and thus reduces the "indirect" GHG emissions associated with PG&E power production.

For the purposes of estimating the annual GHG credit, it is assumed that approximately half a million tons of refuse would be generated each year in Sonoma County as more fully detailed in the EIR. Therefore, because approximately 15 million tons of refuse is currently in place at the Central Disposal Site and approximately 52.65 million kilowatt hours (kWh) of LFG based power was sold by Sonoma County to PG&E in 2007, it is reasonable to assume that 1.76 kWh of LFG power would be generated for each year of refuse deposited at Central Disposal Site.

Using an emission factor (0.524 pounds of CO2E per kWh) developed from PG&E's carbon footprint calculator; a GHG emissions credit of 417 metric tons per year has been assigned relative to LFG power generation at Central Disposal Site. It should be noted that the PG&E emission factor is approximately twice as conservative of an emission factor compared to one that USEPA has published (i.e., 1 million tons of waste in place could generate approximately 7 million kWh per year of energy).

Estimated annual GHG emissions for each of the options under the medium-term strategy, as well as the net emissions compared to Baseline Scenario 1 and Baseline Scenario 2 emissions, are outlined in Table 6-7 of the EIR. As shown, none of the options under the medium-term scenario would result in total emissions that would exceed the threshold of 25,000 metric tons per year. The divestiture option would result in the lowest GHG emissions out of all three options. It is important to note that while the contracted landfills do not currently generate power using LFG, all three are currently in the process of permitting such plants. Therefore, in future years these reductions may not be applicable. Nevertheless, even without the LFG reduction credit, divestiture would result in the lowest GHG emissions of all three options.

Although none of the medium-term options would trigger the 25,000 metric ton threshold, the out-of-County transportation of refuse by either truck or rail is inherently energy inefficient. In addition, it appears that the non-divestiture disposal strategies would conflict with a basic Sonoma County objective (OSRC-16.1) to minimize air pollution and GHG emissions. Furthermore, the Sonoma County Community Climate Action Plan includes a GHG solution that requires that all waste that cannot be reused or recycled be placed in local landfills that produce energy. Therefore, with the exception of the divestiture option, the short-term and medium-term disposal strategies associated with proposed amendments to the Siting Element would result in a significant and unavoidable impact associated with GHG generation.

## C. NOISE

1. Traffic Noise Associated with New Household Hazardous Waste Collection Facilities and Waste by Rail Facilities

Proposed revisions to the Household Hazardous Waste Element, and the Siting Element to allow for development of new household hazardous waste collection facilities within the County, and potential local rail yards under waste by rail option have the potential to generate traffic noise that would exceed significance criteria creating a significant and unavoidable impact.

### (a) Findings

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen the significant and unavoidable traffic noise impacts. More specifically, the following mitigation is imposed upon the Project to lessen the significant traffic noise impact. Nevertheless, this impact will remain significant and unavoidable.

**Mitigation Measure 7-3 [Recommended Revisions to 2003 SPEIR Mitigation Measure 11-2]**

A. Where feasible, collection activities associated with these facilities shall be conducted during hours of the day which are not noise sensitive for nearby residents and other adjacent land uses. The activities shall be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods.

B. The County and cities shall include noise as an evaluation criterion when purchasing new waste/recyclables transportation vehicles (including locomotive engines if waste transport by rail is implemented), and will purchase the quietest vehicles available when reasonably possible. If the County does not make direct purchases of such vehicles, they will require their licensed/franchised haulers, via their licensed/franchised agreement, to include noise as an evaluation criterion in their purchase of vehicles.

C. A site-specific noise evaluation shall be conducted as part of the siting study for new and expanded non-disposal facilities including any new household hazardous waste facilities and/or local rail yards to identify potential noise problem areas prior to site selection. The noise evaluation shall consider the location of sensitive receptors and evaluate sound barriers or other means to reduce noise exposure. The evaluation shall also consider operational changes such as restricting hours of operation.

### (b) Facts in Support of Findings

Household Hazardous Waste Collection Facilities

Proposed revisions to the HHWE would allow for development of new household hazardous waste collection facilities within the County. These facilities would generate traffic noise that could significantly impact nearby sensitive receptors. Since exact locations of the new household hazardous waste facilities have not been proposed, it is impossible to evaluate impacts to sensitive receptors at this time. Therefore, it must be assumed that the revisions could have a potentially significant impact with regard to traffic noise. The mitigation measures above would help minimize potential impacts.

Waste by Rail Facilities

The medium-term (years 2010 through 2030) disposal strategy identified in the proposed revisions to the Siting Element includes an out-of-County disposal with waste transport by rail option. Operations of a new facility, such as a local rail yard, would result in moderate truck traffic noise in route to and from the facility. It is estimated that approximately 142 and 152 truck trips per day to the local rail yard would be required during 2010 and 2020, respectively, as more fully detailed in the SPEIR. In addition to truck trips, it is anticipated that several daily automobile trips associated with commuting workers would be required. Depending on the location of nearby sensitive receptors, traffic noise in the vicinity of the local rail yard could be potentially significant.

Implementation of Mitigation Measure 7-3 would help reduce potential noise impacts from traffic associated with new household hazardous waste collection facilities and waste by rail facilities. However, since no facilities are currently proposed, it is impossible to determine if significant noise impacts could occur. Therefore, for the purpose of this analysis, impacts are considered potentially significant and unavoidable.

2. Railroad Noise

The Project revises the Siting Element to allow for waste by rail option that has the potential to cause significant and unavoidable railroad noise.

**(a) Findings**

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen significant and unavoidable traffic noise impacts. More specifically, the following mitigation is imposed upon the Project to lessen the significant railroad noise impact. Nevertheless, this impact is expected to remain significant and unavoidable.

> **Mitigation Measure 7-3 [Recommended Revisions to 2003 SPEIR Mitigation Measure 11-2]**
>
> A. Where feasible, collection activities associated with these facilities shall be conducted during hours of the day which are not noise sensitive for nearby residents and other adjacent land uses. The activities shall be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods.

B. The County and cities shall include noise as an evaluation criterion when purchasing new waste/recyclables transportation vehicles (including locomotive engines if waste transport by rail is implemented), and will purchase the quietest vehicles available when reasonably possible. If the County does not make direct purchases of such vehicles, they will require their licensed/franchised haulers, via their licensed/franchised agreement, to include noise as an evaluation criterion in their purchase of vehicles.

C. A site-specific noise evaluation shall be conducted as part of the siting study for new and expanded non-disposal facilities including any new household hazardous waste facilities and/or local rail yards to identify potential noise problem areas prior to site selection. The noise evaluation shall consider the location of sensitive receptors and evaluate sound barriers or other means to reduce noise exposure. The evaluation shall also consider operational changes such as restricting hours of operation.

**(b) Facts in Support of Findings**

The waste transport by rail option would generate new train trips along the currently inactive railroad track that runs through Sonoma County. This railroad is currently being repaired by the North Coast Rail Authority (NCRA), which plans to complete repairs and resume freight service sometime in 2009. Therefore, assuming freight service resumes in 2009, the proposed amendment could add an additional daily train trip originating within Sonoma County beginning as early as 2010. While a locomotive and the pass by of railroad cars results in noise levels of 70 dBA or more (depending on the engine noise and quality of the tracks and wheels) at a distance of 50 feet, the loudest noise from a train is the horn. Train horns must be loud to be effective and they are often over 100 dBA at a distance of 100 feet from the horn. Train horns are limited by the Federal Railroad Administration to a maximum of 113 dBA at 100 feet. Locomotive engines can generate SELs of 92 dBA at 50 feet and trains horns can generate SELs up to 110 dBA at 50 feet. These noise levels represent single noise events, and would not last longer than a few seconds. The hourly Leq for these events would be approximately 56.4 dBA and 74.4 dBA respectively (FTA, 2006). Such noise levels could disrupt nearby sensitive receptors. Because of the uncertainties associated with waste by rail option, the level of disturbance to sensitive receptors can not be accurately determined in this SPEIR and further discussion of potential impacts of increased rail noise would be speculative. Railroad noise impacts that would be generated by the waste transport by rail option would be difficult to mitigate as the rail infrastructure is already in place and therefore siting considerations cannot be used as mitigation. The rail line would be utilized for other freight transport as well, so the incremental increase in noise levels from the addition of one train is uncertain at this time.

Therefore, while implementation of Mitigation Measure 7-3 described above would help reduce impacts associated with train noise, it may not reduce impacts to a less-than-significant level. Therefore, impacts would be considered significant and unavoidable if the waste transport by rail option is pursued.

3. On-Site Operations Noise

The revisions to the Household Hazardous Waste Element could result in new household hazardous waste facilities that have the potential to cause noise impacts. Additionally, the revisions to the Siting Element allow for a waste by rail option that could result in development of local rail yards that would also produce noise impacts.

**(a) Findings**

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen the significant and unavoidable on-site operational noise impacts. More specifically, the following mitigation is imposed upon the Project to lessen the significant on-site operational noise impacts. Nevertheless, this impact is expected to remain significant and unavoidable.

**Mitigation Measure 7-6 [Recommended Revisions to 2003 SPEIR Mitigation Measure 11-3]**

A. Same as Mitigation Measure 7-3 (B) and (C).

B. The noise evaluation described in Mitigation Measure 7-3 (C) shall consider the location of sensitive receptors and locate equipment and operations to minimize the noise exposure to the extent practical. The evaluation should consider enclosures for noise equipment or sound barriers to shield off-site receptors from noise. Additionally, if WBR is pursued, the noise evaluation must consider location of sensitive receptors when determining where to place the local rail yard.

**(b) Facts in Support of Findings**

New and expanded non-disposal facilities and the new local rail yard could produce onsite operational noise. Operations of new household hazardous waste facilities would not be expected to result in a substantial increase in noise levels. The location of these facilities has not been proposed at this time, and therefore impacts to sensitive receptors cannot be determined. However, it is unlikely that new household hazardous waste collection facilities would generate substantial noise increases. Nevertheless, due to large number of uncertainties regarding noise levels from operations of new household hazardous waste collection facilities, impacts would be potentially significant.

The proposed amendments to the Siting Element of the CoIWMP would include a medium term disposal strategy that would include the following three waste disposal options: out-of-County disposal with waste haul by truck, out-of-County disposal with waste transport by rail; and divestiture. If out-of-County truck haul is pursued, no changes in existing operations of the transfer stations would be expected to occur under Baseline Scenarios 1 or 2. Therefore, noise levels would not increase from the existing baseline and no impact would occur. If waste transport by rail is pursued, a new local rail yard would need to be constructed. Operation of a local rail yard could generate a substantial amount of onsite noise that could be disruptive to nearby sensitive receptors. A specific rail yard has not been proposed; therefore, impacts can

only be discussed qualitatively at this time. In general, the FTA does not recommend siting a rail yard within 1,000 feet of a sensitive receptor. However, this screening distance was determined based on the assumed operations of 20 train movements per day. The proposed rail yard would be unlikely to service that many trains per day, and therefore screening distances would probably be lower. In addition to the rail yard, the waste transport by rail option would require upgrades to existing transfer stations to include top-pick hoists to load containers onto flat bed transfer vehicles. Such equipment could generate noise level increases at existing transfer stations.

Mitigation Measures 7-3 above would help reduce impacts from operations of non-disposal (e.g., Household Hazardous Waste Facilities) and local rail yard facilities. While implementation of Mitigation Measure 7-6 outlined above would help reduce impacts from the waste transport by rail option, it may not mitigate impacts to less than significant. Therefore, impacts may be significant and unavoidable if waste transport by rail is pursued.

## D. TRAFFIC

1. Traffic Congestion from New Household Hazardous Waste Collection Facilities and Waste by Rail Facilities

The revisions to the Household Hazardous Waste Element and the Siting Element would allow for the development of new facilities for the collection of household hazardous waste, and for the collection of waste via rail facilities. Both of these types of facilities may cause significant and unavoidable traffic impacts as more fully detailed below.

### (a) Findings

Changes or alterations have been required in, or incorporated into the Project to attempt to lessen the significant and unavoidable operational traffic impacts. More specifically, the following mitigation is imposed upon the Project to lessen the significant operational traffic impacts. Nevertheless, this impact is expected to remain significant and unavoidable.

**Mitigation Measure 8-2 [Recommended Revisions to 2003 SPEIR Mitigation Measure 9-1]**

A. To the extent feasible, new non-disposal facilities and new waste by rail facilities shall not be located in areas with significant road congestion, as designed in the cities' and County General Plan.

B. To the extent feasible, new non-disposal facilities and new waste by rail facilities shall be located near other commercial or industrial facilities to allow for the combination of activities in one trip and reduce overall trip generation.

C. Traffic Management Plans (TAMP) shall be developed for each of the new and expanded non-disposal facilities and new waste by rail facilities, as required. These plans shall schedule truck trips so that roadway segments with the potential to be significantly impacted are avoided during peak hours. In

addition, these plans shall detail the hours of operation and other restrictions on truck trips for each of the facilities and shall include plans for employee car pooling and bus transportation, where appropriate and feasible. The plans shall be updated periodically in response to changing traffic conditions and improvements to the highway system. The TAMP shall include a site-specific traffic evaluation conducted as part of the siting study for a new non-disposal facility or a new waste by rail facility to identify potential traffic problem areas prior to site selection. The traffic evaluation shall consider limiting non-disposal facility or waste by rail facility operations to either commercial or private (general public) haulers, as well as co-locating of disposal and non-disposal facilities and waste by rail facilities to reduce haul trips.

D. Countywide Traffic Mitigation fees shall be paid for new facilities implemented in accordance with the CoIWMP to help mitigate off-site cumulative traffic impacts.

E. Construction Traffic Management Plans shall be prepared for each of the new and expanded non-disposal facilities and new waste by rail facilities. These plans shall include, but not be limited to, a discussion of work hours, haul routes, work area delineation, and traffic control and flagging procedures, if required.

**(b) Facts in Support of Findings**

New Household Hazardous Waste Facilities

The proposed revisions to the HHWE would allow the SCWMA the flexibility to create additional permanent household hazardous waste collection facilities in the County at locations other than the Central Disposal Site. It should be noted that household hazardous waste collection facilities are included in the group of facilities referred to as non-disposal facilities. Construction of new facilities would require vehicle trips that could result in short-term traffic congestion. Operations of the new facilities would be anticipated to result in relatively light vehicle traffic to and from the household hazardous waste facilities.

Currently, there are no proposed sites selected for additional household hazardous waste collection facilities; therefore, traffic congestion impacts cannot be determined until a site-specific project is proposed.

New Waste by Rail Facilities

The medium-term (years 2010 through 2030) disposal strategy identified in the proposed revisions to the Siting Element includes an out-of-County disposal with waste transport by rail (WBR) option. Construction of new waste by rail facilities would require vehicle trips that could result in short-term traffic congestion. Operations of a new facility, such as a local rail yard, would be anticipated to result in moderate vehicle traffic to and from the facility. The daily truck trip amounts estimated to be required to deliver intermodal containers or gondola cars to the local rail yard that are identified in Table 8-2 of the EIR are based on the County of Sonoma's 2007 trip and annual increases in waste generation of one percent. In addition to the

trips identified in the table, it is anticipated that several daily automobile trips associated with commuting workers would be required. Currently, there are no proposals for any waste by rail facilities; therefore, traffic congestion impacts cannot be determined because a site specific project has not been proposed.

Implementation of the above identified mitigation measures would reduce traffic congestion impacts related to new household hazardous waste collection facilities and waste by rail facilities. The above mitigation measures may not reduce the impact to a level that is less than significant; therefore, program level congestion impacts associated with new household hazardous waste collection facilities and waste by rail facilities are considered to be significant and unavoidable.

## VII. Project Alternatives.

The SCWMA considered a range of reasonable alternatives for the proposed Project including, the No Project Alternative, the Zero Waste Alternative, and the Comprehensive Materials Recovery Facility with Conversion Technology Alternative.

Under the No Project Alternative, the 2003 Countywide Integrated Waste Management Plan would not be updated. Under the Zero Waste Alternative, policies would be put into place to accelerate the County's goal of 70 percent waste diversion by 2015. Finally, the CMRF Alternative would create a centralized facility-based method of reducing wastes that need to be disposed of in landfills.

Two alternatives (i.e., the Close Landfills Alternative and the New Landfill Alternative) were considered, but were rejected as infeasible. The Close Landfills Alternative would require the waste system operator (County of Sonoma) to select the closest out-of-County landfills to dispose of solid waste generated in Sonoma County. This alternative was rejected as infeasible because it would lack the flexibility needed for the waste system operator to secure favorable waste disposal contracts. The New Landfill Alternative would consist of development of a new solid waste disposal facility either within Sonoma County or within a neighboring county. This alternative was determined to be infeasible because the SCWMA has no authority outside of Sonoma County. In addition, the existing 2003 CoIWMP already allows for new landfill development within Sonoma County.

The alternatives analyzed in this SPEIR (other than the required No Project Alternative) were selected to help reduce the significant impacts of the project. The alternatives would be drivers to reduce wastes requiring landfill disposal; thus reducing potential impacts associated with the proposed project. The proposed project includes revisions to the CoIWMP that identify more options for the SCWMA's consideration related to landfill disposal (including the options of out-of-County haul by truck or rail and divestiture of the Central Disposal Site).

### A. NO PROJECT ALTERNATIVE

#### 1. Summary of Alternative

This alternative would retain the Household Hazardous Waste Element and the Siting Element as adopted in the 2003 CoIWMP. Under this alternative, the adopted 2003 CoIWMP would remain the planning document for the management of solid waste in Sonoma County. Projects consistent with the 2003 CoIWMP would continue to be implemented where permittable, but none of the new amendments proposed in the 2009 CoIWMP would be implemented. The following components of the No Project Alternative would be either excluded from or different than the proposed project.

Household Hazardous Waste Element:

The Household Hazardous Waste Element would not be revised to allow for the potential for additional new permanent household hazardous waste collection facilities to be established in the County. Only one SCWMA-sponsored household hazardous waste collection facility would be permissible.

Siting Element:

The Siting Element would not be revised to reflect that all landfilling of solid waste at the Central Disposal Site has been suspended and that no waste is currently disposed of within Sonoma County. The Siting Element would not be revised to include the potential for Waste By Rail (WBR). In addition, the Siting Element would not be revised to include the potential divestiture of the Central Disposal Site to a private owner who may resume operation of the Central Disposal Site and possibly pursue expansion. Under the No Project Alternative, the out-of-County truck hauling of refuse would continue to be inconsistent with the Siting Element of the 2003 CoIWMP, which describes a system in which refuse is disposed at County-owned facilities within Sonoma County.

2. Reasons for Rejecting Alternative: Infeasibility

Under the No Project Alternative, it is assumed that waste would continue to be shipped out-of-County by truck from the Sonoma County transfer stations, which would be out of compliance with the 2003 CoIWMP. Being out of compliance, the California Integrated Waste Management Board (CIWMB) would require the SCWMA to create a plan for providing at least 15 years of disposal capacity pursuant to Integrated Waste Management Act of 1989 (also known as Assembly Bill (AB) 939). In addition, there would be no potential for the establishment of new household hazardous waste collection facilities within the County, and there would be no waste by rail or divestiture options. Therefore, impacts associated with the construction and operation of waste by rail or divestiture would not occur. However, the No Project Alternative falls short of achieving each of the primary objectives of the proposed project.

The SCWMA hereby finds that each of the reasons set forth above would be an independent ground for rejecting the No Project Alternative as infeasible, and by itself, independent of any other reason, would justify rejection of the No Project Alternative as infeasible.

## B. ZERO WASTE ALTERNATIVE

### 1. Summary of Alternative

The 2003 CoIWMP identifies policies and programs to reach 70 percent waste diversion by 2015. The County has achieved 64 percent diversion in the past (i.e., 2006 CIWMB Annual Report). As an alternative or complement to facility development and exporting of solid waste generated in the County, the County and the cities could accelerate and enhance their source reduction and recycling plans to maximize diversion. The County could also establish specific zero waste policies and programs to reduce the generation of materials that need to be recycled or disposed. Implementation of this alternative may require the establishment of a resource conservation park where the materials can be sorted for further diversion from landfills. The Zero Waste Alternative was recently analyzed for Sonoma County by Brown, Vence, and Associates. The analysis includes several short-term policies and programs that would need to be implemented for this alternative as more fully detailed in the EIR.

### 2. Reasons for Rejecting Alternative: Infeasibility

The Zero Waste Alternative would be consistent with AB 939, which mandates waste disposal reductions, in that it would reduce disposal of Sonoma County refuse. However, even with a diversion rate of 70 percent, refuse disposal would still be needed and this alternative would not address the immediate need to modify the Siting Element to be consistent with existing out-of-County waste disposal practices in Sonoma County.

Implementation of the Zero Waste Alternative could result in new impacts affecting a variety of environmental topic areas. Some of the impacts of the Zero Waste Alternative development would be potentially significant depending on the types of services that would be offered and the specific details of the Zero Waste Alternative. For example, a bulky item collection program and a resource conservation park would result in new air quality and traffic impacts associated with vehicle trips. In addition, construction of new facilities, such as a resource conservation park, could result in short-term construction impacts to water quality, air quality, transportation systems, and sensitive receptors, etc. Development of a Zero Waste Alternative could have a variety of impacts related to various environmental topics.

Additionally, the Zero Waste Alternative by itself would not advance any of the objectives of the proposed project. However, the Zero Waste Alternative would reduce the amount of residual waste in the County that would require disposal at a landfill.

The SCWMA hereby finds that each of the reasons set forth above would be an independent ground for rejecting the Zero Waste Alternative as infeasible, and by itself, independent of any other reason, would justify rejection of the Zero Waste Alternative as infeasible.

## C. CMRF ALTERNATIVE

### 1. Summary of Alternative

The CMRF Alternative provides a means of reducing the wastestream through the aggressive removal of recyclable materials, followed by a conversion technology, thereby minimizing the residual materials that require transport and disposal. The conceptual design would be as follows. Source-separated materials, mixed solid wastes, and construction and demolition (C&D) wastes would all be handled at the facility. Source separated materials could go directly to sorting lines or other processes as required. Yard waste and woody debris would be separated and brought directly to a composting/wood processing facility. Mixed solid waste from residential and commercial collection vehicles would be tipped on a floor. The material would be sorted on the floor to remove larger items that might clog or interrupt the sorting lines. Loaders or grapples would then load remaining materials onto a conveyor or surge hopper. Materials would be processed through duel stage screens to separate fiber (cardboard, newsprint, and mixed paper), containers, and small contaminants. Fiber would be hand sorted off elevated conveyor platforms into commodities and dropped into bunkers below. Containers would be processed through ferrous magnets, eddycurrent magnets, and hand sorting. The small contaminant stream (e.g., dirt, rocks, broken glass, ceramics, and bottle caps) could be further processed to achieve market potentials. Sorted material would be moved from bunkers and baled (fiber, plastic, and metal) or loaded directly into roll-off trucks (glass). Typically C&D processing would generate gypsum, clean wood, ferrous metal, aluminum, inert material (including engineered fill) and alternative daily cover. Some residue from these processes would be sent to landfill for disposal. Other residues from these processes would then undergo further reduction through a conversion technology. Potential conversion technologies could include waste to energy, or Alternative Thermal Technologies (i.e., pyrolysis or gasification) or Alternative Biological Technologies (i.e., anaerobic digestion). Any of the conversion technologies would provide further volume reduction and conversion of the materials. The residue from these processes would be sent to an out-of-County landfill for disposal or in some cases be available for other uses.

### 2. Reasons for Rejecting Alternative; Infeasibility

The CMRF Alternative would be consistent with AB 939, which mandates waste disposal reductions, in that it would reduce disposal of Sonoma County refuse. However, even with dramatic waste diversion reductions, refuse disposal would still be needed and this alternative would not address the immediate need to modify the Siting Element to be consistent with existing out-of-County waste disposal practices in Sonoma County.

Development of a CMRF Alternative would have construction and operations impacts affecting a variety of environmental topic areas, including aesthetics, air quality, traffic, noise, etc. Some of the impacts of CMRF Alternative development would be potentially significant depending on the location selected, roadway access, sensitive receptors, and specific details of the CMRF Alternative, as more fully discussed in the SPEIR.

The CMRF Alternative by itself would not advance any of the objectives of the proposed project. However, the CMRF Alternative would reduce the amount of residual waste in the County that would require disposal at a landfill.

The SCWMA hereby finds that each of the reasons set forth above would be an independent ground for rejecting the CMRF Alternative as infeasible by itself, and independent of any other reason would justify rejection of the CMRF Alternative as infeasible.

## D. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR must also identify an "environmentally superior" alternative among those examined, and where the No Project Alternative is identified as environmentally superior, the EIR must identify an environmentally superior alternative from among the other alternatives. The environmental impacts of each alternative are compared to the proposed project and evaluated as to whether their impacts would be similar to the proposed project, greater, or less than the proposed project. With respect to the proposed Project, only project impacts involving aesthetics, air quality, noise and traffic have been found to be significant and unavoidable, as noted previously.

Both the Zero Waste Alternative and the CMRF Alternative would reduce many of the significant impacts of the project by reducing overall residuals that would need to be disposed at landfills. In that regard, the Zero Waste Alternative and the CMRF Alternative are similar. However, the Zero Waste Alternative is selected as the environmentally superior alternative because it would appear to have less potential impacts of its own compared to the CMRF Alternative. Development of the CMRF Alternative would require careful siting to avoid potential impacts in many environmental topic areas (e.g., air quality, noise, traffic, water quality, etc.).

## E. THE PROJECT AS PROPOSED

### 1. Summary of Project

The Project is described in detail in the SPEIR.

