# SONOMA COUNTY 2003 COUNTYWIDE INTEGRATED WASTE MANAGEMENT PLAN

# FINAL SUPPLEMENTAL PROGRAM ENVIRONMENTAL IMPACT REPORT



Prepared by

The Sonoma County Waste Management Agency

for the member jurisdictions of:

Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Santa Rosa, Sebastopol, Sonoma, Windsor, and the County of Sonoma

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# **RESPONSES TO COMMENTS**

# i INTRODUCTION

# i.i COMPONENTS OF THE FINAL SPEIR

This Response to Comments to the Draft Supplement Program Environmental Impact Report (DSEIR) for the Sonoma County Countywide Integrated Waste Management Plan (2003 CoIWMP) has been prepared in compliance with the California Environmental Quality Act (CEQA) Statutes and Guidelines. Comments and questions on the DSPEIR received during the review period have been compiled and responded to in this Response to Comments Document. The DSPEIR and this Response to Comments Document will constitute the Final SPEIR (FSPEIR) for the proposed 2003 CoIWMP.

After examining the FSPEIR, the Sonoma County Waste Management Agency (SCWMA) will determine whether or not to certify that the FSPEIR is adequate, has been completed in compliance with CEQA, and that the information presented in the FSPEIR has been independently reviewed and will be considered prior to approval of the 2003 CoIWMP. In addition, the FSPEIR will be independently reviewed and will be considered prior to other related project approvals (e.g. General Plan Amendment). A list of potential permits and approvals for which this FSPEIR will be used is included in Section 1.5 of the DSPEIR. It should be noted that certification of an EIR does not constitute project approval; rather, it is a necessary step that precedes project approval. The SCWMA, as well as the various City decision makers, will consider the information in the FSPEIR in determining whether the project should be approved, modified, or rejected.

Following this introductory section to the FSPEIR, Section 2 contains a copy of each comment letter, followed by responses to each comment in that letter. For each letter, the comments were identified by number, with corresponding numbers for each response. Section 3 includes a table of edits to the 2003 CoIWMP that have been made since publication of the DSPEIR, and notations concerning the effects of such changes on the analysis in the DSPEIR.

# i.ii EIR REVIEW AND CONSIDERATION PROCESS

The public review period for written comments on the DSPEIR commenced on June 23, 2003 and ended on August 6, 2003 (45 days). The state agency review period for written comments on the DSPEIR, as set by the State Clearinghouse, commenced and ended on the same days. During the review period, written comments were received from the State of California Department of Transportation.

In addition, the SCWMA held a public hearing on the DSPEIR on Wednesday, July 16, 2003 in the City of Santa Rosa Laguna Wastewater Treatment Plant. No comments were provided at the public hearing.

The DSPEIR was circulated for review by trustee agencies (agencies which have jurisdiction by law over natural resources affected by the project which are held in trust for the people of the State of California) and responsible agencies (agencies other than the Lead Agency which have discretionary approval power over the project). In addition, copies of the DSPEIR were made available to the public at the Sonoma County Public Works Department and at local libraries throughout the county.

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### ii RESPONSES TO COMMENTS RECEIVED

#### ii.i PRIVATE ORGANIZATIONS

No written comments from private organizations were received during the 45-day public review of the Draft SPEIR.

### ii.ii STATE AGENCIES

A total of one written comment letter was received from state agencies during the 45-day public review of the Draft SPEIR.

Comment Letter No. 1- California Department of Transportation (CalTrans) dated July 30, 2003.

<u>Comment No. 1</u>: Mitigation Measures 9-2 and 9-3 indicate that traffic analyses will be completed once specific sites are identified for the proposed quarry project and new solid waste disposal site. Please forward and future traffic analyses for our review when they become available, so that we can ensure any significant transportation impacts to State facilities are fully mitigated. We recommend the County consult the Department to determine an appropriate scope of work for these future traffic analyses, prior to preparing the analyses.