### 2. Reasons for Selecting Project as Proposed

The SCWMA has carefully reviewed the attributes and environmental impacts of all the alternatives analyzed in the SPEIR and has compared them with those of the proposed Project. The SCWMA finds that each of the alternatives is infeasible for various environmental, economic, technical, social, or other reasons set forth above. The SCWMA further finds, for various environmental, economic, technical, social, or other reasons set forth in Exhibit B, that the Project as proposed in the Final SPEIR that addresses the immediate need to modify the Siting Element to be consistent with existing out-of-County waste disposal, and addresses the refuse disposal that would still be needed regardless of the alternatives discussed in the EIR, is the best combination of features to serve the public and handle solid wastes in Sonoma County.

## EXHIBIT B

### Statement of Overriding Considerations

Pursuant to California Public Resource Code § 21080, subdivision (b); and § 15093, et seq. of Title 14, Chapter 3, of the California Code of Regulations (State CEQA Guidelines, as amended October 21, 2008), the SCWMA issues the following Statement of Overriding Considerations:

The adopted 2003 CoIWMP has been updated with the proposed Amendment to the CoIWMP in accordance with the California Integrated Waste Management Act of 1989 (AB 939). A Final Supplemental Program Environmental Impact Report (SPEIR) was prepared on the proposed Amendment to the CoIWMP in accordance with CEQA Guidelines. The Amendment to the CoIWMP will have certain potentially significant adverse impacts that are identified in the proposed project's Final SPEIR. These significant impacts will not be reduced to insignificant levels with the implementation of the mitigation measures proposed in the Final SPEIR; namely in the areas of aesthetics, air quality, noise and traffic and transportation. Therefore, the SCWMA must adopt a Statement of Overriding Considerations.

The SCWMA has carefully considered the Amendment to the CoIWMP and the unavoidable significant adverse environmental impacts associated with it, and hereby determines that specific overriding environmental, economic, legal, social, technological, or other benefits of the proposed Amendment to the CoIWMP outweigh the significant effects on the environment because:

1. The SCWMA finds that the revisions to the Household Hazardous Waste Element (HHWE) will allow the SCWMA the flexibility to create additional collection facilities that could improve the efficiency of collecting household hazardous wastes. The revisions will eliminate the restriction in the current HHWE, which identifies only one permanent Household Hazardous Waste collection facility in the County.

2. The SCWMA believes that the revisions to the Siting Element will allow for alternative strategies for disposal of solid waste that are not currently contained in the 2003 CoIWMP. The revisions to the Siting Element will allow the out-of-County hauling of waste and private sector ownership of landfills to be consistent with the CoIWMP.

3. The SCWMA finds that the revisions to the Siting Element will allow for the signing of out-of-County disposal agreements to meet the California Code of Regulations Title 14 Section 18756.5 required minimum of 15 years of combined permitted disposal capacity.

4. While significant unavoidable impacts may result from the revisions in the CoIWMP, these revisions are necessary to manage solid wastes and address the immediate need to revise the Siting Element to account for the current out-of-County hauling of waste. Additionally, the various revisions to the Siting Element would allow

additional options instead of the current out-of-County hauling of waste that is inherently energy inefficient and has the potential to cause various air quality impacts as further detailed in the EIR.

5. Impacts associated with the project will be reduced to the extent practicable by the mitigation measures identified in the Final SPEIR and by existing State and Federal laws that regulate solid waste facilities.

6. Implementation of the Amendment to the 2003 CoIWMP will ensure that the solid waste infrastructure is in place to accommodate projected new development within the County, thereby avoiding the numerous and significant negative social, economic, health and environmental impacts which would result from inadequate waste management capacity.

SCWMA has weighed the above benefits of the proposed Amendment to the CoIWMP against its unavoidable environmental risks and adverse environmental effects identified in the 2009 Final SPEIR. SCWMA hereby finds that the unavoidable impacts have been reduced to the extent practicable by the inclusions of the mitigation measures set forth in Exhibit A-1, and determines that the benefits described above outweigh the risks and adverse effects and, therefore, determines that these risks and adverse environmental effects are acceptable.

**EXHIBIT C-1**

Mitigation Monitoring and Reporting Program

# Introduction

The Sonoma County Waste Management Agency (SCWMA) is the lead agency for the 2009 Supplemental Program Environmental Impact Report (SPEIR) for the Amendment to the Sonoma Countywide Integrated Waste Management Plan (CoIWMP). As lead agency, it is responsible for ensuring that the mitigation measures included in the certified Final SPEIR are adequate, feasible and implemented pursuant to CEQA. The purpose of the Mitigation Monitoring Program is to identify how the SCWMA will comply with these requirements.

SCWMA is a composite of the County of Sonoma and different incorporated jurisdictions located within Sonoma County. Specific projects that will implement the CoIWMP may be carried out or permitted by the County of Sonoma, one of the incorporated cities, or the SCWMA. The mitigation measures identified in the SPEIR will be the responsibility of the entity proposing to carry out the project. It is anticipated that these entities will function as Lead Agencies in accordance with CEQA.

Section 21081.6 of the Public Resources Code requires that, when making findings required by subdivision (a) of Section 21081, a lead agency shall adopt a reporting or monitoring program for "changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during implementation."

The Mitigation Monitoring Program for the Amendment to the CoIWMP is organized in outline form and keyed to each 2009 SPEIR mitigation measure. For each measure, the following information is provided:

1. A statement of the mitigation measure;
2. The timing for verification of implementation of the mitigation measures.
3. Specification of the party/parties responsible for implementation of the measure;
4. The assignment of mitigation monitoring responsibility; and
5. For most Mitigation Measures, the verification timing and agencies responsible for implementation and monitoring are indicated and are self-explanatory.

In cases where the timing for verification of the mitigation is indicated as "ongoing," the agency responsible for monitoring compliance with the mitigation already had jurisdiction over the activity along with inspection obligations required by law.

In general, this monitoring plan ensures that each mitigation measures will be implemented because the designated monitoring agency will make sure that the party responsible for implementing the measure has actually carried out the measure (or otherwise appropriately guaranteed that it will be complied with through contractual or other agreements) before the particular project is allowed to go any further in the construction or operations process.

Any new or expanded solid waste facilities that result from implementation of the Amendment to the CoIWMP are expected to be located on land within the jurisdiction of the County. Therefore, the monitoring agency for each mitigation measure designed to address disposal facilities is generally a County agency. The Amendment to the CoIWMP contemplates, however, that new or expanded solid waste non-disposal facilities may be located either in a city within the County or on land under County jurisdiction.

It should be noted with the exception of the mitigation measures that have been modified in the 2009 SPEIR, the mitigation measures identified in the 2003 Final Mitigation Monitoring Program are also applicable to the proposed project (see Draft SPEIR Appendix E.2).

# Aesthetics

***Mitigation Measure 5-1 [Recommended Revisions to 2003 SPEIR Mitigation Measure 14-2]***

A litter abatement program shall be developed and implemented by each non-disposal facility operator demonstrating how inadvertent litter that may be generated on- and off-site will be adequately controlled. Each facility's litter abatement program shall be submitted to, and approved by, the LEA prior to operations under the project.

Each non-disposal facility shall assign a litter coordinator who shall be responsible for implementing the litter abatement program and responding to any potential litter complaints by the public. The litter coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the litter coordinator shall be posted conspicuously at entrances to the non-disposal facilities.

On-site Mitigation - Measures to be included and implemented within each non-disposal facility to control litter shall include, but not limited to, the following, as applicable:

~~A. Litter shall be controlled by a litter abatement program~~

A. Litter fences shall be established around new or expanded non-disposal facilities, as necessary to prevent litter blowing onto off-site areas.

B. Litter along on-site roads shall be collected and removed routinely.

Off-site Mitigation - Measures to be included and implemented to control off-site litter shall include, but not limited to, the following, as applicable:

C. ~~Liter shall be controlled on nearby roads providing access to new or expanded non-disposal facilities with a litter abatement program.~~ Prior to project operations, and routinely during project operations, the litter coordinator shall inspect public roads immediately adjacent to the non-disposal sites to document litter presence. If during operations, it is determined by the litter coordinator that an increase in off-site litter associated with the non-disposal facility is occurring compared to pre-project conditions, the non-disposal facility operator shall routinely conduct litter removal (or increase its existing off-site litter removal effort) on these roadways.

D. Open cargo areas of vehicles (e.g., pick-ups, trucks, trailers, etc.) hauling waste shall be covered. This requirement will be enforced with financial penalties levied at the time of delivery to County Non-Disposal Sites and by the California Highway Patrol (CHP) in the areas near disposal sites.

E. ~~A litter abatement program shall be implemented~~ To reduce litter accumulation resulting from the activities of commercial haulers, the litter abatement program could include, but not be limited to: 1) education of commercial haulers; and 2) requirements for thorough cleaning of debris boxes, covering emptied containers, or other similar measures, to reduce litter created upon exiting non-disposal facilities.

F. The litter abatement program shall consider limiting non-disposal facility operations to commercial or private (general public) haulers, including the co-location of disposal and non-disposal facilities to reduce roadside litter.

*Addition to Mitigation Measure 5-1*

G. The litter abatement program shall require all commercial contractors to enclose, cover and /or seal all transfer vehicles to contain all solid waste and prevent spilling or scattering of solid waste during transportation thereof. If any material is spilled, whether on private or public property, the contractor shall clean it up within twenty-four hours after the earlier of receipt of notice from County or contractor's first having actual knowledge of the spill. If contractor does not clean it up within the required time, the County may clean it up, and the County shall be made whole for any costs incurred for the cleanup by the contractor.

- Timing of implementation – Ongoing.
- Implementation – Non-disposal facility operators.
- Monitoring – Lead Agency, Local Enforcement Agency.

*Mitigation Measure 5-2*

A litter abatement program shall be developed and implemented by each waste by rail facility operator demonstrating how inadvertent litter that may be generated on- and off-site will be adequately controlled. Each facility's litter abatement program shall be submitted to, and approved by, the LEA prior to operations under the project.

Each waste by rail facility shall assign a litter coordinator who shall be responsible for implementing the litter abatement program and responding to any potential litter complaints by the public. The litter coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the litter coordinator shall be posted conspicuously at entrances to the waste by rail facilities.

On-site Mitigation - Measures to be included and implemented within each waste by rail facility to control litter shall include, but not limited to, the following, as applicable:

A. Litter fences shall be established around new waste by rail facilities, as necessary to prevent litter blowing onto off-site areas.

B. Litter along on-site roads shall be collected and removed routinely.

Off-site Mitigation - Measures to be included and implemented to control off-site litter shall include, but not limited to, the following, as applicable:

C. Open cargo areas of intermodal containers or gondola cars hauling waste shall be covered.

D. A litter abatement program shall be implemented to reduce litter accumulation resulting from the activities of commercial rail haulers. The program could include but not be limited to: 1) education of commercial haulers; and 2) requirements for thorough

cleaning and emptying of intermodal containers or gondola cars, or other similar measures, to reduce litter created through waste by rail transport.

E. The litter abatement program shall consider limiting non-disposal facility operations to commercial or private (general public) haulers, including the co-location of disposal and non-disposal facilities to reduce litter along the railroad and roadside.

F. The litter abatement program shall require all commercial contractors to enclose, cover and /or seal all intermodal containers or gondola cars to contain all solid waste and prevent spilling or scattering of solid waste during transportation thereof. If any material is spilled, whether on private or public property, the contractor shall clean it up within twenty-four hours after the earlier of receipt of notice from County or contractor's first having actual knowledge of the spill. If contractor does not clean it up within the required time, the County may clean it up, and the County shall be made whole for any costs incurred for the cleanup by the contractor.

- Timing of implementation – Ongoing.
- Implementation – Waste by rail facility operators.
- Monitoring – Lead Agency, Local Enforcement Agency.

# Air Quality

***Mitigation Measure 6-2a [2003 SPEIR Mitigation Measure 10-1(a)]***

The County and cities shall consider air emissions when purchasing new equipment and when entering into agreements with solid waste operators. Cleaner vehicles shall be weighted more favorably than less clean vehicles.

- Timing of implementation – Prior to construction and ongoing.
- Implementation – County of Sonoma and/or cities in Sonoma County.
- Monitoring – Lead Agency.

***Mitigation Measure 6-2b [Recommended Revisions to 2003 SPEIR Mitigation Measure 10-1(b)]***

1. New facilities shall be sited to maximize separation between haul routes/facilities and sensitive receptors to the extent practical.
2. New facilities shall encourage the use of low emissions vehicles that control diesel particulates with engine filters or by using low emissions fuels such as compressed natural gas.

3. The contractor shall reduce $NO_x$, ROG, and CO emissions by complying with the construction vehicle air pollutant control strategies developed by the BAAQMD and the NSCAPCD. The project sponsor shall include in construction contracts the following requirements:

    a. Construction equipment operators shall shut off equipment when not in use to avoid unnecessary idling. As a general rule, vehicle idling should be kept below ~~10~~ five minutes.

    b. The contractor's construction equipment shall be properly maintained and in good operating condition.

    c. The contractor shall utilize new technologies to control ozone precursor emissions as they become available and feasible..

    d. The contractor shall substitute gasoline-powered for diesel-powered equipment where feasible.

4. Asphalt paving materials shall conform to the most recent guidelines by the air district having jurisdiction.

- Timing of implementation – (1) Prior to project approval; (2) Ongoing; (3) and (4) Prior to project construction, during project construction.
- Implementation – New facility project sponsors and contractors.
- Monitoring – Lead Agency.

***Mitigation Measure 6-2(c) [Recommended Revisions to 2003 SPEIR Mitigation Measure 10-1(c)]***

1. Contracts for operation of proposed facilities described in the ~~2003~~ CoIWMP shall require contractors to limit idling time of diesel equipment to ~~10~~ five minutes when practical. Contracts shall also require that equipment be serviced at regular intervals to keep engines operating with parameters that will prevent excessive emissions.
2. Contracts for operation of proposed facilities described in the ~~2003~~ CoIWMP shall include incentives for using electric motors instead of internal combustion engines in stationary equipment.

- Timing of implementation – Ongoing.
- Implementation – New facility project sponsors and contractors.
- Monitoring – Lead Agency.

***Mitigation Measure 6-3 [2003 SPEIR Mitigation Measure 10-2]***

The contractor shall reduce particulate emissions by complying with the dust control strategies developed by the NSCAPCD and the BAAQMD. The project sponsor shall include in construction contracts the following requirements:

1. The contractor shall water in late morning and at the end of the day all earth surfaces during clearing, grading, earthmoving, and other site preparation activities.

2. The contractor shall use tarpaulins or other effective covers for haul trucks that travel on public streets and roads.

3. The contractor shall increase the watering frequency for exposed and erodible soil surfaces whenever winds exceed 15 mph.

4. The contractor shall water exposed soil surfaces, including cover stockpiles, roadways, and parking and staging areas, to minimize dust and soil erosion.

5. The contractor shall sweep streets adjacent to the new and expanded non-disposal facilities at the end of each day.
6. The contractor shall control construction, operation, and site maintenance vehicle speed to 15 mph on unpaved roads.

- Timing of implementation – Ongoing.
- Implementation – New facility project sponsors and contractors.
- Monitoring – Lead Agency, Local Enforcement Agency.

***Mitigation Measure 6-4 [2003 SPEIR Mitigation Measure 10-3]***

A. Control of odors shall be implemented through the use of Best Management Practices utilized with Sonoma County such as the avoidance of compost disturbance in afternoon hours, regulating moisture content, and turning compost windrows.
B. If odor persists as a problem, compost piles or windrows shall be covered with soil or finished compost to reduce emissions of odors.
C. The landfill will be covered at the end of every day with plastic, soil or other appropriate material.
D. Any cracks in the landfill surface will be repaired as soon as practical.
E. Acidity levels in leachate ponds will be monitored and pH adjusted as necessary to reduce odor problems.
F. When new compost facilities are proposed, consideration will be given to operations that are conducted inside buildings using air filtration systems to prevent release of odors.

- Timing of implementation – Ongoing.
- Implementation – Landfill and compost operators.
- Monitoring – (A) and (B) Lead Agency, Local Enforcement Agency; (C) through (F) Lead Agency, Local Enforcement Agency, Regional Water Quality Control Board

***Mitigation Measure 6-5: [2003 SPEIR Mitigation Measure 10-4(b)]***

Same as Mitigation Measures 6-2(a), (b), and (c).

***Mitigation Measure 6-6: [2003 SPEIR Mitigation Measure 10-4(b)]***

Same as Mitigation Measures 6-2(a), (b), and (c).

# Noise

***Mitigation Measure 7-1 [Recommended Revisions to 2003 SPEIR Mitigation Measure 11-1]***

1. Construction activities shall be limited to the hours between 7AM to 7PM to the extent practical.
2. Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise. Wherever possible, noise-generated construction equipment shall be shielded from nearby residences by noise-attenuating walls, berms, or enclosures.
3. The contractor shall attempt to locate stationary noise sources as far away as possible from noise-sensitive land uses.

4. Idling of construction equipment engines shall be minimized; engines shall be shut off when not in use, where applicable.

- Timing of implementation – (a) Prior to project construction; (b) through (d) During project construction.
- Implementation – New facility project sponsors and contractors.
- Monitoring – Lead Agency.

***Mitigation Measure 7-3 [Recommended Revisions to 2003 SPEIR Mitigation Measure 11-2]***

A. Where feasible, collection activities associated with these facilities shall be conducted during hours of the day which are not noise sensitive for nearby residents and other adjacent land uses. The activities shall be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods.

B. The County and cities shall include noise as an evaluation criterion when purchasing new waste/recyclables transportation vehicles (including locomotive engines if waste transport by rail is implemented), and will purchase the quietest vehicles available when reasonably possible. If the County does not make direct purchases of such vehicles, they will require their licensed/franchised haulers, via their licensed/franchised agreement, to include noise as an evaluation criterion in their purchase of vehicles.

C. A site-specific noise evaluation shall be conducted as part of the siting study for new and expanded non-disposal facilities including any new household hazardous waste facilities and/or local rail yards to identify potential noise problem areas prior to site selection. The noise evaluation shall consider the location of sensitive receptors and evaluate sound barriers or other means to reduce noise exposure. The evaluation shall also consider operational changes such as restricting hours of operation.

- Timing of implementation – (a), (b) Ongoing; (c) Prior to project approval.
- Implementation – New non-disposal facility operators, new waste by rail facility operators, and new household hazardous waste collection facility operators.
- Monitoring – Lead Agency.

***Mitigation Measure 7-6 [Recommended Revisions to 2003 SPEIR Mitigation Measure 11-3]***

A. Same as Mitigation Measure ~~11-2~~ 7-3 (B) and (C).

B. The noise evaluation described in Mitigation Measure ~~11-2~~ 7-3 (C) shall consider the location of sensitive receptors and locate equipment and operations to minimize the noise exposure to the extent practical. The evaluation should consider enclosures for noise equipment or sound barriers to shield off-site receptors from noise. Additionally, if WBR is pursued, the noise evaluation must consider location of sensitive receptors when determining where to place the local rail yard.

- Timing of implementation – (a) Prior to project approval, ongoing; (b) Prior to project approval.
- Implementation – New non-disposal facility operators, new waste by rail facility operators, and new household hazardous waste collection facility operators.
- Monitoring – Lead Agency.

# Transportation and Traffic

***Mitigation Measure 8-2 [Recommended Revisions to 2003 SPEIR Mitigation Measure 9-1]***

A. To the extent feasible, new non-disposal facilities and new waste by rail facilities shall not be located in areas with significant road congestion, as designed in the cities' and County General Plan.

B. To the extent feasible, new non-disposal facilities and new waste by rail facilities shall be located near other commercial or industrial facilities to allow for the combination of activities in one trip and reduce overall trip generation.

C. Traffic Management Plans (TMP) shall be developed for each of the new and expanded non-disposal facilities and new waste by rail facilities, as required. These plans shall schedule truck trips so that roadway segments with the potential to be significantly impacted are avoided during peak hours. In addition, these plans shall detail the hours of operation and other restrictions on truck trips for each of the facilities and shall include plans for employee car pooling and bus transportation, where appropriate and feasible. The plans shall be updated periodically in response to changing traffic conditions and improvements to the highway system. The TMP shall include a site-specific traffic evaluation conducted as part of the siting study for a new non-disposal facility or a new waste by rail facility to identify potential traffic problem areas prior to site selection. The traffic evaluation shall consider limiting non-disposal facility or waste by rail facility operations to either commercial or private (general public) haulers, as well as co-locating of disposal and non-disposal facilities and waste by rail facilities to reduce haul trips.

D. Countywide Traffic Mitigation fees shall be paid for new facilities implemented in accordance with the ~~2003~~ CoIWMP to help mitigate off-site cumulative traffic impacts.

- Timing of implementation – (a) through (c) Prior to project approval; (d) Prior to project construction.
- Implementation – New non-disposal facility operators and new waste by rail facility operators.
- Monitoring – Lead Agency.

***Addition to Mitigation Measure 8-2***

E. Construction Traffic Management Plans shall be prepared for each of the new and expanded non-disposal facilities and new waste by rail facilities. These plans shall include, but not be limited to, a discussion of work hours, haul routes, work area delineation, and traffic control and flagging procedures, if required.

- Timing of implementation – Prior to project approval.
- Implementation – New and expanded non-disposal facility operators and new waste by rail facility operators
- Monitoring – Lead Agency.

***Mitigation Measure 8-3 [Recommended Revisions to 2003 SPEIR Mitigation Measure 9-4]***

If significant traffic impacts to the Stony Point Road/Roblar Road and Stony Point Road/West Railroad Avenue intersections continue beyond 2015, mitigation measures such as the following shall be implemented:

A. The Integrated Waste Division or the current Central Disposal Site operator will ~~consider~~ restricting truck traffic that is subject to County or current operator control so that trucks do not travel through the Stony Point Road/Roblar Road and/or the Stony Point Road/West Railroad Avenue intersections during peak traffic hours. This shall apply only to new truck trips associated with projects pursuant to the ~~2003~~ CoIWMP and revisions to the

CoIWMP (including Divestiture), and not existing traffic using the Central Disposal Site. The restriction shall apply to trucks subject to County or current operator control, such as those making deliveries for cover soil and liner materials, and trucks associated with construction at the site. This measure shall remain in effect until a traffic signal has been installed at these intersections.

B. Prior to construction of projects at the Central Disposal Site pursuant to the ~~2003~~ CoIWMP, the Integrated Waste Division or the current Central Disposal Site operator shall pay a traffic mitigation fee that includes a fair share contribution toward the installation of signals at the Stony Point Road/Roblar Road and Stony Point Road / West Railroad Avenue intersections.

C. Consider restricting hours of operation so that traffic is not added to the congested intersections during peak traffic hours. This restriction would remain in effect until these intersections are signalized.

D. Consider restricting the use of the site to commercial operators only, thereby reducing the number of vehicles using the Stony Point Road /Roblar Road and Stony Point Road /West Railroad Avenue intersection.

- Timing of implementation – (A), (C), (D) Prior to project approval; (B) Prior to project construction.
- Implementation – Integrated Waste Division of the Sonoma County Transportation & Public Works Department or the current Central Disposal Site operator.
- Monitoring – Lead Agency.

**EXHIBIT C-2**

Mitigation Monitoring and Reporting Program from 2003 CoIWMP

# APPENDIX F MITIGATION MONITORING PROGRAM

Exhibit C-2

# MITIGATION MONITORING PROGRAM
# FOR THE
# FINAL SUPPLEMENTAL PROGRAM ENVIRONMENTAL IMPACT REPORT
# 2003 SONOMA COUNTY INTEGRATED WASTE MANAGEMENT PLAN
# (2003 CoIWMP)

## Introduction

The SCWMA is the lead agency for the 2003 CoIWMP Final SPEIR (FSPEIR). As lead agency, it is responsible for ensuring that the mitigation measures included in the certified FSPEIR are adequate, feasible, and implemented pursuant to CEQA. The purpose of this Mitigation Monitoring Program is to identify how the SCWMA will comply with these requirements.

As identified in the 2003 CoIWMP, the SCWMA is a composite of the County of Sonoma and different incorporated jurisdictions located within Sonoma County. Specific projects that will implement the 2003 CoIWMP may be carried out or permitted by the County of Sonoma, one of the incorporated cities, or the SCWMA. The mitigation measures identified in the 2003 CoIWMP FSPEIR will be the responsibility of the entity proposing to carry out the project. It is anticipated that these entities will function as Lead Agencies in accordance with CEQA.

Section 21081.6 of the Public Resources Code requires that, when making findings required by subdivision (a) of Section 21081, a lead agency shall adopt a reporting or monitoring program for "changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation."

The Mitigation Monitoring Program for the 2003 CoIWMP is organized in outline form and keyed to each adopted FSPEIR mitigation measure. For each measure, the following information is provided:

1. A statement of the mitigation measure;
2. The timing for verification of implementation of the mitigation measures.
3. Specification of the party/parties responsible for implementation of the measure;
4. The assignment of mitigation monitoring responsibility; and

For most Mitigation Measures, the verification timing and agencies responsible for implementation and monitoring are indicated and are self-explanatory; however, additional explanation is provided for the following situations.

In cases where the timing for verification of the mitigation is indicated as "ongoing", the agency responsible for monitoring compliance with the mitigation already had jurisdiction over the activity along with inspection obligations required by law. For example, to mitigate impacts to Hydrology and Water Quality (Mitigation Measure 7-6), solid waste disposal facilities are required to cover waste with soil (or other cover material) each day to prevent contact with stormwater. This measure will be monitored on a regular and ongoing basis through required inspections by the Local Enforcement Agency (Sonoma County Public Health Department, Environmental Health Division).