<u>Response No. 1</u>: Future projects subject to the 2003 CoIWMP will be required to obtain an environmental determination pursuant to the California Environmental Quality Act (CEQA). New quarries and solid waste disposal sites in Sonoma County would be required to evaluate potential traffic impacts associated with their operations. As part of the environmental review process, the member jurisdictions (lead agencies) of the SCWMA would circulate the environmental document (with traffic study) through the State Clearinghouse, including CalTrans, for review and comment.

<u>Comment No. 2</u>: Please be advised that any work or traffic control with the State right-of-way (ROW) will require an encroachment permit from the Department. To apply for an encroachment permit, submit a completed encroachment permit application, environmental determination, and five (5) sets of plans (in metric units) which clearly indicate State ROW to the following address:

Mr. Sean Nozzari, District Office Chief Office of Permits California Department of Transportation, District 04 P.O. Box 23660 Oakland, CA 94623-0660

<u>Response No. 2</u>: Lead agencies that propose future projects within State ROW will be required to apply for encroachment permits in accordance with CalTrans requirements.

# iii. SCWMA COMMENTS AND REVISIONS TO THE DSPEIR

The SCWMA reviewed the DSPEIR at their public meeting in the City of Santa Rosa Laguna Wastewater Treatment Plant, Administration Building on July 16, 2003. No comments were received from the SCWMA or public at that meeting. The SCWMA will consider the Final SPEIR, Mitigation Monitoring Policy Statement, and 2003 CoIWMP during a public hearing on October 15, 2003.

# **SECTION 1**

# 1.1 **PURPOSE OF THIS EIR**

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) be prepared for any project (including a program or plan) to be undertaken or approved by a State or local agency that may have a significant effect on the environment. As Lead Agency, the Sonoma County Waste Management Agency (SCWMA) has adopted the objectives, criteria and procedures for implementing CEQA and has determined that this Supplemental Program Environmental Impact Report (SPEIR) should be prepared for the proposed 2003 Sonoma County Integrated Waste Management Plan (2003 CoIWMP).

This 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 proposed 2003 CoIWMP and, if approved, to facilitate its effective implementation.

This SPEIR is a "Program" EIR, as defined in the CEQA Guidelines, Section 15168. Program EIRs are prepared on a series of actions that can be characterized as one large project and are related either:

- 1. Geographically;
- 2. As logical parts in the chain of contemplated actions;
- 3. In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or
- 4. As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

Essentially, the actions under the 2003 CoIWMP are related in each of the above ways. Having previously determined that it was necessary to prepare an SPEIR on the 2003 CoIWMP, the SCWMA was not required by CEQA to prepare an Initial Study, but did so to enable responsible agencies and the public an opportunity to provide guidance on the scope of analysis performed for the SPEIR. In keeping with this objective, the SCWMA included the Initial Study with the Notice of Preparation (NOP) that was distributed to the public, including responsible and trustee agencies, for their review and comment in November, 2001. (The distribution list is included in Appendix B.)

This SPEIR evaluates the impacts of the proposed 2003 CoTWMP that were determined potentially significant in the NOP and Initial Study (Appendix B) or in the responses received to the NOP (Appendix C).

Among the purposes of this SPEIR are the following:

- To identify the significant environmental impacts associated with the adoption and implementation of the proposed 2003 CoIWMP;
- To identify mitigation measures that would reduce or avoid significant impacts;

- To indicate impacts of the 2003 CoIWMP that cannot be mitigated;
- To present alternatives to the proposed 2003 CoIWMP that could feasibly avoid or reduce the proposed project's impacts and to assess the impacts of the alternatives relative to those of the proposal; and
- To suggest a mitigation monitoring/reporting system for the mitigation measures recommended in the SPEIR (to be prepared separately).

Overall, the function of the SPEIR is to inform the SCWMA, the County, the affected cities, and the public of the environmental consequences of approving and implementing the proposed 2003 CoIWMP. The analysis provided in this SPEIR will explore the potential environmental impacts of some waste management activities covered by the 2003 CoIWMP (such as disposable waste volume reduction) and will give a general understanding of possible impacts from other waste management activities which are less specific and not fully defined at this time (such as opening a new landfill within the County). Future development proposals for the latter category of waste management facilities, or for modifications to existing ones, or any subsequent land use permits, will be judged against this SPEIR to determine whether their potential impacts are sufficiently examined in this SPEIR or a more site-specific environmental investigation, such as a Negative Declaration or a project-specific EIR, is required. For example, it is expected that selection of a new landfill site will involve a site-specific EIR. Environmental documents prepared for future projects that implement the 2003 CoIWMP may be tiered from this SPEIR, as encouraged by CEQA.