In certain cases, where "implementation" of a plan is a part of the Mitigation Measure, and two agencies are listed as responsible for monitoring, the first agency listed is responsible for ensuring that such a plan is prepared. The second agency listed has jurisdiction under existing law to enforce implementation and compliance with requirements of the plan. For example, to mitigate impacts to Hydrology and Water Quality (Revised Mitigation Measure 7-3), solid waste non-disposal facilities are required to prepare a detailed Erosion and Sedimentation Control Plan. In this case, the Member Jurisdiction as lead agency will ensure that such a plan is prepared followed by the review, approval, and monitoring by the Regional Water Quality Control Board.

In general, this monitoring plan ensures that each mitigation measure will be implemented because the designated monitoring agency will make sure that the party responsible for implementing the measure has actually carried out the measure (or otherwise appropriately guaranteed that it will be complied with through contractual or other agreements) before the particular project is allowed to go any further in the construction or operations process. For instance, if the timing for verification of implementation of a mitigation measure is noted as "prior to issuance of building permits," then the party responsible for complying with the mitigation measure (usually the project applicant) will have to demonstrate to the monitoring agency that the measure has been implemented before the monitoring agency will issue a building permit.

Any new or expanded solid waste disposal facilities that result from implementation of the 2003 CoIWMP are expected to be located on land within the jurisdiction of the County. Therefore, the monitoring agency for each mitigation measure designed to address disposal facilities is generally a County agency. The 2003 CoIWMP contemplates, however, that new or expanded solid waste non-disposal facilities may be located either in a city within the County or on land under County jurisdiction. Because it is not now known precisely where such facilities will be (and several of the same type of facilities may be located in different cities throughout the County), the monitoring program specifies that the member jurisdiction and a city if the property lies within a city's boundaries – will monitor compliance with mitigation measures required for that project.

Abbreviations

Abbreviations used in this Mitigation Monitoring Program include the following:

BAAQMD – Bay Area Air Quality Management District
LEA – Local Enforcement Agency (Sonoma County Environmental Health)
NSCAPCD – Northern Sonoma County Air Pollution Control District
RWQCB – Regional Water Quality Control Board
SCWMA – Sonoma County Waste Management Agency

**LAND USE**

***Mitigation Measure 4-1***

In siting new or expanded solid waste non-disposal facilities, examine land uses surrounding potential sites and take possible land use conflicts into account in making siting determinations. In addition, require each new or expanded facility to incorporate design and operational measures to minimize land use conflicts. Examples of such measures include establishing buffer zones, sound-proofing facilities, restricting outdoor activities and limiting hours of operation.

- **Timing of Implementation** - Prior to project approval; Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 4-2***

In siting new or expanded solid waste disposal facilities, examine land uses surrounding potential sites and take possible land use conflicts into account in making siting determinations. In addition, require each new facility to incorporate design and operational measures to minimize land use conflicts. Examples of such measures include establishing buffer zones, visual screens using berms and landscaping, and limiting hours of operation.

- **Timing of Implementation** - Prior to project approval; Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 4-3***

Although solid waste facilities would be subject to the Exclusionary and Comparative Criteria in the2003 CoIWMP Siting Element, there are no mitigation measures for the loss of important resource lands or for the change in character of the lands. Therefore, this impact is considered ***significant and unavoidable***.

- **Timing of Implementation** - Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency.

***Mitigation Measure 4-4***

Geologic studies of future landfill expansion and new landfill sites will address the possibility that mineral resources could be located under sites of new facilities. To the extent practical, mineral recovery efforts will be incorporated into the construction of the Central Landfill expansion or new landfills.

- **Timing of Implementation** - Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

## GEOLOGY AND SEISMICITY

***Revised Mitigation Measure 5-1***

(a) Non-disposal facilities shall be built a sufficient distance from earthquake fault zones as restricted by state and federal regulatory requirements.

(b) Where proposed development may be exposed to significant risks of damage from geologic hazards, a geologic report (prepared by a California Registered Geologist) shall be prepared which evaluates the hazards and shall identify measures which can be implemented to reduce the risks to acceptable levels. Such measures will be implemented.

(c) All grading and building construction for new or expanded non-disposal facilities shall conform with geologic and seismic standards contained in the latest edition of the Uniform Building Code (UBC). Prior to construction activities, the applicant shall submit building plans to the local jurisdictions' building department indicating compliance with the UBC.

(d) All new or expanded disposal facilities shall meet the requirements of the County or Cities' general site design standards. The proposed new non-disposal facilities shall comply with the County or cities' policies and standards pertaining to geologic hazards.

- **Timing of Implementation** - (a), (b) Prior to project approval; (c), (d), Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 5-2***

(a) Same as Mitigation Measures 5-1 (b) and 5-1 (d).

(b) All new or expanded non-disposal facilities that are susceptible to seismic ground failure (i.e., liquefaction) shall include project designs (e.g., soil densification) for building and road foundations to withstand potential liquefaction impacts.

- **Timing of Implementation** - Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 5-3***

(a) New or expanded disposal facilities shall be built a sufficient distance from earthquake fault zones or as restricted by state and federal regulatory requirements.

(b) Where proposed development may be exposed to significant risks of damage from geologic hazards, a geologic report (prepared by a California Registered Geologist) shall be prepared which evaluates the hazards and shall identify measures which can be implemented to reduce the risks to acceptable levels. Such measures will be implemented.

(c) All grading and building construction for new or expanded disposal facilities shall conform with geologic and seismic standards contained in the latest edition of the Uniform Building Code

(UBC). Prior to construction activities, the applicant shall submit building plans to the local jurisdictions' building department indicating compliance with the UBC.

(d) All new or expanded disposal facilities shall meet the requirements of the County or cities' general site design standards. The proposed new and expanded disposal facilities shall comply with the County or cities policies and standards pertaining to geologic hazards.

(e ) In accordance with state and federal regulations, restrict the development of landfills in geologically unstable areas.

(f) In accordance with state and federal regulations, restrict the development of landfills in seismic impact zones unless containment structures (leachate collection systems, liners, surface water management systems, etc.) are engineered and constructed to preclude failure during rapid geologic change.

- **Timing of Implementation** - (a), (b), (e), (f) Prior to project approval; approval; (c), (d) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

***Revised Mitigation Measure 5-4***

(a) Same as Mitigation Measures 5-3 (a through f).

(b) All new or expanded disposal facilities that are susceptible to seismic ground failure (i.e, liquefaction) shall include project designs (e.g., soil densification) for building and road foundations to withstand potential liquefaction impacts.

- **Timing of Implementation** -Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

***Mitigation Measure 5-5***

The grading plan for the West Expansion area at the Central Disposal Site and the future landfill will incorporate design features to prevent slope failures. These include maximum fill slopes as determined suitable by a registered engineering geologist. The embankments of new sedimentation basins and landfill slopes will be constructed so that the factor of safety is greater than 1.5.

- **Timing of Implementation** -Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 5-6***

Final landfill grades will be constructed in accordance with Section 20650 of Title 27 of the CCR which requires that "Covered surfaces of the disposal area shall be graded to promote lateral runoff of precipitation and to prevent ponding. Grades shall be established of sufficient slopes to account for future settlement of the fill surface." Grades will be of sufficient slopes to allow for

future settlement of the final cover and to avoid ponding and infiltration of stormwater. The landfill gas collection system will use flexible pipe and be designed to accommodate settlement of the refuse.

- **Timing of Implementation** - Prior to project construction; ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency, Regional Water Quality Control Board.

**SOILS AND AGRICULTURAL RESOURCES**

***Revised Mitigation Measures 6-1***

(a) All new facilities shall be designed and constructed to conform with the site development standards contained in the latest edition of the Uniform Building Code (UBC). Prior to construction activities, the applicant shall submit building plans to the local jurisdiction's building department indicating compliance with the UBC.

(b) All new facilities shall meet the requirements of the County or cities' standards pertaining to site design, grading, and erosion control.

(c) Vegetation on soils exposed during construction shall be reestablished as soon as practical. Mulch or other temporary cover shall be used in the interim where erosion potential exists.

(d) Employ Best Management Practices as required under the NPDES Permit for Construction grading.

(e) To the extent feasible, confine grading, excavation, and other earthwork to the dry seasons. When this is not feasible, erosion and sediment transport control facilities should be in place prior to the onset of the first major winter storms. If wind erosion has the potential to occur during summer months, erosion control methods, such as watering graded areas, shall be implemented.

(f) Prepare and implement detailed erosion and sedimentation control plan(s), which should be submitted for review and approval by the RWQCB. The specific language of such plans varies, but the concepts to be adhered to include the following:

- To avoid discharge to natural waterways, sediment should be trapped before leaving the construction site through the use of rip-rap, hay bales, fencing, or sediment ponds.
- Areas of surface disturbance should be minimized.
- Disturbed areas should be stabilized through vegetative or mechanical methods. When construction is complete, all disturbed areas should be regraded and revegetated. Topsoil should be stockpiled and used for the revegetation of disturbed areas.

- **Timing of Implementation** - (a) through (f) Prior to and during project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

***Mitigation Measures 6-2***

To the extent feasible, all new facilities and expansion of existing facilities shall comply with the General Plan objectives and avoid siting on agricultural lands as defined in the General Plan. If a non-disposal facility is sited on agricultural land, this would constitute a ***significant and unavoidable*** impact.

- **Timing of Implementation** -Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 6-3(a)***

Storm Water Pollution Prevention Plans shall be prepared and revised as needed for all facilities at the Central Disposal Site or other new landfills. Plans shall be submitted to the Regional Water Quality Control Board and at a minimum shall include:

(a) A description of the critical features of the erosion control system, including sediment ponds and drainage ways, along with a description and schedule for routine maintenance of these features.

(b) A construction schedule for components of the erosion control system.

- **Timing of Implementation** - (a) Prior to project construction, during project construction, ongoing; (b) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board

***Additions to Mitigation Measure 6-3(a)***

(c) A requirement to vegetate side slopes and waste-fill slopes. Temporary and permanent vegetative cover shall be established as soon as possible on side slopes and waste-fill slopes. To protect the slopes prior to vegetation establishment, a mulch, consisting of straw or wood fiber shall be applied at the time of seeding. A tackifier shall be applied with the mulch as needed to prevent loss of the mulch due to wind or water movement. Sample specifications for revegetating disturbed areas shall be included, with a description of the types of areas to be revegetated, the equipment and procedures to be used, and the dates for the seeding. For areas where an erosion potential exists, but it is not practical to establish vegetation, specifications for placing mulch or temporary covers shall be included.

(d) Specifications for construction features to reduce erosion. These shall include benches on slopes to intercept sheet flow and shorten drainage paths, protective linings (e.g., riprap, concrete, grass, erosion control mats) on interim and final drainage ways, and energy dissipators at inlets and outlets of sediment ponds and at outlets of culverts.

(e) Best Management Practices for construction and operation of the landfill and other facilities. This includes miscellaneous grading and removal of cover soil from all facilities.

(f) Specifications for watering roads, borrow areas, and construction areas to control wind erosion.

(g) An inspection and/or maintenance schedule for critical parts of the sediment control system, including sediment ponds and drainage ways.

(h) A schedule for winterizing that will ensure that critical work is done prior to October 15th each year.

- **Timing of Implementation** - (c) Prior to project construction, during project construction, ongoing; (d) Prior to project construction; (e), (f) Prior to project construction, during project construction; (g), (h) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency.

***New Mitigation Measure 6-3(b)***

Although solid waste facilities would be subject to the Exclusionary and Comparative Criteria in the 2003 CoIWMP Siting Element, there are no mitigation measures for the loss of important agricultural lands or for the change in character of the lands. Therefore, this impact is considered ***significant and unavoidable.***

- **Timing of Implementation** - Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

**HYDROLOGY AND WATER QUALITY**

***Revised Mitigation Measure 7-1***

(a) Stormwater runoff from waste handling areas shall be treated on site or routed to the sanitary sewer for treatment prior to discharge.

(b) To the extent feasible, materials handling and storage areas shall be covered to prevent contact with stormwaters.

(c) All exterior drainage from each site shall be managed in accordance with the requirements of federal NPDES, state, and local regulations.

- **Timing of Implementation** - (a), (b) Prior to project construction, ongoing; (c) Prior to project construction, ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency, Regional Water Quality Control Board, Local Enforcement Agency.

***Mitigation Measure 7-2***

(a) To the extent feasible, new facilities shall be located outside of areas at high risk for flooding (i.e., near rivers, within 100-year floodplains).

(b) The design of new facilities shall, to the extent feasible, minimize the amount of impermeable surface and incorporate methods to lessen surface runoff from the site.

- **Timing of Implementation** - (a) Prior to project approval, prior to project construction; (b) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

***Revised Mitigation Measure 7-3***

(a) Employ Best Management Practices as required under the NPDES Permit for Construction grading.

(b) To the extent feasible, confine grading, excavation, and other earthwork to the dry seasons. When this is not feasible, erosion and sediment transport control facilities should be in place prior to the onset of the first major winter storms. If wind erosion has the potential to occur during summer months, erosion control methods, such as watering graded areas, shall be implemented.

(c) Prepare and implement detailed erosion and sedimentation control plan(s), which should be submitted for review and approval by the RWQCB. The specific language of such plans varies, but the concepts to be adhered to include the following:

- To avoid discharge to natural waterways, sediment should be trapped before leaving the construction site through the use of rip-rap, hay bales, fencing, or sediment ponds.
- Areas of surface disturbance should be minimized.
- Disturbed areas should be stabilized through vegetative or mechanical methods. When construction is complete, all disturbed areas should be regraded and revegetated. Topsoil should be stockpiled and used for the revegetation of disturbed areas.

(d) All new facilities shall be designed and constructed to conform with the site development standards contained in the latest edition of the Uniform Building Code (UBC). Prior to construction activities, the applicant shall submit building plans to the local jurisdiction's building department indicating compliance with the UBC.

(e) All new facilities shall meet the requirements of the County or cities' standards pertaining to site design, grading, and erosion control.

(f) Vegetation on soils exposed during construction shall be reestablished as soon as practical. Mulch or other temporary cover shall be used in the interim where erosion potential exists.

(g) Treat wastewater generated during construction prior to discharge. At a minimum, the wastewater should be treated by sedimentation to remove suspended particles from the water. Sedimentation ponds would need to be maintained regularly. Precipitation agents, such as alum, may be introduced to speed the action of settling suspended particles. Alternatively, either gravity or pressure filtration could be used if sufficient space for sedimentation facilities is unavailable.

(h) Prepare and implement a Spill Prevention Control/Countermeasure (SPCC) Plan prior to the start of construction. The SPCC Plan should cover actions needed to minimize the potential for

accidental spillage of construction-related contaminants such as fuel, oil, or other chemicals. Such contaminants should not be drained onto the soil; rather, they should be confined to sealed containers and removed to proper disposal sites. Refueling should be conducted in a location where spills could be contained.

- **Timing of Implementation** - (a), (b), (f), (g), (h) Prior to project construction, during project construction; (c), (d), (e) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency, Regional Water Quality Control Board.

***Mitigation Measure 7-4***

(a) Same as Mitigation Measures 7-1(a), 7-1(b) and 7-1(c).

(b) Construct a separate spill control facility around and under the waste intake, storage, and loading areas to provide for containment of any hazardous spills that might occur in the vicinity.

- **Timing of Implementation** - (a) Same as 7-1(a), (b), & (c); (b) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

***Revised Mitigation Measure 7-5***

(a) Cover materials (soil) shall be placed over waste materials at the end of each day to prevent water from ponding on the landfill.

(b) A low-permeability final landfill cover, as required by CCR, Title 23, Chapter 15, shall be placed over the landfill during closure.

(c) The volume of fluid that enters the landfill shall be minimized by prohibiting the disposal of liquid waste.

(d) The landfill shall be designed with an adequate drainage and collection system to prevent to the extent possible the migration of leachate off-site.

(e) Landfills shall be located where site characteristics provide adequate separation between solid waste and ground and surface waters and where soil characteristics, distance from waste to groundwater, and other factors will ensure no impairment of beneficial uses of surface or ground water beneath or adjacent to a landfill (California Water Regulations, Chapter 15, Article 3, Section 2533).

(f) Current industry standards for leachate management shall be implemented (e.g., storing leachate in lined on-site ponds where it can evaporate naturally) or, if storage is impossible, transporting leachate to the nearest wastewater treatment plant capable of treating the leachate and not exceeding effluent discharge limits.

- **Timing of Implementation** - (a), (b), (c) Prior to project construction and ongoing (d) Prior to project construction; (e), (f) Prior to project approval, prior to project construction

- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency, Regional Water Quality Control Board.

***Additions to Mitigation Measures 7-5***

(g) Leachate and wastewater collection and disposal systems shall be designed with enough capacity to accommodate the amount of leachate predicted to be generated during the wettest year of record.

(h) Construction of all new landfill cells will comply with the requirements of Title 27 for liner impermeability.

(i) A landfill leachate and wastewater management program will be implemented which will include monitoring leachate and wastewater levels and emptying ponds as necessary to ensure adequate storage capacity.

(j) Investigate and consider methods for treatment of leachate and wastewater on-site and disposal by irrigation at any expanded or new landfill site.

(k) All exterior drainage from each landfill site shall be managed in accordance with the requirements of federal NPDES, state, and local regulations.

- **Timing of Implementation** - (g), (h) Prior to project construction; (i) Ongoing; (j), (k) Prior to project construction and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency, Regional Water Quality Control Board.

***Mitigation Measure 7-6***

(a) To the extent feasible, the working face of the landfill shall be covered with soil or other approved alternate cover material to prevent contact with stormwaters.

(b) All exterior drainage from each site shall be managed in accordance with the requirements of federal NPDES, state, and local regulations.

- **Timing of Implementation** - (a) Prior to project construction and ongoing; (b) Prior to project construction, and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency.

***Revised Mitigation Measure 7-7***

(a) Employ Best Management Practices as required under the NPDES Permit for Construction grading.

(b) To the extent feasible, confine grading, excavation, and other earthwork to the dry seasons. When this is not feasible, erosion and sediment transport control facilities should be in place prior to the onset of the first major winter storms. If wind erosion has the potential to occur during summer months, erosion control methods, such as watering graded areas, shall be implemented.

(c) Prepare and implement detailed erosion and sedimentation control plan(s), which should be submitted for review and approval by the RWQCB. The specific language of such plans varies, but the concepts to be adhered to include the following:

1. To avoid discharge to natural waterways, sediment should be trapped before leaving the construction site through the use of rip-rap, hay bales, fencing, or sediment ponds.

2. Areas of surface disturbance should be minimized.

3. Disturbed areas should be stabilized through vegetative or mechanical methods. When construction is complete, all disturbed areas should be regraded and revegetated.

(d) All new facilities shall be designed and constructed to conform with the site development standards contained in the latest edition of the Uniform Building Code (UBC). Prior to construction activities, the applicant shall submit building plans to the local jurisdiction's building department indicating compliance with the UBC.

(e) All new facilities shall meet the requirements of the County or cities' standards pertaining to site design, grading, and erosion control.

(f) Vegetation on soils exposed during construction shall be reestablished as soon as practical. Mulch or other temporary cover shall be used in the interim where erosion potential exists.

(g) Treat wastewater generated during construction prior to discharge. At a minimum, the wastewater should be treated by sedimentation to remove suspended particles from the water. Sedimentation ponds would need to be maintained regularly.

(h) Prepare and implement a Spill Prevention Control/Countermeasure (SPCC) Plan prior to the start of construction. The SPCC Plan should cover actions needed to minimize the potential for accidental spillage of construction-related contaminants such as fuel, oil, or other chemicals. Such contaminants should not be drained onto the soil; rather, they should be confined to sealed containers and removed to proper disposal sites. Refueling should be conducted in a location where spills could be contained.

- **Timing of Implementation** - (a), (b), (d), (e) Prior to project construction; (c) Prior to project construction; (f) During project construction; (g) During project construction and ongoing; (h) Prior to project construction and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

***Revised Mitigation Measure 7-8***

(a) Mitigation implemented to control erosion during operation of the landfill shall be similar to that implemented during construction (see Mitigation Measure 7-7 above).

(b) Permanent drainage ditches shall be constructed around the landfill perimeter to convey runoff water from the project site. These permanent drainage ditches shall be lined with native grass, concrete, corrugated metal, or other material that will limit water infiltration and soil erosion.

Temporary and permanent berms, collection ditches, benches, and stormwater downdrains shall be constructed to convey water runoff from the landfill surface and downslopes.

(c) On- or off-site detention ponds shall be constructed and maintained and site runoff shall be collected and sedimentation completed in the ponds prior to discharge to surface waters. The ponds shall be adequately designed so that no net increase over existing conditions in stormwater flows from the project site are expected to result from a 100-year flood event.

(d) Prior to the rainy season, drainage facilities shall be inspected and, if necessary, cleared of debris.

(e) Drainage facilities shall be inspected after the first significant rain of the season to ensure that the system is functioning.

(f) Runoff from areas upgradient of the landfill shall be routed around the landfill.

(g) Landfills shall not be developed within a 100-year floodplain (40 CFR 258).

- **Timing of Implementation** - (a), (b), (d) Prior to project construction and ongoing; (b) Prior to project construction and ongoing; (c), (g) Prior to project approval, prior to project construction; (e) ongoing; (f) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency, Regional Water Quality Control Board.

***Mitigation Measure 7-9***

(a) New waste management facilities will use water conservation techniques such as reclaimed water use and water recycling where feasible.

(b) If anaerobic digestion is used to process organics, a complete site specific groundwater study or groundwater availability determination to demonstrate that water use levels will not deplete groundwater supplies for surrounding properties.

- **Timing of Implementation** - (a) Prior to project construction and ongoing; (b) Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency.

***Mitigation Measure 7-10***

Spill prevention and cleanup plans will be required in all construction contracts. Any contracts which involve blasting will require that explosives spilled during the loading of the blasting holes be cleaned up prior to detonating the explosives.

- **Timing of Implementation** - Prior to project construction, during project construction.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency.

***Mitigation Measure 7-11***

If blasting will be done near an existing landfill, a qualified blasting specialist will design the blasting program to ensure that peak particle velocities resulting from blasts will be lower than the amount that could damage the landfill liner or leachate collection system.

- **Timing of Implementation** - Prior to project construction, during project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

***Mitigation Measure 7-12***

When feasible, large non-disposal facilities (i.e., composting facilities) shall provide permeable surfaces and retention basins to aid in the recharge of groundwater in accordance with the water quality standards of the Regional Water Quality Control Board.

- **Timing of Implementation** - Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

**PUBLIC SAFETY, HAZARDS AND HAZARDOUS MATERIALS**

***Revised Mitigation Measure 8-1***

(a) Curbside recycling operations shall be established so that no direct worker contact with the materials occurs. Automated can pick-up, commingled collection, and/or separate materials bins could meet this objective.

(b) Workers shall be supplied with appropriate safety gear which provide the maximum protection available while still affording sufficient manual dexterity for accomplishing their sorting tasks.

(c) All workers shall have current vaccinations against diseases such as tetanus, polio, or other diseases which could be spread through direct contact with solid waste.

(d) Workers shall be trained to spot hypodermic needles during sorting, extract them from the sorting line, and deposit them in a plastic sharps disposal container kept at each sorting station.

(e) Sharps containers filled at the non-disposal facility and landfill, as well as containers encountered in curbside materials during sorting operations, shall be properly disposed of with a licensed medical waste hauler.

(f) New and expanded non-disposal facilities and solid waste disposal facilities shall develop and implement an Illness and Injury Prevention Plan to address the potential for injury and illness among facility employees.

(g) A map showing the locations of local emergency services and appropriate telephone numbers shall be posted at all non-disposal facilities and landfills in a conspicuous place (e.g., near the telephone) by either the program operations manager or the safety inspector.

- **Timing of Implementation** - Prior to project construction and ongoing.

- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 8-2***

(a) Backyard composting training for the general public shall address the potential health effects associated with composting. Training will describe how proper moisture content will reduce dust generation and maximize microbial action and how sufficient oxygen content is critical to maintaining microbial action, regulating temperature, and reducing odors and pathogens. Persons with weakened immune systems or persons with allergies, asthma, or other respiratory problems shall be discouraged from participating in backyard composting. Backyard composters shall also be encouraged to thoroughly wash their hands with soap and water after each contact with backyard compost piles.

(b) Composting operations at the new or expanded composting facility(ies) shall include the following procedures:

1. Proper moisture content shall be maintained in compost piles or windrows.

2. Proper temperatures and oxygen content shall be maintained in compost piles/windrows through aeration and compost turning or agitation. Operating procedures shall require that the compost pile be heated to approximately 132-140° to ensure that all pathogens have been eliminated.

3. Loading and compost turning equipment shall have enclosed, ventilated cabs and the ventilation systems shall be maintained regularly, or individual respiratory protection (dust masks) will be utilized.

4. Employees shall be encouraged to wash their hands frequently with soap and water, particularly prior to lunch and other breaks, and at the end of the work day.

5. Composting facility operators shall inform compost workers about the possibility for development of pulmonary hypersensitivity. Workers shall be encouraged to report unusual health problems to their supervisors and physicians.

6. New and expanded non-disposal facilities shall develop and implement an Illness and Injury Prevention Plan to address the potential for injury and illness among facility employees.

- **Timing of Implementation** - (a), (b) Prior to project construction and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 8-3***

(a) A HHW Facility Operations Plan shall be developed for each permanent HHW facility. This plan shall include procedures for waste acceptance and screening, waste management practices, stormwater management, worker health and safety, and emergency prevention, precaution and response.

(b) An emergency response and evacuation plan shall be developed for each collection site in order

to plan actions to be taken in the event of a spill incident. The emergency response and evacuation plan shall be developed by the collection site operator in coordination with the appropriate local agencies prior to the operation of the collection site.

(c) A safety inspector shall be assigned by the HHW program operations manager to oversee field activities, spot potential risks, and ensure conformance with regulations.

(d) Employee safety meetings shall be conducted, as necessary, by the program safety inspector.

(e) All vehicles shall be inspected, as necessary, for safety violations by the program safety inspector and facility employees.

(f) An on-site eye wash and shower station shall be provided at all mobile and stationary HHW collection sites.

(g) A map showing the locations of local emergency services and appropriate telephone numbers shall be posted at all mobile and stationary HHW collection sites in a conspicuous place (e.g., near the telephone) by either the program operations manager or the safety inspector.

(h) A training program (including periodic retraining) for facility personnel in CPR and first aid shall be provided by the program safety inspector. In addition, first aid materials shall be maintained in good condition.

(i) A drainage containment and collection system shall be set up around the HHW collection and storage facilities to prevent discharge of spilled materials to soil or groundwater. All spilled material shall be collected and treated separately to prevent the spread of any hazardous constituents.

(j) Any risk posed by unauthorized access to any non-disposal site shall be mitigated by posting warning signs, fencing, patrol personnel, or the disabling of equipment when not in use. Daily inspections would be the responsibility of the facility operations manager.

(k) A Load Checking Program shall be updated and implemented to ensure the proper disposal of hazardous wastes illegally disposed with solid waste accepted at non-disposal facilities and the landfill. Any hazardous wastes found while conducting the Load Checking Program shall be disposed of according to applicable state and federal regulations.

- **Timing of Implementation** - (a) through (k) Prior to project construction and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency.

***Revised Mitigation Measure 8-4***

(a) Prior to permitting, develop and implement (in consultation with the Fire Marshal) a Fire Prevention Program for each facility, as necessary. This program shall entail both structural fire suppression mechanisms, such as an automatic sprinkler system and fire retardant building materials in the design of the structure, as well as procedural programs for minimizing/extinguishing fire hazards.

(b) Develop an Emergency Response and Evacuation Plan for each new or expanded facility in accordance with relevant county or city emergency response and evacuation plans, and follow it in the event of a fire, earthquake, hazardous materials spill or other emergency. Each emergency response and evacuation plan shall be developed by the facility operator in coordination with the County Office of Emergency Services, the Hazardous Materials Division of the County Environmental Health Department, and the appropriate Fire Protection District.

(c) All potentially disastrous events shall be reported by the project sponsor to the County Office of Emergency Services so that County emergency services such as traffic control, fire and medical equipment, and evacuation notification can be available as needed.

(d) Facility workers shall be provided and required to use safety glasses, safety shoes, coveralls, gloves, noise reducers for ears, or other safety equipment appropriate to the hazard of the job. An emergency eye bath and emergency showers shall be installed in the facility by the project sponsor.

(e) A map showing the locations of local emergency services and appropriate telephone numbers shall be posted at all non-disposal facilities and landfills in a conspicuous place (e.g., near the telephone) by either the program operations manager or the safety inspector.

(f) New and expanded non-disposal facilities and solid waste disposal facilities shall develop and implement an Illness and Injury Prevention Plan to address the potential for injury and illness among facility employees.

- **Timing of Implementation** - (a) through (f) Prior to project construction and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency.

***Revised Mitigation Measure 8-5***

Same as Mitigation Measure 8-4 (a through e).

(f) Consider reducing operating hours at new or expanded non-disposal facilities in order to reduce the accumulation of combustible solid waste for transfer and storage.

(g) A map showing the locations of local emergency services and appropriate telephone numbers shall be posted at all non-disposal facilities and landfills in a conspicuous place (e.g., near the telephone) by either the program operations manager or the safety inspector.

(h) Develop an Emergency Response and Evacuation Plan for each new or expanded facility in accordance with relevant county or city emergency response and evacuation plans, and follow it in the event of a fire, earthquake, hazardous materials spill or other emergency. Each emergency response and evacuation plan shall be developed by the facility operator in coordination with the County Office of Emergency Services, the Hazardous Materials Division of the County Environmental Health Department, and the appropriate Fire Protection District.

- **Timing of Implementation** -(a) through (h) Prior to project construction and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency.

***Mitigation Measures 8-6***

(a) Rodent traps shall be placed strategically around the public drop-off areas and recycling areas, as required. This measure shall be monitored by the facility operations manager.

(b) Landscape materials shall exclude plants, such as ivy, which may provide hidden nesting areas for rodents.

(c) Standing water and moist areas shall be controlled to prevent mosquito breeding. This shall be monitored by the facility operations manager.

- **Timing of Implementation** - (a) through (c) Prior to project construction and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency, Local Enforcement Agency.

***Revised Mitigation Measure 8-7***

Mitigation measures will result from the site specific CEQA review process, and will include the general following mitigation measures:

(a) Employees shall be encouraged to wash their hands frequently with soap and water, particularly prior to lunch and other breaks, and at the end of the work day.

(b) Employee safety meetings shall be conducted, as necessary, by the program safety inspector.

(c) All vehicles shall be inspected, as necessary, for safety violations by the program safety inspector and facility employees.

(d) A training program (including periodic retraining) for facility personnel in first aid shall be provided by the program safety inspector. In addition, first aid materials shall be maintained in good condition.

(e) Any risk posed by unauthorized access to any areas of the disposal site shall be mitigated by posting warning signs, fencing, patrol personnel, and/or the disabling of equipment when not in use. Daily inspections would be the responsibility of the facility operations manager.

(f) Prior to operations, develop and implement (in consultation with the Fire Marshal) a Fire Prevention Program for each facility, as necessary. This program shall entail both structural fire suppression mechanisms, such as an automatic sprinkler system and fire retardant building materials, in the design of the structure, as well as procedural programs for minimizing/extinguishing fire hazards.

(g) All potentially disastrous events shall be reported by the project sponsor to the County Office of Emergency Services so that County emergency services such as traffic control, fire and medical equipment, and evacuation notification can be available as needed.

(h) Facility workers shall be provided and required to use safety glasses, safety shoes, coveralls, gloves, noise reducers for ears, or other safety equipment appropriate to the hazard of the job. An emergency eye bath and emergency showers shall be installed in the facility by the project sponsor.

(i) Standing water and moist areas shall be controlled to prevent mosquito breeding. This shall be monitored by the facility operations manager.

(j) A map showing the locations of local emergency services and appropriate telephone numbers shall be posted at all non-disposal facilities and landfills in a conspicuous place (e.g., near the telephone) by either the program operations manager or the safety inspector.

(k) Develop an Emergency Response and Evacuation Plan for each new or expanded facility in accordance with relevant county or city emergency response and evacuation plans, and follow it in the event of a fire, earthquake, hazardous materials spill or other emergency. Each emergency response and evacuation plan shall be developed by the facility operator in coordination with the County Office of Emergency Services, the Hazardous Materials Division of the County Environmental Health Department, and the appropriate Fire Protection District.

(l) New and expanded non-disposal facilities and solid waste disposal facilities shall develop and implement an Illness and Injury Prevention Plan to address the potential for injury and illness among facility employees.

- **Timing of Implementation** - (a) through (l) Prior to project construction and ongoing; (k) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** -Lead Agency, Local Enforcement Agency.

***Mitigation Measure 8-8***

If hazardous materials are used at the RMF, the following mitigations will be implemented:

(a) An emergency response and evacuation plan shall be developed for the RMF in order to plan actions to be taken in the event of a spill incident. The emergency response plan shall be developed by the facility operator in coordination with the appropriate local agencies prior to the operation of the facility.

(b) A safety inspector shall be assigned by the RMF operations manager to oversee the transportation, use and disposal of hazardous materials to ensure that workers, the general public, and the environment are protected from accidents or spills.

(c) Employee safety meetings shall be conducted as necessary by the program safety inspector.

(d) An on-site eye wash and shower station shall be provided at the RMF.

(e) A map showing the locations of local emergency services and appropriate telephone numbers shall be posted at the RMF in a conspicuous place (e.g., near the telephone) by either the program operations manager or the safety inspector.

(f) A training program (including periodic retraining) for facility personnel in CPR and first aid shall be provided by the program safety inspector. In addition, first aid materials shall be maintained in good condition.

(g) A drainage containment and collection system shall be set up around the chemical use area at the RMF to prevent discharge of spilled materials to soil or groundwater. All spilled material shall be collected and treated separately to prevent the spread of any hazardous constituents.

(h) Any risk posed by unauthorized access to the RMF shall be mitigated by posting warning signs, fencing, patrol personnel, or the disabling of equipment when not in use. Daily inspections would be the responsibility of the facility operations manager.

(i) New and expanded non-disposal facilities shall develop and implement an Illness and Injury Prevention Plan to address the potential for injury and illness among facility employees.

- **Timing of Implementation** - (a)through (j) Prior to project construction, ongoing. Prior to project
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

***Mitigation Measure 8-9***

(a) Blasting at the Central Disposal Site shall be conducted in accordance with the recommendations of the study conducted by Geotek in 1998, and any further site-specific blasting study conducted by a licensed blasting engineer. At a minimum, mitigation shall include:

1. All blasts will be designed to minimize peak particle velocity at the nearest off-site structures.

2. Measures will be taken to control air blast (overpressure), including stemming explosive charges with clean crushed stone, ensuring the minimum distance between bore holes and the rock face, keeping drilling logs to describe ground conditions, adjusting blast design to isolate explosive charges from weak areas, avoiding blasting during heavy cloud cover or windy conditions and monitoring overpressure at or near nearby residences.

(b) If blasting is necessary at a new solid waste disposal site, a site-specific blasting study to establish procedures to minimize peak particle velocities and overpressure will be conducted.

- **Timing of Implementation** - (a) Prior to project construction, during project construction; (b) Prior to Project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 8-10***

In the event that a facility is located on a designated contaminated site, a site-specific study will be done to ensure that proper handling and disposal methods will be used to minimize environmental impacts. The study shall include a search of records of hazardous materials presence, a field assessment of conditions on the site to determine whether visual evidence of hazardous materials is present, and a plan to treat and/or clean up the site in accordance with regulations of the Regional Water Quality Control Board and Sonoma County Environmental Health if hazardous materials are present. Site specific analysis would be done at the time facility locations are proposed.

- **Timing of Implementation** - Prior to project approval, prior to project construction.

- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency, Regional Water Quality Control Board.

***Mitigation Measure 8-11***

Update the existing or develop a new Emergency Response and Evacuation Plan for each new or expanded facility in accordance with relevant county or city emergency response and evacuation plans, and follow it in the event of a fire, earthquake, hazardous materials spill or other emergency. Each emergency response and evacuation plan shall be developed by the facility operator in coordination with the County Office of Emergency Services, the Hazardous Materials Division of the County Environmental Health Department, and the appropriate Fire Protection District.

- **Timing of Implementation** - Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 8-12***

(a) Safety measures shall be implemented, including, at a minimum, emergency response procedures, safety inspections, safety training, restriction of unauthorized access to areas where hazardous materials are stored, and timely containment and cleanup of spills.

(b) All potentially disastrous events shall be reported by the project sponsor to the County Office of Emergency Services so that County emergency services such as traffic control, fire and medical equipment, and evacuation notification can be available as needed.

- **Timing of Implementation** - (a), (b) Prior to project construction, and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 8-13***

(a) Future non-disposal and disposal facilities located in Sonoma County shall be designed, constructed, and maintained in conformance with the requirements of the Fire Marshall's Vegetation Management Plan and Fire Safe Standards.

(b) Develop an Emergency Response and Evacuation Plan for each new or expanded facility in accordance with relevant county or city emergency response and evacuation plans, and follow it in the event of a fire, earthquake, hazardous materials spill or other emergency. Each emergency response and evacuation plan shall be developed by the facility operator in coordination with the County Office of Emergency Services, the Hazardous Materials Division of the County Environmental Health Department, and the appropriate Fire Protection District.

(c) All potentially disastrous events shall be reported by the project sponsor to the County Office of Emergency Services so that County emergency services such as traffic control, fire and medical equipment, and evacuation notification can be available as needed.

- **Timing of Implementation** - (a) Prior to project approval, ongoing; (b) Prior to project construction, ongoing; (c) Ongoing.
- **Implementation** - Lead Agency.

- **Monitoring** - Lead Agency.

**TRANSPORTATION**

***Revised Mitigation Measure 9-1***

(a) To the extent feasible, new non-disposal facilities shall not be located in areas with significant road congestion, as designated in the cities' and County General Plans;

(b) To the extent feasible, new non-disposal facilities shall be located near other commercial facilities to allow for the combination of activities in one trip and reduce overall trip generation.

(c) Traffic Management Plans (TMP) shall be developed for each of the new and expanded non-disposal facilities, as required. These plans shall schedule truck trips so that roadway segments with the potential to be significantly impacted are avoided during peak hours. In addition, these plans shall detail the hours of operation and other restrictions on truck trips for each of the facilities and shall include plans for employee car pooling and bus transportation, where appropriate and feasible. The plans shall be updated periodically in response to changing traffic conditions and improvements to the highway system. The TMP shall include a site-specific traffic evaluation conducted as part of the siting study for a new non-disposal facility to identify potential traffic problem areas prior to site selection. The traffic evaluation shall consider limiting non-disposal facility operations to either commercial or private (general public) haulers, as well as co-locating of disposal and non-disposal facilities to reduce haul trips.

- **Timing of Implementation** - (a), (b), (c) Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Additions to Mitigation Measures 9-1***

(d) Countywide Traffic Mitigation Fees shall be paid for new facilities implemented in accordance with the 2003 CoIWMP to help mitigate off-site cumulative traffic impacts.

- **Timing of Implementation** - (d) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 9-2***

(a) The siting study for a new landfill shall consider the adequacy and operation of the local roads and intersections as part of the comparative criteria.

- **Timing of Implementation** - (a) Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Additional Mitigation Measure 9-2***

(b) A site-specific traffic evaluation shall be conducted as part of the siting study for a new landfill, to identify potential traffic problem areas prior to site selection and to identify road or intersection improvements and/or changes needed to accommodate landfill traffic.

(c) Countywide Traffic Mitigation Fees shall be paid for new facilities implemented in accordance with the 2003 CoIWMP to help mitigate off-site cumulative traffic impacts.

- **Timing of Implementation** - (b) Prior to project approval; (c) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 9-3***

Traffic analysis shall be conducted at the time a site-specific environmental analysis of a quarry project is undertaken. If rock extraction traffic would cause significant congestion at the Stony Point/Roblar or Stony Point/West Railroad intersections, the following mitigation measures shall be considered:

(a) Trucks hauling rock from the landfill quarry shall be restricted so that they do not add traffic to the congested intersections during peak traffic hours. Restrictions could include alternative hours of operation or alternative haul routes. This restriction shall remain in effect until these intersections are signalized.

(b) The quarry operator shall pay a traffic mitigation fee to provide a fair-share contribution toward the cost of signalizing the intersections.

- **Timing of Implementation** - (a) Prior to project approval; (b) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 9-4***

If significant traffic impacts to the Stony Point/Roblar Roads and Stony Point Road/West Railroad Avenue intersections continue beyond 2015, mitigation measures such as the following shall be implemented:

(a) The Integrated Waste Division will consider restricting truck traffic that is subject to County control so that trucks do not travel through the Stony Point/Roblar and/or Stony Point Road/West Railroad intersections during peak traffic hours. This shall apply only to new truck trips associated with projects pursuant to the 2003 CoIWMP and not existing traffic using the Central Disposal Site. The restriction shall apply to trucks subject to County control, such as those making deliveries of cover soil and liner materials, and trucks associated with construction at the site. This measure shall remain in effect until a traffic signal has been installed at these intersections.

(b) Prior to construction of projects at the Central Disposal Site pursuant to the 2003 CoIWMP, the Integrated Waste Division shall pay a traffic mitigation fee that includes a fair share contribution toward the installation of signals at the Stony Point/Roblar and Stony Point/West Railroad intersections.

(c) Consider restricting hours of operation so that traffic is not added to the congested intersections during peak traffic hours. This restriction would remain in effect until these intersections are signalized.

(d) Consider restricting the use of the site to commercial operators only, thereby reducing the number of vehicles using the Stony Point/Roblar and Stony Point/West Railroad intersections.

- **Timing of Implementation** - (a), (c), (d) Prior to project approval; (b) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 9-5***

Prior to the commencement of hauling, the quarry operator and the Integrated Waste Division shall implement a truck driver education program which familiarizes rock and commercial refuse haulers with speed limit zones, school bus stops, areas of low sight distance on the haul route, permit limits on trucking, weight and load height limits, circulation routes through the landfill to minimize interference, and other measures which will reduce public conflicts. The Integrated Waste Division shall maintain a record of the drivers receiving the orientation.

- **Timing of Implementation** - Prior to project construction, during project construction, ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 9-6***

(a) Driveways and access roads for the new landfill and non-disposal facilities shall be designed to AASHTO standards to ensure safety hazards are minimized. These standards include driveway width, acceleration-deceleration lanes, and turning radius requirements.

(b) Prior to operation, minor roads that would be used as haul routes shall be examined for existing safety problems and corrections shall be made as necessary to accommodate traffic from new facilities.

(c) Design access roads for new facilities to accommodate emergency vehicles in accordance with County Fire Safe Standards.

- **Timing of Implementation** - (a), (c) Prior to project construction; (b) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

**AIR QUALITY**

***Revised Mitigation Measure 10-1 (a)***

The County and cities shall consider air emissions when purchasing new equipment and when entering into agreements with solid waste operators. Cleaner vehicles shall be weighted more favorably than less clean vehicles.

- **Timing of Implementation** - (a) Prior to project constructtion and ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Additional Mitigation Measure 10-1 (b) (Construction)***

1. New facilities shall be sited to maximize separation between haul routes/facilities and sensitive receptors to the extent practical.

2. New facilities shall encourage the use of low emissions vehicles that control diesel particulates with engine filters or by using low emissions fuel such as compressed natural gas.

3. The contractor shall reduce $NO_x$, ROG, and CO emissions by complying with the construction vehicle air pollutant control strategies developed by the BAAQMD and the NSCAPCD. The project sponsor shall include in construction contracts the following requirements:

a. Construction equipment operators shall shut off equipment when not in use to avoid unnecessary idling. As a general rule, vehicle idling should be kept below 10 minutes.

b. The contractor's construction equipment shall be properly maintained and in good operating condition.

c. The contractor shall utilize new technologies to control ozone precursor emissions as they become available and feasible.

d. The contractor shall substitute gasoline-powered for diesel-powered equipment where feasible. The contractor shall electrify equipment where practical.

4. Asphalt paving materials shall conform to the most recent guidelines by the air district having jurisdiction.

- **Timing of Implementation** - (b1) Prior to project approval; (b2) Ongoing; (b3), (b4) Prior to project construction, during project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Additional Mitigation Measure 10-1 (c) (Operations)***

1. Contracts for operation of facilities described in the 2003 CoIWMP shall require operators to limit idling time of diesel equipment to 10 minutes when practical. Contracts shall also require that equipment be serviced at regular intervals to keep engines operating within parameters that will prevent excessive emissions.

2. Contracts for operation of facilities described in the 2003 CoIWMP shall include incentives for using electric motors instead of internal combustion engines in stationary equipment.

3. Alternate technology, such as a fuel cell or cleaner burning engines, shall be considered for any electricity generation plant implemented by programs in the 2003 CoIWMP.

- **Timing of Implementation** - (c1) through (c3) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Additional Mitigation Measure 10-1 (d)***

If emissions of criteria pollutants are produced by the selected technology for processing of organic waste at the RMF, the facility will be equipped with a means to collect or treat emissions which may include air control and emission filters to comply with air quality standards.

- **Timing of Implementation** - (d) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Air Quality Management District/Air Pollution Control District.

***Revised Mitigation Measure 10-2***

The contractor shall reduce particulate emissions by complying with the dust control strategies developed by the NSCAPCD and the BAAQMD. The project sponsor shall include in construction contracts the following requirements:

1. The contractor shall water in late morning and at the end of the day all earth surfaces during clearing, grading, earthmoving, and other site preparation activities.

2. The contractor shall use tarpaulins or other effective covers for haul trucks that travel on public streets and roads.

3. The contractor shall increase the watering frequency for exposed and erodible soil surfaces whenever winds exceed 15 mph.

4. The contractor shall water exposed soil surfaces, including cover stockpiles, roadways, and parking and staging areas, to minimize dust and soil erosion.

5. The contractor shall sweep streets adjacent to the new and expanded non-disposal facilities at the end of each day.

6. The contractor shall control construction, operation and maintenance vehicle speed to 15 mph on unpaved roads.

- **Timing of Implementation** - Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 10-3***

(a) Control of odors shall be implemented through the use of Best Management Practices utilized with Sonoma County such as the avoidance of compost disturbance in afternoon hours, regulating moisture content, and turning compost windrows.

(b) If odor persists as a problem, compost piles or windrows shall be covered with soil or finished compost to reduce emissions of odors.

- **Timing of Implementation** - (a), (b) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency.

***Additions to Mitigation Measure 10-3***

(c) The landfill shall be covered at the end of every day with plastic, soil or other appropriate material.

(d) Any cracks in the landfill surface shall be repaired as soon as practical.

(e) Acidity levels in leachate ponds shall be monitored and pH adjusted as necessary to reduce odor problems.

(f) When new compost facilities are proposed, consideration will be given to operations that are conducted inside buildings using air filtration systems to prevent release of odors.

- **Timing of Implementation** - Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency, Regional Water Quality Control Board.

***Revised Mitigation Measure 10-4 (a)***

Mitigation measures will include revised Mitigation Measure 10-1 (a), additional Mitigation Measures 10-1 (b) and 10-1 (c), including revised Mitigation Measure 10-2 described above.

- **Timing of Implementation** - Same as Mitigation Measures 10-1(a), (b) and (c); 10-2.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 10-4 (b)***

1. To prevent excessive emissions of ROG, future landfill gas collection systems shall be designed to minimize the amount of uncontrolled gas emissions. To ensure that the latest information and technology is considered in the design, the project sponsor will have a qualified consultant prepare recommendations that would include the appropriate collection technology. These recommendations shall be submitted to the Bay Area Air Quality Management District for approval prior to the issuance of an Authority To Construct.

2. Mitigation measures shall include revised Mitigation Measure 10-1 (a) and additional Mitigation Measures 10-1 (b) and 10-1 (c).

- **Timing of Implementation** - (b1) Prior to project construction; (b2) Same as 10-1(a), (b), and (c).
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Air Quality Management District/Air Pollution Control District.

***Mitigation Measure 10-5***

(a) Blasting operations for landfill construction shall be restricted as follows to control dust emissions:

1. To the extent possible, remove all loose dirt and overburden material from blasting areas prior to drilling blast holes.

2. Spray water over blast areas prior to blasting.

3. No loading of explosives in blast holes or blasts shall be conducted when wind speed on site exceeds 15 mph.

(b) Any rock crusher used for landfill construction shall be equipped with a spray mister, or incorporate some other equally effective measure to control dust.

(c) Revised Mitigation Measure 10-2 shall be implemented for the rock extraction operations.

- **Timing of Implementation** - (a) Prior to project construction, during project construction; (b) During project construction; (c) Same as Revised Mitigation Measure 10-2.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Air Quality Management District/Air Pollution Control District.

***Mitigation Measure 10-6***

(a) To prevent excessive $NO_x$ emissions: 1) Blasting for landfill construction shall be done with water resistant explosives in the wet areas of bore holes. Non-water resistant explosives may be used above the wet areas of bore holes, provided the bore hole is sealed above the wet area so that the non-water resistant explosive remains above the wet area. 2) Blended ammonium nitrate/fuel oil blasting agents shall contain at least 5.7% fuel oil by weight.

(b) Revised Mitigation Measure 10-1 (a) and Additional Mitigation Measures 10-1 (b) and 10-1 (c) shall also be applied to rock extraction associated with new or expanded landfills.

- **Timing of Implementation** - (a) Prior to project construction, during project construction; (b) Same as Revised Mitigation Measure 10-1(a); additional Mitigation Measures (b), (c).
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Air Quality Management District/ Air Pollution Control District.

**NOISE**

***Revised Mitigation Measure 11-1***

(a) Construction activities shall be limited to the hours between 7 AM and 7 PM to the extent practical.

(b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise. Wherever possible, noise-generating construction equipment shall be shielded from nearby residences by noise-attenuating walls, berms, or enclosures.

(c) The contractor shall attempt to locate stationary noise sources as far away as possible from noise-sensitive land uses.

- **Timing of Implementation** - (a) Prior to project construction; (b), (c) During project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 11-2***

(a) Where feasible, collection activities associated with these facilities shall be conducted during hours of the day which are not noise sensitive for nearby residents and other adjacent land uses. The activities shall be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods.

(b) The County and cities shall include noise as an evaluation criterion when purchasing new waste/recyclables transportation vehicles, and will purchase the quietest vehicles available when reasonably possible. If the County or cities do not make direct purchases of such vehicles, it will require licensed/franchised haulers, via license/franchise agreements, to include noise as an evaluation criterion in their purchase of vehicles.

- **Timing of Implementation** - (a), (b) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Addition to Mitigation Measure 11-2***

(c) A site-specific noise evaluation shall be conducted as part of the siting study for new and expanded non-disposal facilities to identify potential noise problem areas prior to site selection. The noise evaluation shall consider the location of sensitive receptors and evaluate sound barriers or other means to reduce noise exposure. The evaluation shall also consider operational changes such as restricting hours of operation (see Mitigation Measure 11-3 (b)).

- **Timing of Implementation** - (c) Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 11-3***

(a) The County and cities shall include noise as an evaluation criterion during facility design and when purchasing equipment for the new and expanded facilities and will purchase the quietest equipment available to buy, when reasonably possible. If the County or cities do not make direct purchases of such equipment, it will require facility owner/operators, via conditions of approval, to include noise as an evaluation criterion in their purchase of equipment.