#### **1.2 PROJECT BACKGROUND**

Sonoma County adopted its first County Solid Waste Management Plan (CoSWMP) in 1976. The CoSWMP was last revised in late 1985. In January of 1990, Assembly Bill (AB) 939, the California Integrated Waste Management Act of 1989, became effective, establishing the integrated waste management planning process which involves all methods of handling the solid waste stream-from reduction of solid waste to landfill disposal. AB 939 eliminated the requirement for a CoSWMP and instituted a requirement for a CoIWMP.

With the enactment of AB 939, the State of California has required each city and county to prepare solid waste management planning documents that demonstrate reduction of the amount of solid waste landfilled, long-term ability to ensure the implementation of countywide diversion programs, and provision of adequate disposal capacity for local jurisdictions through the siting of disposal and transformation facilities. This planning document is known as the Countywide Integrated Waste Management Plan (CoIWMP) and includes the Source Reduction and Recycling Element (SRRE), Household Hazardous Waste Element (HHWE), Non-Disposal Facility Element (NDFE), and the Siting Element.

In 1995, the SCWMA was designated a regional agency as defined under Section 40970 of the California Public Resource Code, for the purpose of implementing, monitoring and reporting programs to meet the goals established by AB 939. In addition, the SCWMA also assumed the responsibility of maintaining all AB 939 planning documents for Sonoma County jurisdictions.

In 1997, Senate Bill 1066 modified Section 41785 of the California Public Resources Code to allow

jurisdictions to request time extensions in order to meet the 50% diversion goal. In 2002, the California Integrated Waste Management Board (CIWMB) approved the SCWMA's time extension which describes how the SCWMA and its member jurisdictions will meet the 50% diversion goal by the year 2003. In 1999, the County of Sonoma and the AB 939 Local Task Force (LTF) began a 12-month planning process that evaluated a wide range of solid waste management options to develop a long range solid waste disposal strategy. The Sonoma County Solid Waste Management Alternatives Analysis Project Final Report (December, 2000) recommended a strategy that included:

- Fully utilizing the existing waste management resources/infrastructure in both the public and private sectors. Strategy elements include Central Landfill expansion, a flow control policy, and mandatory recycling opportunities.
- Maximizing waste diversion and resource utilization at a reasonable cost based on generator responsibility to extend the useful life of an expanded Central Landfill and minimize the size necessary for a new landfill in the County. Strategy elements include mandatory recycling and an integrated resource management facility that could include organic processing and green waste processing.
- Complementing and enhancing existing and planned operations for collection/processing of refuse and recyclables, recognizing the historically accepted private sector role fulfilled through franchise agreements.

The Sonoma County Board of Supervisors and the Sonoma County Waste Management Agency accepted these recommendations and directed staff to take the necessary actions to implement them. Pursuant to this direction, the programs included in the above recommendations are described throughout Chapter 4 of the 2003 CoIWMP. Implementation of this long-term strategy would provide solid waste disposal capacity at least to the year 2050.

The SCWMA will be responsible for maintaining and administering the 2003 CoIWMP. The 2003 CoIWMP is designed to provide direction for the solid waste management system in Sonoma County by providing programs for handling solid waste in Sonoma County for the short-term (2000-2008) and medium-term (2009-2018) planning periods and for a 50-year disposal horizon (long-term). The CoIWMP also describes the process and criteria the SCWMA, the County, and the cities intend to use in siting additional solid waste disposal sites.

# 1.3 EIR REVIEW AND CONSIDERATION PROCESS

The SPEIR will be subject to a 45-day review period, during which the SCWMA will hold a public hearing to solicit comments on the adequacy and contents of the document. Interested individuals, organizations, and agencies can also provide written comments on the document during this same review period.