(b) The noise evaluation described in Mitigation Measure 11-2 (c) shall consider the location of sensitive receptors and locate equipment and operations to minimize the noise exposure to the extent practical. The evaluation should consider enclosures for noisy equipment or sound barriers to shield off-site receptors from noise.

- **Timing of Implementation** - (a) Prior to project approval, ongoing; (b) Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 11-4***

Same as Mitigation Measure 11-1.

- **Timing of Implementation** - Same as Mitigation Measure 11-1.

- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 11-5***

(a) Where feasible, collection activities associated with these facilities shall be conducted during hours of the day which are not noise sensitive for nearby residents and other adjacent land uses. The activities shall be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods.

(b) The County and cities shall include noise as an evaluation criterion when purchasing new waste/recyclables transportation vehicles, and will purchase the quietest vehicles available when reasonably possible. If the County or cities do not make direct purchases of such vehicles, it will require licensed/franchised haulers, via license/franchise agreements, to include noise as an evaluation criterion in their purchase of vehicles.

- **Timing of Implementation** - (a), (b) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 11-6***

(a) The County and cities shall include noise as an evaluation criterion when purchasing equipment for the disposal facility and will purchase the quietest equipment available to buy, when reasonably possible. If the County or cities do not make direct purchases of such equipment, it shall require facility owner/operators, via conditions of approval, to include noise as an evaluation criterion in their purchase of equipment.

- **Timing of Implementation** - (a) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Addition to Mitigation Measure 11-6***

(b) During project analysis, sound levels for landfill and quarry equipment will be analyzed to determine whether standards would be exceeded. If it is determined that noise standards would be exceeded at the property line of any residential use, the project shall include, to the extent practical, sound barriers, special mufflers on equipment, or other means to reduce the noise levels at the property line. A berm or other noise barrier shall be used to break the line of sight between noisy equipment, such as rock hammers and rock crushers, and the property line prior to operation of the equipment.

- **Timing of Implementation** - (b) Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

**VEGETATION AND WILDLIFE**

***Revised Mitigation Measure 12-1***

(a) When new non-disposal and landfill facilities are proposed, site specific biotic studies shall be

performed to identify biotic resources on the sites. To the extent practical the new facilities shall be constructed to avoid these resources. Where avoidance is not practical the project sponsor shall consult with the appropriate State or Federal resource agencies to determine appropriate mitigation for any loss of or change to the biotic resources. The project sponsor shall acquire all necessary permits from these agencies. Compliance with permit conditions shall be a condition of approval of the project.

- **Timing of Implementation** - (a) Prior to project approval, prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, California Department of Fish and Game, U.S. Fish and Wildlife.

***Additions to Mitigation Measure 12-1***

(b) Riparian areas shall be avoided where possible in siting new facilities. If avoidance is not possible, compensation for loss of riparian vegetation shall be made by planting and otherwise enhancing a comparable area of streambank in the general vicinity where habitat quality can be improved. Planting plans shall be reviewed by a qualified biologist and submitted to the California Department of Fish and Game and other agencies, if needed, for review and comment prior to implementation. Revegetation areas shall be managed to permanently protect the riparian vegetation

- **Timing of Implementation** - (b) Prior to project approval, prior to project construction, during project construction, ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, California Department of Fish and Game, U.S. Fish and Wildlife.

***Revised Mitigation Measure 12-2***

(a) No solid waste disposal facility shall be built or expanded within a wetland unless it can be demonstrated that the landfill will not contribute to or cause significant degradation of wetlands or violations of the Clean Water Act or State water quality standards, jeopardize endangered or threatened species, violate any toxic effluent standard, or violate any requirement of the Marine Protection, Research, and Sanctuaries Act. There must also be no practicable alternative to the proposed location which does not involve wetlands. (Title 40, Chapter 1, Subchapter 1, Part 258, Subpart B [40 CFR 258].)

(b) When new non-disposal and landfill facilities are proposed, site specific biotic studies shall be performed to identify biotic resources on the sites. To the extent practical the new facilities shall be constructed to avoid these resources. Where avoidance is not practical the project sponsor shall consult with the appropriate State or Federal resource agencies to determine appropriate mitigation for any loss of or change to the biotic resources. The project sponsor shall acquire all necessary permits from these agencies. Compliance with permit conditions shall be a condition of approval of the project.

- **Timing of Implementation** - (a) Prior to project approval, prior to project construction, ongoing; (b) Prior to project approval, prior to project construction, ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, California Department of Fish and Game, U.S. Fish and Wildlife.

***Additions to Mitigation Measure 12-2***

(c) Riparian areas will be avoided where possible in siting new facilities. If avoidance is not possible, compensation for loss of riparian vegetation shall be made by planting and otherwise enhancing a comparable area of streambank in the general vicinity where habitat quality can be improved. Planting plans shall be reviewed by a qualified biologist and submitted to the California Department of Fish and Game and other agencies, if needed, for review and comment prior to implementation. Revegetation areas shall be managed to permanently protect the riparian vegetation.

(d) Before construction during the active nesting period between March 1 and September 1, the Integrated Waste Division of the Sonoma County Department of Transportation and Public Works shall determine the locations of any active raptor nests that could be affected. If any active nests are found, removal of the trees containing the nests shall be delayed until a qualified wildlife biologist has determined that the young birds are able to leave the nest and forage on their own. A qualified wildlife biologist shall be consulted to determine what activities must be avoided in the vicinity of the nests while the nests are active, and those recommendations shall be followed during construction.

- **Timing of Implementation** - (a) Prior to project approval, prior to project construction, during project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, California Department of Fish and Game, U.S. Fish and Wildlife.

## CULTURAL RESOURCES AND PALEONTOLOGY

***Revised Mitigation Measure 13-1***

(a) Intensive on-site cultural and paleontological resources surveys shall be conducted by a qualified archaeologist and paleontologist prior to construction in any areas of a site to be used for solid waste non-disposal facilities that are designated as sensitive in a city or County planning document. In addition, the Northwest Information Center (NWIC) will be consulted to determine if previously recorded archaeological sites exist on or in the vicinity of the project site. The purpose of this survey will be to more precisely locate and map significant cultural and paleontological resources. The services of the archaeologist and paleontologist shall be retained by the project sponsor.

(b) If, in the process of the cultural resource surveys, significant archaeological resources are found to exist on the site, the project sponsor shall consider changing the facility layout to avoid such resources. If it is not possible to make this change, however, formal archaeological data collection work on the significant resources will be completed. This shall include a complete surface collection of cultural material and, at a minimum, excavation of a sample subsurface cultural material sufficient to evaluate the extent, depth, and make-up of site components (i.e., archaeological testing). The overall objectives of such data collection work shall be to explicitly identify those research questions for which the site contains relevant information, with the research questions representing those presently expressed by the body of professional archaeologists in the region. If the results of the archaeological testing indicate that additional mitigative data recovery work is justified or warranted, it will be completed prior to the construction of the facility.

(c) If paleontological resources cannot be avoided by changing the site layout, a program of data collection and recovery shall be implemented.

(d) Archaeological and paleontological monitors shall be present during studies, site construction and development activities in areas of high cultural and paleontological resource sensitivity when recommended by a site-specific study for a project under the CoIWMP or the 2003 CoIWMP, or when a designated Native American tribal representative requests to monitor projects. These monitors shall be retained by the project sponsor. In the event that human remains are unearthed during construction, state law requires that the County Coroner be notified to investigate the nature and circumstances of the discovery. At the time of discovery, work in the immediate vicinity would cease until the Coroner permits work to proceed. If the remains were determined to be prehistoric, the find would be treated as an archaeological site and the mitigation measure described above would apply.

(e) In the event that unanticipated cultural or paleontological resources are encountered during project construction, all earthmoving activity shall cease until the project sponsor retains the services of a qualified archaeologist or paleontologist. The archaeologist or paleontologist shall examine the finding, assess their significance, and offer recommendations for procedures deemed appropriate to either further investigate or mitigate adverse impacts to those cultural or paleontological archaeological resources that have been encountered (e.g., excavate the significant resource). These additional measures shall be implemented.

- **Timing of Implementation** - (a) through (e) Prior to project approval, prior to project construction, during project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 13-2***

Same as Mitigation Measure 13-1.

- **Timing of Implementation** - Same as Mitigation Measure 13-1.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 13-3***

(a) Intensive on-site historical resources surveys shall be conducted by a qualified architectural historian prior to construction where structures over 45 years old or sites known to have historical significance could be affected by proposed facilities. The purpose of the survey shall be to determine the historical significance of the resources and whether the proposed project would affect those structures that are found to have historical significance. The services of the architectural historian shall be retained by the project sponsor.

(b) If, in the process of the historical resource surveys, significant resources are found to exist on the site, the project sponsor shall consider changing the facility layout to avoid such resources. If it is not possible to make this change, however, mitigation work in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, which address preservation, rehabilitation, restoration and reconstruction of historic resources, shall be completed for the historical resource.

- **Timing of Implementation** - (a), (b) Prior to project approval, prior to project construction.

- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

**VISUAL RESOURCES**

***Revised Mitigation Measure 14-1***

(a) To the extent possible, new facilities shall not be located within Designated Scenic Resource Areas as designated in the adopted 1989 Sonoma County General Plan (as amended), unless the facilities are not visible from public roads.

(b) A landscaping plan for each facility, if required by local regulations, shall include visual mitigation measures, such as earthen berms, tree screening, and other landscaping elements along the perimeter of the site in order to screen the proposed facility from public view. Earthen berms and tree screening would be especially important along nearby roadways or other visual corridors.

(c) Existing trees shall be retained to the extent feasible as a visual screen.

(d) New or expanded facility buildings shall be located away from site borders (to the extent feasible) and shall maximize the use of any natural shielding provided by the topographical relief of site's existing landforms.

(e) Consistent with any required local design review recommendations, facility support buildings and site plans shall be designed and constructed with appropriate materials, exterior colors, and architectural details compatible with the natural landscape and surrounding development in the project vicinity.

(f) Disturbed areas that are not directly a part of the project shall be revegetated immediately following construction.

(g) Project lighting equipment shall be of low-profile design, unobtrusive, and consistent with adjacent land uses.

- **Timing of Implementation** - (a) through (e, g) Prior to project approval, prior to project construction; (f) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 14-2***

On-site Mitigation:

(a) Litter shall be controlled by a litter abatement program.

(b) Litter fences shall be established around new or expanded non-disposal facilities, as necessary to prevent litter from blowing onto off-site areas.

(c) Litter along on-site roads shall be routinely collected and removed.

Off-site Mitigation:
(d) Litter shall be controlled on nearby roads providing access to new or expanded non-disposal facilities with a litter abatement program.

(e) Open cargo areas of vehicles (e.g., pick-ups, trucks, trailers, etc.) hauling waste shall be covered. This requirement will be enforced with financial penalties levied at the time of delivery to County Non-Disposal Sites and by the California Highway Patrol (CHP) in the areas near disposal sites.

- **Timing of Implementation** - (a) through (e) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency, (e)California Highway Patrol.

***Additions to Mitigation Measure 14-2***

(f) A litter abatement program shall be implemented to reduce litter accumulation resulting from the activities of commercial haulers. The program could include, but not be limited to:
1) education of commercial haulers; and 2) requirements for thorough cleaning of debris boxes, covering emptied containers, or other similar measures, to reduce litter created upon exiting non-disposal facilities.

(g) The litter abatement program shall consider limiting non-disposal facility operations to commercial or private (general public) haulers, including the co-location of disposal and non-disposal facilities to reduce roadside litter.

- **Timing of Implementation** - (f), (g) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 14-3***

(a) To the extent possible, new facilities shall not be located within Designated Scenic Resource Areas, as designated in the adopted 1989 Sonoma County General Plan (as amended), unless the facilities are not visible from public roads.

(b) A landscaping plan shall be required for each facility and shall include visual mitigation measures, such as earthen berms, tree screening, and other landscaping elements along the perimeter of the site in order to screen the proposed facility from public view. Earthen berms and tree screening would be especially important along nearby roadways or other visual corridors.

(c) Existing trees shall be retained to the extent feasible as a visual screen.

(d) New or expanded landfills shall utilize site buffer areas (to the extent feasible) and shall maximize the use of any natural shielding provided by the relief of site landforms.

(e) Consistent with any required local design review recommendations, construct new and expanded landfills and facility support buildings with appropriate materials, exterior colors, and architectural details compatible with the natural landscape and surrounding development in the project vicinity.

(f) Disturbed areas that are not directly a part of the project shall be revegetated as soon as practicable.

(g) Project lighting equipment shall be of low-profile design, unobtrusive, and consistent with adjacent land uses.

- **Timing of Implementation** - (a) through (e, g) Prior to project approval, prior to project construction; (f) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Addition to Mitigation Measure 14-3***

(h) Exterior security lighting plans shall be prepared for all new facilities. Designs shall be consistent with County design standards, including exterior lighting that does not glare onto adjacent parcels, and includes motion sensors to minimize light and glare impacts on surrounding land uses.

- **Timing of Implementation** - (a) Prior to project approval, prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Addition to Mitigation Measure 14-3***

(i) Visual analysis of the Central Landfill expansion, or a new landfill site, shall include photo simulation, three-dimensional-terrain modeling, or similar methods to evaluate potential change in visual character as seen from nearby public roads.

- **Timing of Implementation** - (i) Prior to project approval.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Revised Mitigation Measure 14-4***

On-site Mitigation:

(a) Litter shall be controlled by a litter abatement program.

(b) Litter fences shall be established around active landfill areas to prevent litter from blowing onto off-site areas.

(c) Litter along on-site roads shall be routinely collected and removed.

Offsite Mitigation:

(d) Litter shall be controlled with a litter abatement program on nearby roads which provides access to new or expanded disposal facilities.

(e) Open cargo areas of vehicles (e.g, pick-ups, trucks, trailers, etc.) hauling waste shall be covered. This requirement will be enforced with financial penalties levied at the time of delivery to County Disposal Sites and by the CHP in the areas near disposal sites.

- **Timing of Implementation** - (a) through (e) Ongoing.

- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency, (e) California Highway Patrol.

***Addition to Mitigation Measure 14-4***

(f) Roadsides adjacent to landfill sites shall be cleaned each day that the landfill is open. Signs will be posted on roadways adjacent to the landfill site that will provide a phone number that people may call to report vehicles that are seen littering on the way to or from the landfill. The County, or its designee, will, to the extent feasible, identify offending haulers and request that corrective action be taken.

(g) A litter abatement program will be implemented to reduce litter accumulation resulting from the activities of commercial refuse haulers. The program could include, but not be limited to, 1) education of commercial refuse haulers, and 2) requirements for thorough cleaning of debris boxes, covering emptied containers or other similar measures to reduce litter created upon exiting the Central Disposal Site or any new landfill.

- **Timing of Implementation** - (f), (g) Ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Local Enforcement Agency.

**POPULATION & HOUSING, PUBLIC SERVICES, RECREATION, &UTILITIES**

***Revised Mitigation Measure 15-1***

(a) For each facility and for the applicable CoIWMP programs, a Fire Prevention Program shall be developed and implemented (in consultation with the Fire Marshal). This program shall detail both structural fire suppression mechanisms in the design of the facilities, such as fire sprinkler systems in facility buildings, as well as procedural programs for minimizing fire hazards.

(b) For each facility that handles hazardous materials and for the applicable CoIWMP programs, a Hazardous Materials Inventory and Emergency Response Plan shall be prepared and implemented (in consultation with the appropriate local agency).

(c) Private project sponsors shall pay development impact fees to cover the cost of additional fire protection services, if necessary.

- **Timing of Implementation** - (a), (b), (c) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 15-2***

(a) For each new and expanded solid waste disposal facility, a Fire Prevention program shall be developed and implemented (in consultation with the Fire Marshal). This program shall entail both structural fire suppression mechanisms in the design of the facilities, such as fire sprinkler systems in facility buildings, as well as procedural programs for minimizing fire hazards.

(b) Private project sponsors shall pay development impact fees to cover the cost of additional fire protection services, if necessary.

- **Timing of Implementation** - (a), (b) Prior to project construction.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency.

***Mitigation Measure 15-4***

Any projects which involve discharge to waterways or stormwater runoff shall comply with the permitting provisions of the applicable Regional Water Quality Control Board.

- **Timing of Implementation** - Prior to project construction, during project construction, ongoing.
- **Implementation** - Lead Agency.
- **Monitoring** - Lead Agency, Regional Water Quality Control Board.

RESOLUTION NO. 2010-004

RESOLUTION OF THE SONOMA COUNTY WASTE MANAGEMENT AGENCY APPROVING THE 2009 AMENDMENTS TO THE COUNTYWIDE INTEGRATED WASTE MANAGEMENT PLAN AND FORWARDING THE 2009 AMENDMENTS TO THE CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD IN ACCORDANCE WITH THE CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT OF 1989 (AB 939)

The Sonoma County Waste Management Agency hereby finds and resolves as follows:

WHEREAS, the Sonoma County Waste Management Agency (the "SCWMA") became a Regional Agency on November 15, 1995, as defined under Section 40970 of the California Public Resources Code, representing the Cities of Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Santa Rosa, Sebastopol, and Sonoma, the Town of Windsor, and the County of Sonoma; and

WHEREAS, the Countywide Integrated Waste Management Plan (the "CoIWMP") was approved by the California Integrated Waste Management Board (CIWMB) on April, 1996, and revised at annual intervals with the submission of the Assembly Bill 939 Annual Report to the CIWMB; and

WHEREAS, the 2009 Amendments to the CoIWMP were initiated by the SCWMA to amend and update the 2003 CoIWMP in accordance with AB 939. The 2009 Amendment to the CoIWMP propose to: (1) revise the Household Hazardous Waste Element to allow for the development of additional permanent household hazardous waste collection facilities in the County; and (2) revise the Siting Element to allow for out-of-County disposal of solid waste and to allow for future public or private ownership of regional disposal facilities.

WHEREAS, the 2009 Amendment to the CoIWMP was prepared in accordance with the California Integrated Waste Management Act of 1989; and

WHEREAS, the SCWMA held a duly noticed public hearing on June 17, 2009 to discuss the 2009 Amendments to the CoIWMP and the related environmental review under the California Environmental Quality Act (CEQA).

WHEREAS, on February 17, 2010 the SCWMA certified the Final Supplemental Program Environmental Impact Report (the "Final SPEIR") pursuant to CEQA, for the 2009 Amendment to the CoIWMP through the approval of Resolution No. 2010-003, which is hereby incorporated by this reference. In adopting Resolution No. 2010-004, the SCWMA considered the Final SPEIR and exercised its independent judgment in reviewing the Final SPEIR and all of the information and data in the administrative record, and all oral and written testimony presented to it during meetings and hearings. As part of this certification, the SCWMA considered the adverse impacts of the 2009 Amendment to the CoIWMP, as more fully detailed

in the Final SPEIR, and determined that the project benefits detailed in the Statement of Overriding Considerations in the Final SPEIR, outweighed those impacts.

NOW, THEREFORE, based on the record of this proceeding and the foregoing findings and determinations, the SCWMA hereby takes the following action:

Section 1. Adopts the Final 2009 Amendment to the CoIWMP attached hereto as Exhibit A-2, and hereby incorporated by this reference.

Section 2. Directs staff to forward a copy of the 2009 Amendment to the CoIWMP to the California Integrated Waste Management Board for consideration and adoption.

**PASSED, APPROVED AND ADOPTED** by the Sonoma County Waste Management Agency this 17th day of February, 2010.

MEMBERS:

| | | | | |
|---|---|---|---|---|
| -AYE- | -AYE- | -AYE- | -AYE- | -AYE- |
| Cloverdale | Cotati | County | Healdsburg | Petaluma |
| -AYE- | -AYE- | -AYE- | -AYE- | -AYE- |
| Rohnert Park | Santa Rosa | Sebastopol | Sonoma | Windsor |

AYES -10- NOES -0- ABSENT -0- ABSTAIN -0-

SO ORDERED.

The within instrument is a correct copy
of the original on file with this office.

ATTEST: DATE: [redacted] 9/17/10

Elizabeth Koetke
Clerk of the Sonoma County Waste Management
Agency of the State of California in and for the
County of Sonoma

# Local Task Force Final Revisions to HHWE and Siting Element

Alterations in Italics or Strikeout

# CHAPTER 5

# HOUSEHOLD HAZARDOUS WASTE ELEMENT

## 5.1 INTRODUCTION

Hazardous Waste is defined as material that meets criteria set forth in the Federal Resource Conservation and Recovery Act (RCRA). In simple terms it is a material that can cause harm to human health or the environment through its reactivity, flammability, corrosivity, or toxicity. Since many materials have these characteristics, the law has defined limits for each hazard class (reactivity, flammability, corrosivity, and toxicity). Any material falling within those limits is considered characteristically hazardous and must be handled as hazardous waste. California law requires that any waste material that meets RCRA hazardous characteristics or California's stricter limits must be handled as hazardous waste regardless of who generated the waste. Waste generated by residents is called Household Hazardous Waste (HHW).

By law, a hazardous waste is created when a generator determines that a product is no longer useful, thereby determining that the product is a waste. Most HHW was formerly common household products. Householders generate hazardous wastes while performing regular household activities such as cleaning, painting, making repairs, gardening, working on hobbies, and maintaining autos. The following are examples of some common types of HHW:

- Household cleaners
- Pesticides
- Car batteries
- Wood preservatives
- Auto and furniture polish
- Pesticides
- Automotive products
- Adhesives and sealants
- Paints and coatings
- Photographic chemicals
- Pool chemicals
- Motor oil
- Anti-freeze

The hazards associated with HHW are the same as those associated with industrially generated hazardous waste. Hazardous waste can burn or irritate skin and eyes and make people both acutely and chronically ill. Hazardous waste can poison people, pets and wildlife. Hazardous wastes can cause or fuel fires. Hazardous waste can contaminate soil, water and air. Specifically there is concern about hazardous waste: 1) leaching out of landfills into ground water; 2) being poured down the drain (i.e., when the waste water treatment plant is unable to treat such waste); and 3) being poured down storm drains, which lead straight to creeks and rivers.

## 5.2 GOAL AND OBJECTIVES OF THE HHWE

### 5.2.1 Goal

As stated in Chapter 2, the following goal addresses household hazardous waste management:

> The County and the Cities and/or the SCWMA will provide cost-effective and environmentally sound waste management services, including special waste and household hazardous waste handling and disposal, over the long term to all community residents and promote access to the services.

### 5.2.2 Objectives

The following objectives address this goal:

- The SCWMA will distribute HHW educational material to all county households and businesses at least annually.

- The SCWMA will monitor and evaluate, at the end of the short and medium terms, educational programs outlined in the SRRE and the HHWE to improve their effectiveness.

- The SCWMA, County and the Cities will achieve participation in the County's Household Hazardous Waste (HHW) collection program of 3 percent annually of the county's households.

- The SCWMA will achieve measurable reduction of landfill disposal of prohibited wastes documented by waste characterizations studies at the end of the short term and medium term planning periods.

## 5.3 EXISTING CONDITIONS

### 5.3.1 History of HHW Management in Sonoma County

#### 5.3.1.1 Household Hazardous Waste Collections

HHW collections started in Sonoma County in 1985 in the City of Santa Rosa. Gradually each of the jurisdictions starting offering annual collections provided by their solid waste hauler. In 1993 the SCWMA assumed responsibility for HHW management and started offering Household Toxics Roundups (HTRs) countywide making all collections available to any county resident. Collection services for qualified businesses, referred to as CESQGs (Conditional Exempt Small Quantity Generators), started in 1994. A reuse program started in 1995 to redistribute reusable products to the public – a program that the public appreciates and provides a significant cost savings to the SCWMA. A door-to-door collection was added in 1998 in conjunction with the HTRs. Construction began on an HHW Facility in 2001, ~~with an anticipated opening of Spring 2002~~, *and opened January 2005.*

#### 5.3.1.2 Recycle Only Collections

There has been a significant increase in recycle only collection centers, referred to as BOPs (Battery, Oil, Paint). Oil recycling started at some county disposal sites in 1990. Beginning in 1990 the recycling center at the Central Disposal Site offered a latex paint exchange. This program was duplicated at three of the County's transfer stations. When the State offered grant funds for oil recycling, businesses were recruited to collect oil and more public drop-offs were created for a total of 70 oil collection locations countywide in 2001. Starting in 1996, the SCWMA asked the oil collection centers to accept antifreeze and oil filters; in 2001, 16 centers collect antifreeze and 33 collect oil filters. Curbside oil and filter collection was added in the Cities of Rohnert Park, Santa Rosa, Sonoma and the unincorporated county in 2000.

#### 5.3.1.3 Load Checking

A load checking program was started at county disposal facilities in 1990. The program consists of spot checking commercial and residential self-haul loads for hazardous waste. The load check program emphasizes education of residents about proper HHW disposal opportunities. Identified hazardous wastes are removed from the waste stream. When a generator is not evident, waste is stored in hazardous waste lockers awaiting proper packing and disposal.

#### 5.3.1.4 Education

A variety of educational campaigns have been implemented to encourage use of Household Toxics Roundups, oil and filter recycling, Integrated Pest Management, use of safer alternatives and not to dispose of HHW in garbage cans. Nearly all residents and businesses generate HHW. Much of the education and public information efforts have been focused towards the public as a whole. In some cases, campaigns have been directed to specific populations including boaters, Spanish speakers, sports fans, children, high school students, landfill users, and government employees. Examples of a few of the efforts undertaken include: oil recycling (multiple campaigns and target audiences), Household Toxics Roundup promotion, A Health Environment Begins at Home (children); "No Toxics" garbage can stickers; Our Water Our World IPM Store campaign; and IPM Workshops (government employees).

### 5.3.2 HHW Generation Rates

There is little known about how much HHW is generated annually. Sales of hazardous products do not equal the hazardous waste, since products put to their intended use are not considered wastes. Since HHW is created when the generator determines that a product is no longer useful, it is difficult to distinguish between products and wastes in storage. In practice, residents tend to store products past their useful life, which can create hazards in the home through the growth in quantities and the destabilization of some hazardous products with age. Additionally, it is unknown how much HHW is improperly disposed of in storm drains, down sewers or to the soil. What is quantified are estimates of how much is disposed of in the landfill and how much is collected in HHW collection programs.

In 1990 and 1995/96 solid waste characterization studies were conducted at Sonoma County disposal sites. Table 5-1 illustrates the HHW measured in Sonoma County's waste stream. While this chapter focuses on HHW, waste from businesses is also disposed of illegally as illustrated in Table 5-1. Businesses that generate small quantities of hazardous waste (known as CESQGs) may and are served by the HHW program in accordance with State and Federal law. Therefore, the programs listed are also designed to target some unknown portion of the hazardous waste being disposed of by businesses. It is an unknown portion as the law limits the businesses that HHW programs may serve, and it is unknown where business hazardous waste found in the waste stream is generated. Businesses that generate large quantities of hazardous waste are addressed through stringent hazardous waste regulations at the State and Federal level.

Table 5-2 illustrates how much HHW and CESQG waste was collected in Sonoma County by program type from 1996 to 2001. Table 5-3 illustrates the quantities of waste collected by waste type.

## 5.4 EVALUATION OF ALTERNATIVES

While Section 5.3.1 provides the program description for each of the evaluated alternatives, the evaluation is conducted in Table 5-4 Alternative Program Evaluation using criteria set forth in Title 14, Section 18751.3. This chapter evaluates all programs required to be evaluated by Title 14 and additional programs that the SCWMA considers appropriate.

### 5.4.1 Alternative Program Descriptions

### 5.4.1.1 Periodic Collection

A temporary collection center is set up in a paved, accessible location (e.g., a parking lot) for a short period (usually one or two days). Residents are encouraged to bring their household hazardous materials to the site on collection days. The center is staffed by trained personnel who collect, sort, and pack the HHW into 55-gallon drums. Wastes are transported by a licensed hauler to licensed hazardous waste facilities for recycling, treatment, or disposal. The hours, dates and locations must be advertised for each collection in advance. Periodic Collections can be very successful, but there are limitations. The residents may not be able to make the date selected or find it inconvenient. Residents are asked to store material until an event is held. Residents who are moving are often caught in the situation of not being able to move the material or properly dispose of it within their limited time frame. Rain or other situations can arise that impact participation, which can increase cost. Sites acceptable for locating Periodic Collections can be limited and/or limiting.

**Table 5-1: Waste Characterization Studies at Sonoma County Disposal Sites (1992 and 1995/96)**

| Waste Type | 1990 (tons annually) | | 1995/96 (tons annually) | |
|---|---|---|---|---|
| | Residential | Non-Residential | Residential | Non-Residential |
| Paint | breakout unavailable | | 219 | 54 |
| Automotive Fluids | | | 243 | 75 |
| Household Batteries | | | 158 | 57 |
| Vehicle Batteries | | | 217 | 118 |
| Remainder Composite HHW | | | 368 | 288 |
| *Subtotal* | *119* | *976* | *1,205* | *592* |
| **TOTAL** | **1,095** | | **1,797** | |

**Table 5-2: Hazardous Waste Collected by Sonoma County HHW Programs**
(reported in pounds by fiscal year)

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |

| ~~Program~~ | ~~00-01~~ | ~~99-00~~ | ~~98-99~~ | ~~97-98~~ | ~~96-97~~ |
|---|---|---|---|---|---|
| Household Toxics Roundups | 736,793 | 721,141 | 637,542 | 504,243 | 665,200 |
| BOPs | 596,104 | 579,418 | 504,290 | programs not tracked | |
| Load Checking | 36,667 | 48,517 | 34,558 | | |
| Door-to-Door | 52,105 | 79,844 | 16,188 | no program | |
| Curbside Oil & Filter Recycling | 125,733 | no program | | | |
| Vendor Collection | 485,700 | 574,262 | 773,140 | program not tracked | |
| **TOTAL** | **2,035,102** | **2,003,182** | **1,965,718** | **504,243** | **665,200** |

**Table 5-3: Waste Collected by HHW Programs by Waste Type**
(reported in pounds)

| Waste Category | 2000-2001 | 1999-2000 |
|---|---|---|
| Flammable solid/liquid | 133,964 | 133,711 |
| Bulked flammable liquids | 59,296 | 98,805 |
| Oil-base paint | 206,577 | 164,249 |
| Poison (excl. Aerosols) | 55,937 | 55,114 |
| Reactive and explosive | 28 | 92 |
| Inorganic acid | 8,318 | 7,347 |
| Organic acid | 263 | 683 |
| Inorganic base | 12,274 | 11,001 |
| Organic base | 733 | 0 |
| neutral oxidizers | 0 | 308 |
| Organic peroxides | 100 | 131 |
| Oxidizing acid | 348 | 91 |
| Oxidizing base | 3,247 | 5,221 |
| PCB-containing paint | 0 | 0 |
| Other PCB waste | 3,674 | 2,981 |
| Corrosive aerosols | 1,663 | 1,556 |
| Flammable aerosols | 11,636 | 10,865 |
| Poison aerosols | 3,322 | 3,101 |
| Antifreeze | 14,497 | 16,700 |
| Car Batteries | 143,130 | 166,975 |
| Fluorescent bulbs | 7,068 | 3,806 |
| Latex paint | 176,582 | 192,115 |
| Motor oil/oil products | 1,141,018 | 1,062,782 |
| Oil filters | 27,227 | 25,693 |
| Mercury | 82 | 300 |
| Medical waste (syringes) | 497 | 459 |
| Household batteries | 4,439 | 4,957 |

| | | |
|---|---|---|
| ~~Other~~ | ~~15,147~~ | ~~28,921~~ |
| Asbestos | 4,035 | 5,215 |
| **TOTAL POUNDS** | **2,035,101** | **2,003,178** |
| Total tons | 1,018 | 1,002 |

| Table 5-4: Alternative Program Evaluation | | | | |
|---|---|---|---|---|
| **Criteria (1= high; 5= low)** | **Periodic Collections** | **HHW Facility** | **Mobile Collections** | **Vendor Collection** |
| **Potential Hazard** | 2 | 4 | 2 | 4 |
| **Accommodate Change** | 2 | 5 | 2 | 3 |
| **Implementation Lead Time** | Three months | Three years | Six months | Four months |
| **New or Expanded Facility(s)** | None | Yes | Uses HHW Facility | None |
| **Consistent with Local Conditions** | Yes | Yes | Yes | Yes |
| **Institutional Barriers** | None | CEQA review and mitigations; neighbor opposition | None | None |
| **Cost** | $30,000 - $110,000/event | ±$850,000 annually | $2,000 - $5,000/collection | $500/site annually |
| **End Use of Waste** | 75% recycled 25% incinerated | 75% recycled 25% incinerated | 75% recycled 25% incinerated | Recycled |
| **Effectiveness** | Good | Excellent | Good | Fair - Excellent |
| **Criteria (1= high; 5= low)** | **Curbside Collection** | **Door-to-Door Collection** | **BOPs** | **E-waste Recycling** |
| **Potential Hazard** | 2 | 4 | 5 | 5 |
| **Accommodate Change** | 2 | 2 | 2 | 1 |
| **Implementation Lead Time** | Six months | Six months | Two months | Two months |
| **New or Expanded Facility(s)** | None | Recommend use with HHW Facility | Minimal, optional | None |
| **Consistent with Local Conditions** | Yes | Yes | Yes | Yes |
| **Institutional Barriers** | Perceived danger of spills and vandalism | None | None | None |
| **Cost** | $0.05 - $0.15/hh/mo | ±$60.00/pickup (collection only) | Varies on volume $3,000 - $20,000 | Varies on volume. $750/ton |
| **End Use of Waste** | Recycled | Same as HHW Facility | Recycled | Recycled |
| **Effectiveness** | Fair | Good | Excellent | Good |
| **Criteria (1= high; 5=** | | | | **Disaster** |

| low) | CESQG | Load Checking | Reuse Exchange | Response |
|---|---|---|---|---|
| **Potential Hazard** | 4 | 1 | 3 | 3 |
| **Accommodate Change** | 2 | 1 | 1 | 1 |
| **Implementation Lead Time** | One month with existing program. | Two Months | One week | Days |
| **New or Expanded Facility(s)** | Uses facility(s) used for other programs | Hazardous waste lockers | None | None |
| **Consistent with Local Conditions** | Yes | Yes | Yes | Yes |
| **Institutional Barriers** | None | None | Waiver of liability | None |
| **Cost** | Costs passed through to businesses | $175,000 annually | Net cost savings vary $6,000 - $22,000 | Varies |
| **End Use of Waste** | Same as HHW Facility | Same as HHW Facility | Used as product | Same as HHW Facility |
| **Effectiveness** | Fair | Poor | Not applicable | Varies |

### 5.4.1.2 HHW Facility~~ies~~

HHW Facilities provide an ongoing means for residents to properly manage HHW. These facilities vary from small, often prefabricated structures. HHW Facilities entail larger capital costs than other HHW collection options. Because of their storage and waste-handling capacity, however, these facilities can help control long-term program costs through greater flexibility and economies of scale in waste handling and disposal.

### 5.4.1.3 Mobile Collection

A Mobile Collection is a smaller version of a Periodic Collection and is operated in conjunction with ~~a~~ *the* HHW Facility~~ies~~. The HHW Facility~~ies~~ that supports Mobile Collections may or may not provide service directly to the public. The idea behind a mobile program is to provide convenient, local service while still reaping the flexibility and economies of scale that ~~a~~ HHW Facility~~ies~~ provide~~s~~. Wastes collected by Mobile Collections can be consolidated, bulked, and/or reused at the HHW Facility~~ies~~. Typically Mobile Collections are smaller and more frequent than Periodic Collections.

### 5.4.1.4 Vendor Collection

Since some businesses already manage hazardous wastes, they can be cost-efficient and convenient collection centers for HHW. Methods to increase vendor participation in HHW

collection include identifying additional materials and vendor types (e.g., paint stores for collection of paint wastes) and providing education and/or incentives to vendors. Waste collection opportunities are specific to the product or material that each type of vendor sells (e.g., battery vendors could collect used batteries) and may be limited by cost and potential liability. SCWMA advertises participating vendors, who would benefit from increased customer traffic at their locations. In 2001, 61 vendors collect oil, 33 collect oil filters and 16 collect antifreeze. There is a State law that requires automotive battery vendors to accept trade-in batteries or collect a core charge with the new battery if a trade-in is not received. Rechargeable Battery Recycling Corp (RBRC) provides for collection of rechargeable batteries at many chain stores such as Radio Shack, Sears, Cellular One, Ace Hardware and others. In 2001, Best Buy stated they would develop a program to accept waste electronics. Several large computer manufactures have developed fee programs for recycling of their computers (e.g., Dell, HP, IBM). Extended Producer Responsibility (EPR) efforts are working to increase management of wastes by retailers and manufacturers.

#### 5.4.1.5 Curbside Collection

Curbside Collection programs are limited to collecting oil, filter and household battery recycling due to the potential hazards involved in placing hazardous waste on the curb. Curbside oil and filter recycling can be very successful programs when run in conjunction with curbside recycling programs. Oil and filters are left at the curb with other recyclables, thereby using the existing collection infrastructure.

#### 5.4.1.6 Door-to-Door Pickup Program

Door-to-Door Pickup programs involve pickups at residents' homes by appointment. The advantages are convenience, controlled and knowledgeable transport, early identification of materials that pose an imminent danger, and service to non-mobile residents. However, these programs can be costly.

#### 5.4.1.7 Batteries, Oil, and Paint Programs

Batteries, Oil, and Paint Programs (BOPs) are recycling centers for HHW. By law, BOPs can only collect recyclable HHW: oil, oil filters, batteries, antifreeze, paint and fluorescent lamps. BOPs are typically operated with non-direct supervision, meaning the public places waste in well marked containers without assistance. It is best to have some supervision of the site to discourage potential abuses. BOPs are frequently located at disposal sites and municipal corporation yards.

#### 5.4.1.8 E-waste Recycling

Electronic Waste (E-waste) can contain hazardous components, which require that the product be disposed of as hazardous waste. Cathode Ray Tubes (CRTs), the glass tubes found in TVs and computer monitors, contain four to eight pounds of lead. CRTs have been designated as Universal Waste by the State of California and must be recycled in accordance with the Universal Waste Rule. If they are not recycled as Universal Waste, then CRTs must be treated as hazardous waste. Many experts expect that other electronic wastes will also be designated

as Universal Wastes, requiring hazardous waste management. The Universal Waste Rule allows for collection of Universal Wastes at facilities that do not have hazardous waste permits so long as certain handling requirements are met. Due to the size, weight, quantity and cost of managing E-waste, HHW programs could become overwhelmed. Therefore, it is recommended that E-waste be collected at disposal sites where bulky items can be more easily managed and fees can be charged to cover the recycling costs.

#### 5.4.1.9 Conditionally Exempt Small Quantity Generator

The law allows HHW programs to serve commercial generators that meet the regulatory definition of a Conditionally Exempt Small Quantity Generator (CESQG). A CESQG cannot generate more than 27 gallons of hazardous waste per month, excluding oil, antifreeze and latex paint if recycled. CESQGs in California must still handle their hazardous wastes like large quantity generators; however, it is sometimes difficult to find haulers that will haul small quantities and the cost per unit is more expensive. Providing hazardous waste disposal opportunities can be a very valuable service to local businesses. As shown in Table 5-1, it is necessary to serve businesses to eliminate hazardous waste from local landfills. CESQG's can be served using any of the collection programs evaluated in this chapter. The disposal cost may be passed on to the CESQG. Typically CESQGs are served on an appointment only basis and inventories of wastes are required. Transportation and disposal issues may be more involved than with the average resident. The California State Department of Toxic Substances Control offers a transportation variance for CESQG's that allow transport of up to 27 gallons if specific transportation information has been shared with the CESQG by the jurisdiction.

#### 5.4.1.10 Load Checking

Load Checking is necessary to identify hazardous materials in the solid waste stream and to reduce the amount of HHW being disposed of as solid waste. Load Checking seeks to ensure proper management of the hazardous wastes delivered to solid waste facilities, to identify generators who place hazardous wastes in the solid waste stream, and to require them to assume responsibility for proper waste management through education and enforcement. Monitoring consists of questioning and educating self-haulers, stopping the dumping of hazardous waste when witnessed, retrieving hazardous waste identified in the solid waste, and spot checking and sorting random loads. Load Checking programs are mandated by law.

#### 5.4.1.11 Reuse Exchange

A good portion of the waste brought to a HHW collection program is still usable product (i.e., leftovers or unwanted product). Hazardous waste disposal is expensive, and even proper disposal has an environmental impact. Therefore, the best use of a hazardous product is to use it for its intended use. Reuse Exchange programs allow the public to take usable products at no cost, providing an avoided cost to the collection program. Experience has shown that the public likes Reuse Exchange programs.

#### 5.4.1.12 Disaster Response

Sonoma County has experienced three Federally declared natural disasters in the past decade. For each of those disasters, special programs to capture HHW were implemented. Should Sonoma County experience any natural disasters in the future, the HHW collection system, along with resources from emergency response agencies, will be utilized to mitigate the impact of HHW on health, the environment, and the landfill.

## 5.5 SELECTION, IMPLEMENTATION AND MONITORING OF PROGRAMS

All of the programs evaluated in Section 5.3 have been or are being implemented in Sonoma County. The SCWMA has chosen to provide the most convenient and comprehensive service to its residents and
CESQGs (Table 5-5). The Periodic Collections were operated until the HHW Facility was built. ~~The~~ HHW Facility*ies* was*ere* selected as the most cost effective approach to the management HHW with the ability to offer weekly service. Additionally, the HHW Facility*ies* allows for the operation of other programs that provide convenient service in each of the SCWMA member communities. The Mobile Collection program was selected to provide convenient collection in each of the jurisdictions. Sonoma County covers 1,500 square miles, and therefore, no single facility could provide convenient service. The HHW Facility*ies* offers a place to most efficiently manage the waste from the Mobile Collections. Door-to-Door Collection is offered as a convenience for those residents and CESQGs that are willing to pay for the convenience. Additionally it addresses the issue of residents with limited transportation options. Curbside Collection, BOPs and Vendor Collection are used to collect recyclable HHW in the most cost effective manner possible so that other more costly HHW collection programs are not overwhelmed. CESQG's are served at cost to provide CESQG's a reasonable disposal option and in acknowledgment that CESQG's must be served in order to meet the SCWMA's goal of eliminating improper disposal of hazardous waste. The Load Checking program is implemented in accordance with law, and the Reuse Exchange program is implemented to save money and limit disposal liability. The collection capabilities of each program is found in Table 5-2.

The end use or disposal of hazardous waste is highly regulated. The SCWMA adheres to the US EPA's waste management hierarchy: Reduce, Reuse, Recycle, Treat, Incinerate, Landfill. As new technologies open up recycling markets for waste, the SCWMA adjusts its disposal methods. For implementation of the selected programs, ~~only one~~ HHW facility*ies* will be built *as needed and economically feasible.*

Within the limitations and requirements of law, the SCWMA collects all HHW except radioactive materials, explosives, and biological wastes (excluding syringes). Should a resident bring a waste that a program does not manage, an assessment is made to determine if there is an imminent danger posed by
the waste. If a danger is determined, then the appropriate agency is notified. If an imminent danger is not identified, the resident is provided with proper disposal information.

| Table 5-5: Selected Programs | | |
|---|---|---|
| **Program** | **Implementation Dates** | **Responsible Agency** |
| Periodic Collections | Started 1993 / Discontinued 2002 | SCWMA |
| HHW Facility | 2002 | SCWMA |
| Mobile Collection | 2002 | SCWMA |
| Vendor Collection | 1993 | SCWMA |
| Curbside Collection | 2000 | City/County |
| Door-to-Door Collection | 1999 | SCWMA |
| BOPs | 1990 | County |
| E-waste Recycling | 2002 | County |
| CESQG | 1994 | SCWMA |
| Load Checking | 1992 | County |
| Reuse Exchange | 1994 | SCWMA |
| Disaster Response | As Needed | County/SCWMA |

Each program is monitored annually. Waste volumes are reported annually to the State in the State's 303 Forms. Waste characterization analyses are conducted as necessary so that diversion progress can be tracked. Annually, the most recent waste characterization data and cost data are used to determine the success of programs and to modify programs accordingly. The minimal criteria used for evaluating a program's success are that it: 1) does not cost more than $1.00 per pound; 2) is collecting reasonable amounts of waste; 3) is mandated by law; and 4) is successfully supported by direct user fees.

The funding discussion for these programs is presented in Section 5.5.6 of this chapter.

## 5.6 EDUCATION AND PUBLIC INFORMATION

The SCWMA has conducted multiple educational and publicity campaigns on HHW and participated on State committees to improve HHW education. The SCWMA has been very successful at promoting programs and encouraging participation. However, in light of the efforts of the SCWMA and other jurisdictions, the SCWMA has concluded that significant reduction of HHW creation is outside of SCWMA's capability. The reality is that there are too many barriers to effectively educate the public about reducing the use of hazardous products, including:

1. Often there are not any non-toxic alternatives to toxic products.

2. Products are not required to list ingredients, limiting knowledge of a product's hazards.

3. Assessing "safer" toxics is a matter of debate as widely accepted standards do not exist.

4. There is not enough expertise to accurately guide the public to make better choices.

5. As a public entity, the SCWMA is limited in mentioning specific brands, which in the world of safer products can make a big difference. For example, one toilet bowl cleaner may be much safer than another, but they are both labeled as toilet bowl cleaners with no distinction.

6. There are vast numbers of product types and uses in the world of HHW.

7. The consequences of choosing one product over another is often too subtle to impact consumers. While products may not cause death or imminent cancer, the difference may still be significant. For example, one produce may cause immune system damage while a safer alternative may be just an irritant.

8. Sometimes better options are not the least toxic option. For example, a good insect control are baits. Baits are a better choice than sprays because of the containment of the toxics to a gel accessed only by the insect, yet the chemical composition of the bait can be equal or greater in toxicity to a spray.

9. Often when selecting less toxic options consumers are weighing one impacted ecosystem against another (i.e., air vs. water; mammals vs. aquatic life).

10. Current research on creating changes in behavior concludes that behaviors are simple and straight forward, and the public's barriers must be removed by the educational efforts.

King County, Washington recently conducted a lawn care campaign with a budget of $600,000 over three years. They established a baseline of sales data for targeted products, which was tracked throughout the campaign. The campaign was implemented in accordance with

current research on creating behavior change. During the three-year campaign, sales of weed and feed and other targeted lawn care products increased faster than the population. There is no evidence that King County succeeded in changing any targeted behavior.

### 5.6.1 HHW Education Goals and Objectives

#### 5.6.1.1 Goal

Increase proper disposal of HHW and decrease the cost of HHW management, improper disposal of HHW, and the generation of HHW.

#### 5.6.1.2 Objectives

1. Promote HHW collection programs.

2. Work towards Extended Producer Responsibility (EPR) policies for any product that becomes an HHW upon disposal to reduce or eliminate the SCWMA's responsibility for HHW and to encourage redesign and reformulation.

3. Work towards the use of the Precautionary Principal (see Section 5.5.3.3) for the approval and continued use of chemicals.

4. Work towards State and national restrictions or bans on chemicals that create unnecessary harm to humans, wildlife or the environment.

5. Promote the five hazardous product management habits:

    1. Buy only what you need.
    2. Buy the least toxic option available.
    3. Use up what you have.
    4. Share what you cannot use.
    5. Properly dispose of what you cannot use or share.

6. Increase Integrated Pest Management (IPM) practices by SCWMA member jurisdictions.

7. Increase the use of safer janitorial supplies by SCWMA member jurisdictions through contractual agreements with janitorial contractors.

8. Participate and create regional and multi-agency campaigns on HHW or related topics (e.g. storm water).

### 5.6.2 Current and Historical HHW Educational and Public Information Efforts

#### 5.6.2.1 Annual Recycling Guide

The SCWMA has produced a Sonoma County Recycling Guide annually since 1993, providing a wealth of information on recycling and household hazardous waste, including Household Toxics Roundup (HTR) dates, locations for recycling oil and filters, antifreeze, paint, and other hazardous wastes.

#### 5.6.2.2 Eco-Desk

An information specialist answers the Eco-Desk hotline 3 hours a day, Monday through Friday. A 24-hour voice-mail system provides a variety of information such as oil and filter recycling centers (English and Spanish), HHW facility locations and operating hours, and paint recycling. Callers may leave messages in any of the information boxes and receive return calls.

#### 5.6.2.3 Website

The SCWMA has an extensive website, www.recyclenow.org. The SCWMA website has HHW Collection information, the IPM campaign fact sheets and all the oil and filter, antifreeze and automotive battery recycling centers.

#### 5.6.2.4 HHW Collection Programs Publicity

The SCWMA widely publicizes the HHW collection programs on an ongoing basis using a variety of methods including banners, utility bill flyers, press releases, collection schedule flyers, load checking personnel, event signs, garbage can flyers, newsletters, email notices, and word of mouth.

#### 5.6.2.5 Oil and Filter Recycling Publicity

The SCWMA receives annual grant funds to promote oil and filter recycling. Since 1994, the SCWMA has implemented numerous campaigns, including advertising in Auto Traders, bilge pad give-aways, banners, boater cards, bumper stickers, Car Club Show sponsorship, car racing programs, collection center signs, direct mail, dockwalkers, driver's education videos, Earth Day events; fairs/event booths, give-aways (pens, t-shirts, magnets, tickets, etc.), live radio remotes, mailers to boaters, minor league baseball (trash can ads, outfield banners, program ads, radio spots), multi-family posters/flyers, newspaper articles, newspaper ads, oil container

give-aways, oil change window decals, posters, radio spots, radio talk shows, radio dramas, scratcher games, shelf talkers, Spanish outreach (radio, newspapers, newsletters, container give-aways, give-aways, hotline), storm drain stenciling, teacher packets, television commercials, and utility bill flyers.

#### 5.6.2.6 IPM Training Workshops

The SCWMA is conducting two workshops on Integrated Pest Management (IPM) techniques for City and County employees in the Winter of 2002. The workshops will focus on landscape pests and roadside maintenance. Depending on the outcome, future IPM workshops may be conducted.

#### 5.6.2.7 IPM Store Campaign

The SCWMA, Sonoma County Water Agency and City of Santa Rosa teamed for the local implementation of a Bay Area regional IPM store campaign. The campaign was conducted in local hardware stores and nurseries. The campaign consisted of training store employees and distributing fact sheets, special displays, and shelf labels.

#### 5.6.2.8 "No Toxics" Garbage Can Labels

To deter improper disposal of hazardous waste in garbage, "No Toxics" labels were applied to all residential garbage cans countywide. Stickers are applied to new cans as they are distributed.

#### 5.6.2.9 Resource Lists

Resource lists are created and maintained for hazardous waste haulers, oil recyclers, fluorescent lamp recyclers and other resources as necessary. Resource lists are primarily used by the Eco-Desk when responding to specific requests for information.

#### 5.6.2.10 Safer Alternatives Literature

The SCWMA has distributed a variety of brochures addressing safer alternatives to household hazardous wastes. Some of the brochure titles include: "Buy Smart, Buy Safe;" "Grow Smart, Grow Safe;" and "Recipes for Environmentally Friendly Cleaning."