During the public review period, the SPEIR will be circulated for review by trustee agencies (agencies which have jurisdiction by law over natural resources affected by the project which are held in trust for the people of the State of California) and responsible agencies (agencies other than the Lead Agency which have discretionary approval power over the project). Copies of the SPEIR will be made

available to the public at the County of Sonoma, Department of Transportation and Public Works and at local libraries throughout the County.

Because the CIWMB, the County, and the cities located in the County must review and approve the 2003 CoIWMP, they are considered responsible agencies under CEQA. These and other agencies listed below are considered responsible, or trustee agencies, because they will likely require permit(s) for the expansion of existing solid waste management facilities, the construction of new facilities, or because they are responsible for protecting resources that may be affected by implementing the 2003 CoIWMP.

The responsible and trustee agencies for the 2003 CoIWMP SPEIR include:

#### FEDERAL

Army Corps of Engineers U.S. Fish and Wildlife Service National Marine Fisheries Service

#### STATE

California Integrated Waste Management Board Department of Fish and Game Department of Transportation California Coastal Commission State Water Resources Control Board

#### REGIONAL

Bay Area Air Quality Management District Northern Sonoma County Air Pollution Control District San Francisco Bay Regional Water Quality Control Board North Coast Regional Water Quality Control Board San Francisco Bay Conservation and Development Commission

# LOCAL

City of Cloverdale City of Cotati City of Healdsburg City of Petaluma City of Rohnert Park City of Santa Rosa City of Sebastopol City of Sonoma Town of Windsor County of Sonoma

Comments and questions on the SPEIR received during the review period will be compiled in a Response to Comments Document. The SPEIR and the Response to Comments Document will constitute the Final Supplemental Program Environmental Impact Report (FSPEIR) for the proposed 2003 CoIWMP. After examining the FSPEIR, the SCWMA will determine whether or not to certify that the FSPEIR is adequate, has been completed in compliance with CEQA, and that the information presented in the

FSPEIR has been independently reviewed and will be considered prior to approval of the 2003 CoIWMP. It should be noted that certification of an EIR does not constitute project approval; rather, it is a necessary step that precedes project approval. As the Lead Agency representing the County and the cities, the SCWMA will consider the information in the FSPEIR in determining whether the project should be approved, modified, or rejected. The County and any of the cities that intend to implement a program of the 2003 CoIWMP will be able to use this FSPEIR as the environmental document for the program.

In order for a lead agency to approve a project (after certifying the Final SPEIR), it must prepare written findings for each significant adverse environmental effect identified. Findings must be accompanied by a brief explanation of the rationale for each finding and should indicate that either (1) changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment, (2) those changes or alterations are the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that agency, or (3) specific economic, legal, social, technological, or other considerations, including the consideration for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the SPEIR.

# 1.4 ORGANIZATION OF THIS SPEIR

Following this introduction is a summary section which briefly summarizes the 2003 CoIWMP, lists all of the impacts identified and elaborated on in the 13 environmental issue sections, identifies areas of controversy and issues to be resolved, and provides a summary of alternatives. Section 3 provides a description of the proposed project, i.e., a summary of the 2003 CoIWMP.

Sections 4 through 16 contain the topical analysis of potential impacts that could result from implementing the proposed 2003 CoIWMP. Each of these sections is organized into an introduction on the environmental issue under consideration, the setting in the County with respect to that environmental issue, specification of significance criteria (significance criteria were based on CEQA Guidelines Section 15382 and CEQA Guidelines Appendix G), and a discussion of the impacts and recommended mitigation measures.

Section 17 contains discussions on cumulative impacts, growth inducing impacts, and other discussions required by CEQA.

Section 18 describes and compares the relative impacts of the three alternatives to the proposed 2003 CoIWMP. This section also provides a brief description of alternatives identified but rejected.

Section 19 identifies the agencies, organizations, and individuals consulted in preparing the SPEIR.

The authors of this document are listed in Section 20, and Section 21 lists the references cited. The appendices to this SPEIR are included near the end of the document; see the Table of Contents for the complete list of impact sections and appendices.