#### 5.6.2.11 Fair Booths/Give-aways

The SCWMA participates annually in fairs using a special booth display. Publicity give-aways, such as magnets, pens, posters, and t-shirts, are distributed from the booths.

#### 5.6.2.12 General Media Coverage

The SCWMA receives a significant amount of press coverage for HHW issues. Each of the Roundups has been well advertised by the local media. Photos are not uncommon in print media, and there have been a handful of TV news spots and radio show spots. During the fall of 2001, HHW was the cover story on one issue of the Home and Garden section of the Press Democrat. HHW programs have also received coverage as some local hazardous waste dumping issues have arisen.

#### 5.6.2.13 Annual Reports

Annual reports are published for the HHW program listing the programs and their accomplishments and is distributed to the SCWMA members.

#### 5.6.2.14 Surveys

The SCWMA has conducted two telephone surveys that focused on HHW issues. The surveys have measured the public's knowledge of HHW issues and programs as high (70% or better).

#### 5.6.2.15 California Peer Review Committee

The SCWMA participated in a statewide committee aimed at producing researched information on safer alternatives for dissemination to the public. The committee produced two websites, a program managers manual, and a mock public brochure.

#### 5.6.2.16 Storm Drain Stenciling

The SCWMA initiated the storm drain stenciling programs in Sonoma County. The SCWMA continues to support ongoing labeling of storm drains.

#### 5.6.2.17 Bay Area Oil Contest (Scratchers)

The SCWMA participated in the Bay Area oil campaign in 1995/96, which included an extensive radio and television campaign and scratchers for prizes.

#### 5.6.2.18 Re-refined Oil Workshop

In 1997/98 the SCWMA sponsored two workshops conducted by the Community Environmental Council entitled *Re-refined Oil Workshop*: one for local government fleet managers and one for private fleet managers. The Cities of Petaluma and Santa Rosa use re-refined oil in their vehicle fleets. The SCWMA has printed bumper stickers to identify vehicles using re-refined oil.

#### 5.6.2.19 Teacher Packets

Drivers education and auto shop teachers were sent an oil recycling kit every year between 1994 and 1997, including oil recycling posters, brochures, oil change record window stickers and magnets. In 1995, each teacher also received a video, *Lean Green Drivin' Machine*.

#### 5.6.2.20 GREEN

In 1997, the SCWMA worked with 13 other local agencies, Government Resources Environmental Education Network (GREEN), to develop a campaign called *A Healthy Environment Begins at Home*. GREEN first developed a brochure that covers oil and antifreeze recycling, Household Toxics Roundups, pesticide use, hazardous waste spill clean-up, latex paint clean-up, and lead paint management, in addition to other environmental issues. GREEN expanded the campaign to include an interactive booth at the Thursday Night Market, a local weekly fair. Each week the booth was staffed by a different agency with a different emphasis. GREEN continues as a networking committee that has led to other collaborative efforts, including the IPM campaign described below.

### 5.6.3 Program Descriptions of New HHW Educational and Public Information Programs

#### 5.6.3.1 HHW Program Promotion

The SCWMA will continue to promote HHW programs using the methods historically found successful, including utility bill flyers, press releases, banners, newsletters, emails, newspaper ads, radio spots, flyers, the annual Recycling Guide and the SCWMA website.

### 5.6.3.2 Extended Producer Responsibility (EPR) Policies

The SCWMA will continue to work for implementation of EPR policies by manufacturers. The SCWMA will join coalitions working towards EPR and lobby administrative and legislative representatives as necessary. EPR policies incorporate the life-cycle costs of a product, including recycling or disposal, into the manufacturing and sale price of a product. EPR policies promote redesign and reformulation to make recycling or disposal more cost effective. The SCWMA has already passed a resolution in support of EPR policies, joined the Product Stewardship Institute, and written a letter of support for the California Integrated Waste Management Board's 2002 Strategic Plan, which incorporates EPR policies.

### 5.6.3.3 Promote the Precautionary Principal

The Precautionary Principal states that decisions should be made based on a weight of scientific evidence. Currently, precedent requires proof of harm after a product has met initial requirements for introduction. Unfortunately, that standard has allowed products to remain in the market for decades after they have been determined to cause harm using a weight of evidence standard. While weight of evidence can be demonstrated with strong and consistent correlations between cause and effect, proof requires a great deal more science. Proof of harm can be difficult to establish with chemicals that are so pervasive in our community that no control group is available, such as with many pesticides. In order to measure and address the threat of such products, the SCWMA will promote the use of the Precautionary Principle. The SCWMA will introduce the public to the Precautionary Principal through available media such as press releases, the annual Recycling Guide, SCWMA website, and brochures. The SCWMA will lobby administrative and legislative representatives to adopt the Precautionary Principal at the State and Federal level. The SCWMA will join coalitions promoting the Precautionary Principal as such coalitions arise. The SCWMA will use the Precautionary Principal in making its own policy decisions.

### 5.6.3.4 Bans and Restrictions

Based on the Precautionary Principal, the SCWMA will work towards the ban and/or restriction of products that are demonstrated to pose harm to people, wildlife or the environment in Sonoma County. Due to the complexity of most hazardous product issues, it is far more effective to ban or restrict their distribution than to attempt to educate the public on appropriate use, disposal and alternatives. Therefore, products that pose particular or significant harm may be targeted for bans or restrictions. The SCWMA will introduce the public to the issues involving the product(s) of concern through available media such as press releases, the annual Recycling Guide, SCWMA website, and brochures. The SCWMA will lobby administrative and legislative representatives to adopt bans or restrictions at the State and Federal level. The SCWMA will join coalitions promoting the bans or restrictions as such coalitions arise. The SCWMA will consider all desired bans and restrictions in making its own policies decisions.

#### ~~5.6.3.5 Promote the Five Hazardous Product Habits~~

The SCWMA will promote the following hazardous product management habits:

1. Buy only what you need.
2. Buy the least toxic option available.
3. Use up what you have.
4. Share what you can't use.
5. Properly dispose of what you can't use or share.

The SCWMA will use available media, including flyers, utility bill flyers, press releases, HHW Facility signage, newsletters, emails, newspaper ads, radio spots, flyers, the annual Recycling Guide, the SCWMA website, give-aways, and posters.

#### 5.6.3.6 Integrated Pest Management

Integrated Pest Management (IPM) incorporates a variety of management techniques to control pests. IPM does not exclude the use of pesticides, but seeks to find other solutions leaving pesticides as a last resort. IPM techniques are training intensive, and can generally not be well applied by the general public. Therefore, this program will target the training of public employees that maintain public properties to minimize the exposure of the public and the environment to pesticides and reduce disposal needs. It will also establish local government as a model and resource for other elements of the community.

#### 5.6.3.7 Safer Janitorial Supplies

Each of the SCWMA's member jurisdictions has contracted janitorial services. The SCWMA will create guidelines designed to lead to the use of safer products by janitorial contractors. Member jurisdictions can use the guidelines in their bidding process and contracts with janitorial service providers. Since the selection of products can be very complex and involved, the guidelines will consist primarily of lists of banned or restricted ingredients with the intent to eliminate carcinogens, mutagens and teratagens. The guidelines will also include recommendations on how to further reduce the impact of products.

### 5.6.4 Implementation of New HHW Educational and Public Information Programs

Table 5-6 addresses the six criteria of implementation as required by Title 14, Section 18751.7(4)(d).

### 5.6.5 Monitoring and Evaluation of New HHW Educational and Public Information Programs

Table 5-7 addresses the six criteria of monitoring and evaluation as required by Title 14 Section 18751.7(4)(e).

### 5.6.6 Funding

The HHW infrastructure has already been implemented using a variety of stable funding sources as presented in Table 5-8. An SCWMA staff person is assigned to manage the HHW program and further develop the program. Limited additional funding is necessary to implement the new education and public information programs selected in this Element. Funding requirements and

~~sources are presented in Table 5-8. The SCWMA reserves the right to modify, limit or~~ discontinue programs as necessitated by funding limitations.

| Table 5-6: Program Implementation: HHW Education and Public Information Programs | | | | |
|---|---|---|---|---|
| | **HHW Program Promotion** | **EPR Policies** | **Precautionary Principal** | **Bans & Restrictions** |
| **Audience** | Potential Program Users | Manufactures, State and Federal Agencies and Legislators, General Public | Manufactures, State and Federal Agencies and Legislators, General Public | Manufactures, State and Federal Agencies and Legislators, General Public |
| **Responsible Agency** | SCWMA | SCWMA | SCWMA | SCWMA |
| **Implementation Tasks** | · Vary with program | · Write letters<br>· Attend meetings<br>· Speak on topic<br>· Network<br>· Sit on committees | · Write letters<br>· Attend meetings<br>· Speak on topic<br>· Network<br>· Sit on committees<br>· Create short educational writeups | · Write letters<br>· Attend meetings<br>· Speak on topic<br>· Network<br>· Sit on committees<br>· Create short educational writeups |
| **Implementation Timeline** | Ongoing | Ongoing | Short-term | As necessary |
| **Implementation Cost** | Varies with Program | Staff time | Staff time | Staff time |
| **Safer Alternatives** | Possibly | No | Possibly | Indirectly, yes |
| | **Hazardous Waste Habits** | **IPM** | **Janitorial Supplies** | |
| **Audience** | Residents | City and County employees who do landscaping or roadside maintenance | City and County purchasing agents and janitorial contractors | |
| **Responsible Agency** | SCWMA | SCWMA and member jurisdictions | SCWMA and member jurisdictions | |
| **Implementation Tasks** | · Develop brochures<br>· Develop signage<br>· Indoctrinate employees | · Organize workshops<br>· Create networks<br>· Develop/purchase resources | · Develop guidelines<br>· Meet with purchasing agents | |
| **Implementation Timeline** | Short-term | Short-term | Short-term | |
| **Implementation** | | | | |

| ~~Cost~~ | ~~$2,000 annually~~ | ~~$10,000 annually~~ | ~~Staff time~~ | |
|---|---|---|---|---|
| **Safer Alternatives** | Yes | No | No | |

| Table 5-7: Program Monitoring and Evaluation: HHW Education and Public Information Programs | | | | |
|---|---|---|---|---|
| | **HHW Program Promotion** | **EPR Policies** | **Precautionary Principal** | **Bans & Restrictions** |
| **Measurement Methods** | Participation in HHW programs being promoted | Success in establishing EPR policies | Success in changing legislative and legal mind set | Success in banning or restricting targeted products or effecting their redesign or reformulation |
| **Evaluation Criteria** | · Participation in HHW programs | · EPR policies adopted<br>· Willing legislative sponsors<br>· Strong coalitions | · Receptive CIWMB<br>· Receptive legislators | · Ban/restrictions adopted<br>· Willing legislative sponsors<br>· Strong coalitions |
| **Responsible Agency** | SCWMA | SCWMA | SCWMA | SCWMA |
| **Funding Requirements** | None | None | None | None |
| **Shortfall Contingencies** | Modify approach being utilized | Modify "requests" | Long-term effort<br>Keep up the pressure | Implement local bans and restrictions as necessary |
| **Schedule** | Varies with program | Flexible with legislative priorities | Long-term effort<br>Keep up the pressure | Flexible with legislative priorities |
| | **Hazardous Waste Habits** | **IPM** | **Janitorial Supplies** | |
| **Measurement Methods** | Phone Surveys | Increased knowledge and use of IPM techniques and active network | Inclusion of guidelines in janitorial contracts | |
| **Evaluation Criteria** | · Familiarity of public with five habits<br>· Reported changes in behavior | · Attendance at training<br>· Positive feedback from participants<br>· Decrease in pesticide use | · Adoption of guidelines in contracts<br>· Adherence of contractual requirements<br>· Use of other recommendations | |
| **Responsible Agency** | SCWMA | SCWMA and member jurisdictions | SCWMA and member jurisdictions | |
| **Funding Requirements** | $30,000 every five years | None | None | |
| **Shortfall Contingencies** | Research new behavior change | ·Modify training approach | Seek Council mandates | |

| | | | | |
|---|---|---|---|---|
| | ~~approaches~~ | ~~Seek Council~~ mandates | | |
| **Schedule** | Annual HHW report<br>Five year report | Annual HHW report | Annual HHW report | |

| Table 5-8: Funding | | | |
|---|---|---|---|
| **Program** | **Funding Needs** | **Funding Sources** | **Contingency Funding** |
| **COLLECTION PROGRAMS** | | | |
| **Periodic Collections** | Program discontinued in 2001 | | |
| **HHW Facility** | $600,000 annually | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Mobile Collection** | $200,000 annually | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Vendor Collection** | $30,000 annually | Used Oil Block Grant | Larger Portion of Used Oil Block Grant |
| **Curbside Collection** | $0.05-$0.10/HH/month | Garbage Rates | Increase Garbage Rates |
| **Door-to-Door Collection** | $100/pickup | User Fees and SCWMA Tipping Fee Surcharge | Increase User Fees and SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **BOPs** | $15,000 annually | Landfill Tipping Fee | Increase to Landfill Tipping Fee and/or Reduce Service |
| **E-waste Recycling** | $750/ton, $150,000 | Recycling Fee | Increase Recycling Fee |
| **CESQG** | Varies | User Fees | Increase User Fees |
| **Load Checking** | $50,000 annually | Landfill Tipping Fee | Increase Landfill Tipping Fee |
| **Reuse Exchange** | Generates Cost Savings | Not Applicable | Not Applicable |
| **EDUCATION PROGRAMS** | | | |
| **HHW Program Promotion** | Varies, Unknown | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **EPR Policies** | Staff time | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Precautionary Principals** | Staff time | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Bans & Restrictions** | Staff time | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Hazardous Waste Habits** | $2,000 annually<br>$30,000 every 5 years | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |

| | | | |
|---|---|---|---|
| **IPM** | $10,000 annually | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge and/or Reduce Service |
| **Janitorial Supplies** | Staff time | SCWMA Tipping Fee Surcharge | Increase to SCWMA Tipping Fee Surcharge |

# CHAPTER 6

# SITING ELEMENT

Pursuant to the California Code of Regulations (CCR), Title 14, Division 7, Article 6.5, the Siting Element presents an integrated strategy to ensure the provision of long-term disposal capacity in Sonoma County. The County will *prepare and adopt* a strategy to provide 15 years of combined permitted disposal capacity from the submission date of this document. The goals, objectives, and policies established for the Siting Element will be used in conjunction with siting criteria developed by County staff, the Local Task Force (LTF), and the general public to guide the development of additional disposal capacity, either through the expansion of existing and/or the construction of new solid waste disposal facilities. Procedural mechanisms to assure use of the established siting criteria and documentation from local jurisdictions agreeing to use procedures specified are presented. The final product is a blueprint for the long-term provision of solid waste disposal capacity.

## 6.1 GOALS, OBJECTIVES, AND POLICIES

The Sonoma County Waste Management Agency (SCWMA), in cooperation with the County of Sonoma, incorporated Cities and the LTF have developed a number of goals, objectives, and policies designed to encourage a high level of public involvement in solid waste facility siting processes. These goals and objectives will serve as benchmarks to evaluate and monitor the effectiveness of local policies and selected diversion programs over the short- (2007 to 2010) and medium-term (2011 to 2022) planning periods. Under legislation enacted in 1992, non-disposal facilities (transfer stations, recycling facilities, and composting projects) are not subject to the goals, objectives, policies, and siting criteria in the Siting Element. Discussion of these facilities can be found in the Non-Disposal Facility Element (NDFE) (see Chapter 7). Non-disposal facilities are mentioned in the following goals, objectives and policies only as needed for clarification.

### 6.1.1 Goals for the Safe Handling and Disposal of Solid Waste

The following goals are general statements regarding the siting and operation of solid waste disposal facilities.

- In order to help ensure the sustainability of our communities and to conserve natural resources and landfill capacity, the Sonoma County Waste Management Agency (SCWMA), County and the Cities will continue to improve their municipal solid waste management system through emphasis on the solid waste management hierarchy of waste prevention (source reduction), reuse, recycling, composting and disposal, with a goal of zero waste.

- The solid waste management system in Sonoma County will be planned and operated in a manner to protect public health, safety and the environment. Furthermore, all landfills that receive Sonoma County waste must be *in compliance* with State and Federal landfill regulations.

- Solid waste disposal facilities located in Sonoma County will be sited and operated in a manner to minimize energy use, conserve natural and financial resources, protect prime agricultural lands and other environmentally sensitive or culturally sensitive areas, *and reduce greenhouse gas emissions*.

- The County, *in consultation with the Cities and the SCWMA,* will develop a strategy for disposal capacity for solid waste not handled by other elements of the management hierarchy for at least fifteen-year horizon.

### 6.1.2 Objectives and Associated Programs for Achievement of Goals

The following objectives are intended to provide measurable events to document the County's progress in meeting the goals established above.

**Short-Term Planning Period (2007 to 2010) Objectives**

- Objective and consistent siting criteria and policies will be used for the siting of solid waste disposal facilities.

- Project proposers/owners will document the siting process and provide the public with information on a regular basis to ensure that the public and decision-makers are fully informed. Procedures for making siting decisions will be described in addition to the reasons for selection or elimination of potential sites.

- The County will estimate the need for countywide disposal capacity for the municipal solid waste stream after all feasible diversion programs are implemented and initiate efforts to establish *or secure* sufficient landfill capacity either in County or out of County to allow for achievement of the County's policy to provide at least fifteen years of disposal capacity.

- The County's existing transport and disposal agreements expire in August 2010. *By* 2009 the County will initiate a process to either extend or bid new transport and disposal contracts which will secure landfill capacity at least until 2022.

**Medium-Term Planning Period (2011 to 2022) Objectives**

- If the County or other entities implement the siting process, it will provide public information to ensure that the public and decision-makers are fully informed. Procedures for making siting decisions will be described in addition to the reasons for selection or elimination of potential sites.

### 6.1.3 Policies to Facilitate Siting of Solid Waste Facilities

The following policy statements illustrate the intent and/or actions to be taken by the County and/or the Cities to achieve the goals and objectives of the Siting Element.

- The County and/or the Cities will provide solid waste disposal facilities or transfer facilities within reasonable distances of the county's population centers. This policy will provide a means for achieving the goal of conservation of natural resources and energy and minimizing the cost of disposal.

- The County will cooperate with adjacent counties, considering their solid waste management planning and waste disposal needs. This includes possible export/import, as approved by the Board of Supervisors, of solid waste and encourages joint resolution of emergency problems.

## 6.2 DESCRIPTION OF EXISTING SOLID WASTE DISPOSAL FACILITIES

Landfilling of solid waste at the Central Disposal Site has been suspended. Figure 6-1 shows the boundaries of the Central Disposal Site and the surrounding land use designations.

The Santa Rosa Geothermal WMU Disposal Site, a Class III drilling muds disposal site owned and operated by Cal-Pine Operating Plant Services, is currently the only other landfill operating in Sonoma County. This privately-owned landfill does not accept municipal solid waste.

### 6.2.1 Description of the Central Disposal Site

The Central Disposal Site includes the Central Landfill, a Class III landfill. The following description briefly presents information regarding the Central Disposal Site, including disposal capacity, permitted capacity, permit constraints, and site characteristics:

| | |
|---|---|
| **Name:** | Central Disposal Site |
| **Address:** | 500 Mecham Road, Petaluma, CA 94952 |
| **Location:** | 2.8 miles southwest of the City of Cotati, in Sections 4 & 9, T5N, R8W, MDB&M |
| **Assessor Parcel No.:** | 024-080-19 & 24-080-018 |
| **SWIS No.:** | 49-AA-0001 |
| **Permitted Area:** | 398.5 acres |
| **Waste Types Landfilled:** | All non-hazardous wastes consisting of household and commercial wastes, agricultural and demolition wastes, sludge from wastewater treatment plants (as per Title 23, Subchapter 15, Section 2523[c]). |
| **Average Daily Loading:** | 1,461 tons per day; 2,435 cubic yards per day (in 2002) |
| **Permitted Daily Capacity:** | 2,500 tons per day; 4,167 cubic yards per day |

| | |
|---|---|
| **Site Owner:** | County of Sonoma, Department of Transportation and Public Works |
| **Site Operator:** | County of Sonoma, Department of Transportation and Public Works, Integrated Waste Division |

### *6.2.2 Description of other disposal sites*

The following *nonexclusive list* presents information regarding the other disposal sites used for solid waste generated in Sonoma County:

| | |
|---|---|
| **Name:** | Redwood Sanitary Landfill |
| **Address:** | P.O. Box 793, Novato, CA 94947 |
| **Location:** | 8590 Redwood Highway, Novato, CA 94958 |
| **SWIS No.:** | 21-AA-0001 |
| **Permitted Area:** | 210 acres |
| **Waste Types Landfilled:** | Mixed municipal, Sludge (Biosolids), Agricultural, Construction/demolition, Asbestos, Tires, Ash, Wood waste, Other designated |
| **Permitted Daily Capacity:** | 2,300 tons per day; 3,834 cubic yards per day |
| **Site Owner:** | U.S.A. Waste of California |
| **Site Operator:** | Redwood Sanitary Landfill, Inc. |

| | |
|---|---|
| **Name:** | Potrero Hills Landfill |
| **Address:** | 3675 Potrero Hills Lane, Suisun City, CA 94585 |
| **SWIS No.:** | 48-AA-0075 |
| **Permitted Area:** | 190 acres |
| **Waste Types Landfilled:** | Agricultural, Ash, Construction/demolition, Industrial, Mixed municipal, Sludge (Biosolids), Tires |
| **Permitted Daily Capacity:** | 4,330 tons per day; 7,217 cubic yards per day |

| | |
|---|---|
| **Site Owner:** | Republic Services of California, L.L.C. |
| **Site Operator:** | Potrero Hills Landfill, Inc., P.O. Box 68, Fairfield, CA 94533 |
| **Name:** | Keller Canyon Landfill |
| **Address:** | 901 Bailey Road, Pittsburg, CA 94565 |
| **SWIS No.:** | 07-AA-0032 |
| **Permitted Area:** | 244 acres |
| **Waste Types Landfilled:** | Mixed municipal, Construction/demolition, Agricultural, Sludge (BioSolids), Other designated, Industrial. |
| **Permitted Daily Capacity:** | 3,500 tons per day; 5,834 cubic yards per day |
| **Site Owner:** | Allied Waste Industries, Inc., 15880 N. Greenway-Hayden Loop #100, Scottsdale, AZ 83260 |
| **Site Operator:** | Keller Canyon Landfill, 901 Bailey Road, Pittsburg, CA 94565 |
| **Name:** | Vasco Road Sanitary Landfill |
| **Address:** | 4001 North Vasco Road, Livermore, CA 94550 |
| **SWIS No.:** | 01-AA-0010 |
| **Permitted Area:** | 222 acres |
| **Waste Types Landfilled:** | Contaminated soil, Industrial, Mixed municipal, Other designated, Green Materials, Construction/demolition. |
| **Permitted Daily Capacity:** | 2,518 tons per day; 4,197 cubic yards per day |
| **Site Owner:** | Republic Services of California I, L.L.C., 4001 Vasco Road, Livermore, CA 94550 |
| **Site Operator:** | Republic Services of California I, L.L.C., 4001 Vasco Road, Livermore, CA 94550) |
| **Name:** | Hay Road Landfill |

| | |
|---|---|
| **Address:** | 6426 Hay Road, Vacaville, CA 95687 |
| **SWIS No.:** | 48-AA-0002 |
| **Permitted Area:** | 256 acres |
| **Waste Types Landfilled:** | Construction/demolition, Agricultural, Sludge (BioSolids), Tires, Ash, Mixed municipal, Asbestos |
| **Permitted Daily Capacity:** | 2,400 tons per day; 4,003 cubic yards per day |
| **Site Owner:** | Norcal Waste Systems, Inc., 6426 Hay Road, Vacaville, CA 95687 |
| **Site Operator:** | Norcal Waste Systems, Inc., 6426 Hay Road, Vacaville, CA 95687 |

| | |
|---|---|
| **Name:** | Yolo County Central Landfill |
| **Address:** | County Road 28H & County Road 104, Davis, CA 95616 |
| **SWIS No.:** | 57-AA-0001 |
| **Permitted Area:** | 473 acres |
| **Waste Types Landfilled:** | Tires, Sludge (BioSolids), Construction/demolition, Mixed municipal, Agricultural. |
| **Permitted Daily Capacity:** | 1,800 tons per day; 3,002 cubic yards per day |
| **Site Owner:** | County of Yolo Public Works Department, 292 Beamer St., Woodland, CA 95695 |
| **Site Operator:** | County of Yolo Public Works Department, 292 Beamer St., Woodland, CA 95695 |

| | |
|---|---|
| **Name:** | Clover Flat Landfill |
| **Address:** | 4380 Clover Flat Road, Calistoga, CA 94515 |
| **SWIS No.:** | 28-AA-0002 |
| **Permitted Area:** | 44 acres |

**Waste Types Landfilled:** Contaminated soil, Industrial, Mixed municipal, Other designated, Green Materials, Construction/demolition.

**Permitted Daily Capacity:** 600 tons per day; 1,001 cubic yards per day

**Site Owner:** Clover Flat Landfill, Inc., 1285 Whitehall Ln., St. Helena, CA 94574

**Site Operator:** Clover Flat Landfill, Inc., 1285 Whitehall Ln., St. Helena, CA 94574

## 6.3 DISPOSAL CAPACITY REQUIREMENTS

Currently, no waste is disposed of within Sonoma County, so all waste must be exported. The Table 1 shows the total waste generated in Sonoma County by *jurisdictional area*, as well as *unadjusted* projections until 2022.

Each jurisdiction's proportion of the total county's waste was determined using the 2003 Disposal Report, as 2003 was the most recent year that all of the jurisdictions were channeling the waste through the County system. These proportions were applied to the disposal totals from the 2005 Disposal Report, and projected until 2022. A growth rate of 0.95% per year *is based on* the Brown, Vence, and Associates (BVA) report (Reassessment of the Long-Term Solid Waste Strategy Management Plan).

### 6.3.1 Existing Countywide Disposal Capacity

The existing disposal capacity is 9,160,293 cubic yards (5,496,176 tons) as of September 25, 2006. The decision to utilize the remaining landfill capacity will be determined in the future.

### 6.3.2 Anticipated Countywide Disposal Capacity Needs

Table 1 displays projected the countywide disposal capacity needs until 2022. Strategies involving disposal outside of Sonoma County are discussed further in Section 6.7.

## 6.4 CRITERIA FOR ESTABLISHING NEW OR EXPANDING EXISTING SOLID WASTE FACILITIES

The siting criteria included in this section are based on federal, state, and local laws and policies regarding solid waste facilities. Siting criteria were developed according to Title 14, Chapter 9, Article 6.5 for preparing the Siting Element of the County Integrated Waste Management Plan (ColWMP). The state guidelines outline specific categories of criteria to be used for establishing new, or expanding existing, solid waste facilities for ultimate disposal (landfills and transformation or incineration facilities). Several criteria were based on federal (Environmental Protection Agency) landfill locational restrictions (40 CFR 258), which are generally exclusionary in nature. It should be noted that exclusionary criteria do not necessarily exclude an entire site from consideration, but may only pertain to portions of a site.

### 6.4.1 Siting Criteria Development

The 1985 CoSWMP stated that public acceptance is the primary practical consideration in siting solid waste disposal facilities. The County actively sought to involve the public in the development of the siting criteria. An initial list of siting criteria was developed and presented to the public in a series of ten public workshops, five held in November, 1992 and five in February, 1993. The Sonoma County Permit Resource Management Department (PRMD) then reviewed and commented on the draft siting criteria. Based on PRMD comments and input from the LTF, the process for developing the siting criteria was revised to provide for a greater opportunity for public input into the development of the criteria. Should a public or private entity seek to create a new or expand an existing landfill, the expanded process will involve subjecting the criteria to more extensive public review during identification of specific landfill locations, an effort that was not undertaken during development of the Siting Element.

The siting criteria in this Siting Element reflect the community's interests, based on the public workshops conducted, as well as regulatory and technical considerations. The siting criteria listed provide a sound foundation for moving forward with a public process through the Siting Study and associated California Environmental Quality Act (CEQA) activities to locate new landfill site capacity.

### 6.4.2 Siting Criteria and Their Application

Siting criteria can be categorically defined as either exclusionary or comparative. Exclusionary criteria are generally regulatory land use restrictions created at the federal, state, or local level. Exclusionary criteria are designed to detect and eliminate clearly inappropriate sites from further

consideration before undertaking the more costly and time consuming process of applying comparative criteria.
The exclusionary criteria define parameters that need to be satisfied for a piece of land to be considered for a landfill site. For example, a parcel that is located entirely in a flood plain would be excluded from further consideration as a candidate landfill site. The exclusionary criteria do not restrict development of a parcel as a landfill if only a portion of the parcel is excluded. If the land located in a flood plain included other property that would be suitable for a landfill, the portion in the flood plain could be used as landfill buffer. As a result, a property could have a portion that is excluded and not used for landfill and the remainder potentially suitable as a landfill site.

The exclusionary criteria will be applied to the entire county to identify those broad areas of the county that are not suitable for siting a new landfill prior to beginning the CEQA process. Should any public or private entity decide to resume in-County waste disposal, that entity will conduct a Siting Study to accomplish the following:

- Review the means that are available for achieving at least fifteen years of disposal capacity.
- Provide for extensive public participation in the landfill siting process.
- Refine the comparative criteria to reflect the public's considerations.
- Adopt the final comparative siting criteria by the Board of Supervisors at a public hearing before the criteria are used to identify potential sites.
- Seek nominations from property owners for land to be considered as a potential site.
- Apply the comparative criteria to each of the sites nominated or identified in this review by the County. Rank the sites to identify the best ones to be evaluated in a process to comply with CEQA.

The development of comparative criteria is the primary mechanism available to local constituents to influence site selection prior to the public hearing process. It is essential that local citizens be included in the process of defining local comparative criteria to minimize protracted conflict over various sites as different projects arise. The comparative criteria in this Siting Element were developed through such a public process – input received from the public at workshops, input from the LTF, and review at the public hearings conducted to adopt the 1996 CoIWMP. Comparative criteria will be further structured with numeric values and modified, as needed, in the Siting Study prior to the evaluation of any proposed landfill site.

The comparative criteria, further refined into environmental, community, economic, engineering, and administrative categories, are described in more detail in the following discussion. Should the County ever decide to pursue a new landfill site, Figure 6-2 graphically depicts the process envisioned for siting landfill capacity in Sonoma County.

### 6.4.2.1 Exclusionary Criteria

The first set of criteria are the exclusionary criteria. These criteria identify constraints that make the siting of a landfill so difficult that further analysis or evaluation would be unproductive. The criteria are useful in the initial screening to identify general areas of the county which may have potentially suitable sites. The following list contains the exclusionary criteria selected by Sonoma County or required by local, state, and federal laws and regulations. Figure 6-3 is a map showing the areas of the county remaining after application of the exclusionary criteria which are reflected as the shaded portions of the county.

- Lands within 10,000 feet of a runway used by jet aircraft, or 5,000 feet of a runway used by propeller-driven aircraft
- Lands within a FEMA designated 100-year flood plain
- Lands restricted by State and Federal regulatory requirements over earthquake fault zones.
- Lands within channels of USGS designated perennial streams
- Lands within the urban boundary of an incorporated city
- Lands within designated Community Separators
- Lands within designated Critical Habitat
- Lands within the Coastal Zone
- Lands designated with the following land use in the County General Plan
    - Urban Residential
    - Rural Residential
    - General or Limited Commercial
    - Recreation and Visitor Serving Commercial
    - General and Limited Industrial
    - Public/Quasi-Public (unless the designation is applied to accommodate a landfill)

### 6.4.2.2 Comparative Criteria

The comparative criteria would be used to evaluate sites which are not located in exclusionary

areas and that are suitable based on their physical attributes. These criteria would be used to evaluate across a wide spectrum of environmental, engineering, socio-political, and economic factors. These Comparative Criteria, with the Exclusionary Criteria, form the basis of the Siting Study. During the Siting Study these Comparative Criteria will be modified, new criteria added, and a ranking and weighting system developed.

**Environmental**

1. Groundwater Flow System: In accordance with the County General Plan, watersheds and groundwater basins should be preserved by avoiding the placement of potential pollution sources in areas with high percolation rates. Therefore, sites located outside of recharge areas are the most desirable for landfill construction and operation.

2. Proximity to Surface Water: The proximity of a site to surface water and existing or beneficial uses of the surface water is of obvious importance. A candidate site which is far from a surface water body would be a highly rated site. A poorly rated site would be one that is near a surface water body.

3. Depth to Groundwater: The water table depth in the underlying sediments is important for both landfill operational considerations (such as placement of groundwater monitoring wells) and also from a standpoint of potential groundwater contamination.

4. Existence of Wetlands: Federal regulations for siting landfills (40 CFR 258) prohibit the location of landfills in wetlands unless the construction and operation of the landfill will not cause or contribute to violations of state water quality standards, violate toxic effluent standards under the Clean Water Act, violate the Marine Protection Act, jeopardize endangered species, or cause degradation of wetlands. Data sources to be evaluated will include those from the California Department of Fish and Game, California Native Plant Society, and the Corps of Engineers.

5. Air Quality - Non-Attainment This criterion will measure whether an area is in attainment for

for Particulates: $PM_{10}$ and ozone. A site in a non-attainment area would be less desirable than one in an attainment or unclassified area. Wind direction and distance to nearby sensitive receptors will also be considered in evaluating this criterion.

6. Proximity to Threatened or Endangered Species - Animals: In accordance with federal regulations the operation of a landfill at a site which would cause or contribute to the taking of any endangered species of plant, fish, or wildlife could constitute a fatal flaw. Similarly, the facility or operation cannot result in the destruction of critical habitat of endangered or threatened species. Data sources to be evaluated will include the State Department of Fish and Game, Federal Fish and Wildlife Service, and General Plan Open Space Element, Critical Habitat designations.

7. Proximity to Threatened and Endangered Species - Plants: This criterion is similar to the criterion above, except that it covers threatened or endangered plant species. Data sources to be evaluated will include the State Department of Fish and Game, California Native Plant Society, and General Plan Open Space Element, Critical Habitat designations.

**Community**

1. Population Density Near Site: This criterion is used as one measure of the proposed landfill's potential impact on people.

2. Compatibility with Adjacent Land Uses: Existing and proposed land uses are considered. Also considered is the site's potential for impact mitigation.

3. Residents Along Access Routes/Road Safety: This criterion reflects the number of residents being affected by haul traffic to a potential site.

4. Schools and Hospitals Along Access Routes: This criterion measures the impact of solid waste truck haul traffic, including noise, traffic congestion, and

safety considerations, on sensitive receptors such as schools and hospitals.

5. Proximity to Parks or Resource Lands: Landfills would generally be excluded from locations within a Federal Recreation Area, State Park, Department of Natural Resources – Natural Resources Conservation Area, County Park, etc. Sites valued for their pristine environment or held in reserve for use at a future time and are incompatible with a landfill.

6. Presence of Cultural, Historic, or Archaeological Resources: This criterion excludes locations which would interfere with the County General Plan's goal of preserving sites with significant archaeological, historical, or cultural resources. These resources include sites on the National and State Historic Register, areas identified as being of archaeological importance to Native Americans, and those sites/buildings/trees that have been identified as significant by the County Landmarks Commission.

7. Visual Impacts of Site: The magnitude of the landfill visual impacts relates to the location and topography of the site and to the availability of buffers to screen the operations. Aesthetics impacts are also important to consider.

8. Proximity to Major Transportation Corridors: This criterion considers the effects of landfill traffic on local roads, as well as the costs of hauling waste to a landfill. Those sites that are close to major transportation corridors will be less likely to impact local roads and residents (traffic congestion, noise, safety concerns, etc.) than sites located farther from major roads. Those sites closer to major transportation corridors would require less fuel to reach; this would help meet the county's goal of conserving energy.

## Engineering

1. Soil Suitability: A more highly rated site would have both fine- and

coarse-grained soils which could provide bottom soil liner, final soil cover and intermittent soil cover during operation. The use of on-site soils can reduce the cost of landfill construction and the impacts of importing off-site materials.

2. Geology: This criterion is a measure of the permeability/transmissivity of materials underlying a proposed site. The geologic materials that have been identified in Sonoma County can be generally divided up into two groups: (1) unconsolidated deposits and
(2) semi-consolidated to consolidated rocks. The permeability and transmissivity of materials within these general groups can be an indication of site security in terms of leachate and gas containment and as an indication of barriers to groundwater movement.

3. Fault Areas: Proximity to active fault areas is an important criteria in terms of maintaining the integrity of the landfill control structures (such as leachate and gas collection) and the engineering measures that would be needed to prevent damage from seismic movements. State and Federal regulatory requirements for earthquake fault zones will be followed to evaluate potential landfill sites.

4. Unstable Areas: Locating landfills on sites that have unstable geological conditions is generally undesirable. Unstable areas are defined as those locations that are susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of those landfill structural components that are responsible for preventing releases to the environment (such as leachate or gas control structures). Criteria categories are:

- Category A – Areas of greatest relative stability due to low slope inclination – dominantly less than 15%.
- Category B – Areas of relatively stable rock and soil units on slopes greater than 15% containing few landslides

- Category Bf – Locally level areas within hilly terrain - may be underlain or bounded by unstable or potentially unstable rock materials
- Category C – Areas of relatively unstable rock and soil units on slopes greater than 15% containing abundant landslides
- Landslide Area – Areas of lowest relative slope stability; failure and downslope movement of rock and soil has occurred or may occur

5. Flood Hazard, 100-year Flood Plains: Federal regulations (40 CFR 258) prohibit the placement of a landfill within a 100-year flood plain. The hazard from floods is due primarily to potential erosion, washout of waste from the site and restrictions on reducing the water storage capacity of a watershed basin.

6. Seismic Impact Zones: Federal regulations for siting landfills (40 CFR 258) prohibit development of a landfill in seismic impact zones unless it can be proven that all containment structures (leachate collection system, surface water collection system, etc.) have been designed to resist the maximum horizontal acceleration of the earth beneath the site.

7. Annual Precipitation: This criterion measures how much water will need to be contained on the landfill site, both on the surface of the landfill property as runoff and within the landfill as leachate.

8. Erosion Potential: Soil characteristics, slope, and surrounding topography may create conditions that are particularly susceptible to erosion (from rainfall). Erosion results in stormwater runoff having high levels of sediment with the potential for impacting water quality in surface waters. Extensive and costly engineering controls may be required to prevent stormwater runoff, and siltation and sedimentation impacts to nearby surface water.

**Administrative**

1. Site Capacity/Site Life: A potential site should have at least fifteen years of capacity. Sites with more capacity are ranked higher.

2. Agricultural Land: The General Plan recognizes the importance of agricultural land in the county stating that lands containing agricultural and productive woodland soils should be preserved, and conversion of this land to incompatible residential, commercial, or industrial uses be avoided.

3. Proximity to Existing Uses of Groundwater: Landfill operations have the potential for contamination of groundwater. Therefore, it is important to protect beneficial uses as much as possible by choosing sites located further from these areas.

4. Airport Safety: Federal Aviation Administration Order 5200.5 prohibits the development of landfills within 5,000 feet from a runway used by propeller-driven aircraft and 10,000 from a runway used by jet aircraft.

5. Site Parcel Assemblage: This category compares the various sites as to the ease (availability of information, communications, ease of acquisitions and mitigation) with which the required parcels for the landfill site could be assembled.

6. Ownership/Acquisition Potential: This category compares sites based upon the potential ease with which a selected property might be acquired.

**Economic**

1. Total Operating Costs: A number of elements would be combined for the total operation costs, including: (1) landfill operation costs (cost of daily and intermediate cover, and operation and maintenance of all landfill access roads and environmental monitoring systems), +(2) leachate treatment and control, (3) gas control, and (4) post-closure costs (maintaining the final cover, surface water management systems, gas control facilities, environmental monitoring facilities

and the leachate treatment facilities). For all of these elements, planning level costs for labor, equipment and materials should be estimated and daily operational costs should be considered for the projected life of the selected landfill site.

2. Site Development Costs: These are the capital expenditures at the site including the cost of building the landfill, equipment to begin operations, and other costs of opening a landfill.

3. Transportation Costs: Based upon engineering and economic analysis, the cost of solid waste transport to each site would be estimated. The estimate for each site would include operation and maintenance costs incurred by the County, municipal haulers, and private/ commercial haulers for transport and transfer of solid waste.

4. Parcel Costs: Using the assessed valuations maintained by the county and review of other county records, the purchase price for each potential site will be estimated as appropriate.

### 6.4.3 Procedural Mechanisms To Assure Use Of Criteria In Siting Solid Waste Disposal Facilities

The preliminary Siting Criteria were adopted by the County and incorporated Cities when they approved the 1996 CoIWMP. In adopting the Siting Criteria in this CoIWMP, the County and Cities confirmed the procedural mechanisms described here that will be used by the public or private entity for siting a new landfill. These procedural mechanisms include a Siting Study, which will refine the siting criteria and provide weighting and ranking factors for the comparative siting criteria with input from the LTF and public. Once into the CEQA process, the Siting Criteria may also have a role in identification and evaluation of alternatives to the proposed project.

## 6.5 PROPOSED SOLID WASTE FACILITIES

There are no pending applications for a solid waste facility at this time.

## 6.6 CONSISTENCY WITH COUNTY GENERAL PLAN

There are no current proposals for new or expanded landfills in Sonoma County at this time.

### 6.6.1 Sites Reserved For Solid Waste Disposal or Transformation Facilities

The Central Disposal Site is currently the only site with a landfill reserved for solid waste disposal in Sonoma County.

### 6.6.2 Sites Tentatively Reserved For Solid Waste Disposal or Transformation Facilities

There are no sites tentatively reserved for solid waste disposal or transformation facilities in Sonoma County.

## 6.7 STRATEGIES FOR DISPOSING OF SOLID WASTE IN EXCESS OF CAPACITY WHEN NEW OR EXPANDED SITES ARE NOT AVAILABLE

Due to significant uncertainties, *the County of Sonoma* is not considering in-county disposal at this time, although potential sites for disposal *may* exist within Sonoma County. *Risks* associated with expansion of the Central Landfill have caused in-county disposal to be rejected as the *County of Sonoma's* on-going disposal strategy. *The*

*SCWMA supports efforts to identify potential in-county disposal sites.*

### 6.7.1 Short Term Disposal Strategy

Out-of-county disposal contracts are currently in place to ensure sufficient disposal capacity until 2010. The daily tonnage commitment with contracted landfills are detailed in the table below.

### 6.7.2 Medium Term Disposal Strategy

As there are no current plans to establish a new or expand an existing disposal facility in Sonoma County, the County's medium term (2010 - 2022) disposal strategy will consider the following two options:

- Out-of-county disposal with waste transport by truck
- Out-of-county disposal with waste transport by rail

While both options will secure, at minimum, 15 years of disposal capacity through contract(s) which specify maximum allowed daily tonnages, the two options differ in capital investment and level of commitment required by participating jurisdictions. It is therefore necessary that the County work with the Cities to determine which are interested in each option. The selection of truck or rail haul will depend in part on the

result of any such agreements between the County, the Cities, *and appropriate regulatory agencies.*

### 6.7.3 Waste Transport by Truck

In response to the lack of permitted landfill capacity, the County contracted for out-of-County haul and disposal through three separate companies for a five-year period beginning September 1, 2005.

The County is in a favorable position to haul to out-of-County landfills by truck. The County currently has five transfer stations that allow for transfer of solid waste to trucks to transport the waste to out-of-County disposal sites. Another positive factor is that the County owns the sites and is already permitted to operate these transfer facilities, so no additional site acquisition, regulatory, or permitting activities are anticipated. Although flow control is important for rail haul disposal commitments, it is less critical for the strategy involving truck haul and disposal. Little new capital investment is required for truck haul and the operating costs are more easily reduced should tonnage leave the disposal system.

The potential downside to out-of-County haul and disposal is the risk of losing disposal capacity sometime in the future. Although the County may contract for certain capacity, there is no assurance that this capacity will always be available. Furthermore, landfill options are more limited than with rail haul, as the cost effectiveness of truck hauling declines rapidly as distance from Sonoma County increases.

Contracts between the County, haulers, and landfill owners would secure the County's ability to guarantee disposal capacity and the means with which to transport waste generated within Sonoma County. The BVA analysis indicates that there is adequate landfill capacity in the Bay Area for the next 15 years (source: Assessment of Long-Term Solid Waste Management Alternatives, BVA).

### 6.7.4 Waste Transport by Rail

The infrastructure requirements for development of hauling waste by rail (WBR) to out-of County disposal sites generally include the following five components:

- Transfer Station to collect, recover divertible materials, and load residual waste into intermodal containers or consolidate for loading gondola cars
- Local Rail Yard to load intermodal containers or gondola cars on spur track
- Rail Haul for transporting containers or gondola cars over rail lines to the remote rail yard
- Remote Rail Yard to off-load the containers or material in gondola cars to the landfill or transfer vehicles for haul to the landfill
- Landfill for disposal of residual solid waste

While WBR increases accessibility to a larger number of disposal sites than truck hauling, there is significant capital investment required. This necessitates an agreement between a significant number of Cities and the County to share the capital costs, and a long term commitment to WBR in the form of 20 to 25 year contracts with the North Coast Rail Authority (NCRA) and the destination landfill(s). Potential capital investments include the retrofit of existing transfer stations to accommodate the intermodal operating system, the purchase of sufficient intermodal containers to satisfy the disposal needs of Sonoma County, and the development of at least one or more loading stations along the rail line..

In an effort to promote waste diversion and zero waste, special care must be made with regard to tonnage commitments with the destination landfill(s). Agreements will be created with flexibility such that the County's landfill capacity commitments decrease in proportion to the success of our source reduction and recycling programs. Agreements which provide an economic disincentive for waste reduction will be avoided.

## 6.8 SITING ELEMENT IMPLEMENTATION

### 6.8.1 Responsible Agencies

Since all solid waste facilities in Sonoma County are currently owned by the County of Sonoma, the Board of Supervisors is the responsible agency for implementing the Siting Element. DTPW will implement the Board's policies by working with the SCWMA, PRMD, LEA, and the LTF.

In the event that a private entity should seek to establish a new or expand an existing landfill, that entity would be required to implement the Siting Element as defined in this ColWMP. This entity would implement the Board's policies by working with the SCWMA, PRMD, LEA, and LTF.

### 6.8.2 Implementation Tasks

Should a public entity decide to expand an existing or create a new landfill within Sonoma County, the following task list summarizes the process for achieving the goal of *maximizing* disposal capacity.

Task 1. Siting Study/Options Evaluations

a. Siting Study will include the Board of Supervisors adopting the refined Siting Criteria and an environmental and economic consideration of various long-term disposal options.

b. Screen county for candidate sites and request public nomination of sites.

c. Apply first round siting criteria to candidate sites, develop ranking, and review criteria application.

d. Complete first round ranking of sites. It is expected that 8 to 13 sites may be identified at this step.

e. Second round of screening of sites with field confirmation of significant siting criteria.

f. Rank sites and recommend 3 to 5 sites as final candidates in report to Board of Supervisors. Board accepts report and gives direction to staff to proceed with preliminary design and CEQA.

Task 2. Preliminary Design

a. Issue RFP, hold interviews and execute contract for investigation of the final candidate sites. Work will include geotechnical and hydrogeotechnical research and biological reconnaissance of the sites.

b. Prepare preliminary design including geotechnical and hydrogeotechnical investigation and biological reconnaissance.

c. Review of preliminary design report and recommendation for selected site.

d. Prepare final preliminary design report and recommendation for selected site.

Task 3. CEQA

a. Issue RFP, hold interviews and execute contract for preparation of project level EIR for candidate site(s) and selected alternatives.

b. Prepare Initial Study, present to the Environmental Review Committee, issue Notice of Preparation (NOP), meet with regulatory agencies, and hold public meetings for input for the EIR.

c. Prepare Draft EIR (DEIR).

d. Issue and circulate Notice of Completion (NOC) to open public review period.

e. Planning Commission holds hearings on DEIR and Final EIR (FEIR).

f. Board of Supervisors certifies FEIR and adopts the project selecting the best site.

Task 4. Final Design

a. Prepare final design plans and specifications for first phase improvements.

b. Bid first phase improvements and award contract.

c. Complete first phase improvements.

Task 5. General Plan Amendment

To run concurrent with design and construction. Process general plan amendment to have scheduled site zoned Public/Quasi-Public or other appropriate zoning. Includes hearing before the Planning Commission and Board of Supervisors.

Task 6. Permits

To run concurrent with design and construction. Permitting agencies include the California Integrated Waste Management Board (CIWMB), Regional Water Quality Control Board, Air Quality Management District, and Sonoma County PRMD. Documents submitted to the CIWMB will include a Joint Technical Document, including a Report of Disposal Site Information, Preliminary Closure Plan, and Preliminary Post Closure Maintenance Plan.

### 6.8.4 Revenue Sources

Funding for the implementation of the Sonoma County Siting Element and all facility siting programs and procedures need to be identified for any proposal concerning solid waste facility siting. *If the County of Sonoma makes the decision to site a new landfill, funds for implementing the siting element would come from a tipping fee surcharge. If another public or private entity intends to establish a new landfill site, either entity would be responsible for funding the implementation of the siting element.*

# Notice of Determination

FEB 19 2010

JANICE ATKINSON, Co. Clerk

BY: _____ DEPUTY CLERK

This notice was posted on _____ and will remain posted for a period of thirty days until March 21, 2010

# Notice of Determination

10-0219-1

Appendix D

CR

To:

☒ Office of Planning and Research

| *For U.S. Mail:* | *Street Address:* |
|---|---|
| P.O. Box 3044 | 1400 Tenth St. |
| Sacramento, CA 95812-3044 | Sacramento, CA 95814 |

☒ County Clerk
County of: Sonoma
Address: 2300 County Center Drive, Suite B177
Santa Rosa, CA 95403

From: Lead & Applicant:
Public Agency: Sonoma County Waste Management Agency
Address: 2300 County Center Drive, Suite B100
Santa Rosa, CA 95403
Contact: Patrick Carter
Phone: 707-565-3687

Lead Agency (if different from above):
Address:
Contact:
Phone:

***SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.***

State Clearinghouse Number (if submitted to State Clearinghouse): SCH# 2008042112

Project Title: 2009 Amendment to the Sonoma Countywide Integrated Waste Management Plan (ColWMP)

Project Location (include county): County of Sonoma - Countywide

Project Description:

This project proposes to (1) revise the ColWMP Household Hazardous Waste Element to allow for the development of additional permanent household hazardous waste collection facilities in the County and (2) revise the ColWMP Siting Element to allow for out-of-County disposal of solid waste and to allow for future public or private ownership of regional disposal facilities.

This is to advise that the Sonoma County Waste Management Agency has approved the above described project on
☒ Lead Agency or ☐ Responsible Agency

February 17, 2010 (Date) and has made the following determinations regarding the above described project:

1. The project [☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☒ was ☐ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: 2300 County Center Drive, Suite B100, Santa Rosa, California 95403

Signature (Public Agency): [redacted] Title Interim Executive Director

Date February 19, 2010 Date Received for filing at OPR _____

PD $2842.25
DKLV

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

399302

Revised 2005