# 1.5 POTENTIAL PERMITS AND APPROVALS REQUIRED

The following is a list of potential local, regional, state, and federal permits and approvals which may be required to implement the proposed 2003 CoIWMP.

#### LOCAL AGENCIES

Proposed facilities and the expansion of existing facilities identified in the 2003 CoIWMP may require a general plan amendment, zoning ordinance amendment, conditional/special use permit, a variance, or other discretionary approval or entitlement, depending on the consistency of each project with the general plan and zoning ordinance(s) of the agencies listed below.

City of Rohnert Park
City of Santa Rosa
City of Sebastopol
City of Sonoma
Town of Windsor

These jurisdictions would consider the certified final SPEIR for the 2003 CoIWMP prior to approving future solid waste projects and policies, including flow control. For example, all proposed activity involving the placement of encroachments that would be in, under, or over the County or City rights-of-way must be covered by an Encroachment Permit from the appropriate agency (typically the Public Works Department of the jurisdiction listed above). Other permits and plans particular to individual local agencies, including business and emergency response plans, may also be required. These would typically be issued by the appropriate jurisdiction's public works, building, or Certified Unified Program Agency (CUPA) and would focus on the construction, operation, and maintenance of a specific project.

#### **REGIONAL AGENCIES**

#### Bay Area Air Quality Management District (AQMD) or Northern Sonoma County Air Pollution Control District (APCD)

Project proponents proposing to construct, modify or operate a facility or equipment that may emit pollutants from a stationary source into the atmosphere must obtain an Authority to Construct and Permit to Operate from the appropriate regional AQMD or APCD.

#### San Francisco Bay Regional Water Quality Control Board or North Coast Regional Water Quality Control Board (RWQCB)

The owner or operator of any facility that is currently discharging or will be discharging waste into any surface waters (e.g. rivers, creeks, lakes) of the State must meet waste discharge requirements pursuant to a federal National Pollutant Discharge Elimination System (NPDES) permit from the appropriate RWQCB. Examples of activities that require an NPDES permit include storm water runoff discharges (municipal, industrial, and construction).

#### San Francisco Bay Conservation and Development Commission (BCDC)

Project proponents proposing to fill, extract materials, or change the use of water, land, or structures in and around the San Francisco Bay must obtain a Development Permit from the BCDC.

#### STATE AGENCIES

#### California Coastal Commission (CCC)

Project proponents proposing development within California's coastal zone must obtain a Coastal Development Permit from the CCC, or from the city or county with authority to issue such permits in accordance with their Local Coastal Plans.

#### California Integrated Waste Management Board (CIWMB)

Project proponents proposing to operate a solid waste facility including landfills, transfer-processing stations, compost facilities, and waste-to-energy facilities must first obtain a Solid Waste Facilities Permit from the local enforcement agency (LEA), Sonoma County Department of Health Services. The CIWMB must concur in the issuance of a proposed permit before it may be issued by the LEA. For example, proponents proposing to operate a waste tire facility which will store 500 or more tires must obtain a Waste Tire Facility Permit from the CIWMB. LEAs may exempt certain types of solid waste facilities from the requirement of obtaining a permit with the approval of the CIWMB.

#### State Water Resources Control Board (SWRCB)

The SWRCB requires filing a Notice of Intent with their agency to be covered under the NPDES General Permit and preparation of a Storm Water Pollution Prevention Plan (SWPPP).

#### California Department of Fish and Game (CDFG)

Any activity that will divert or obstruct the natural flow or change the bed, channel or bank of any river, stream, or lake, or that proposes to use any material from a streambed must enter into a Streambed or Lake Alteration Agreement with the CDFG. As a general rule, this requirement applies to any work undertaken within the annual high-water mark of a wash, stream, or lake which contains or once contained fish and wildlife or once supported riparian vegetation.

#### **California Department of Transportation (CalTrans)**

All proposed activity involving the placement of encroachments within, under, or over the State Highway right-of-way must be covered by an Encroachment Permit issued by CalTrans.

#### FEDERAL AGENCIES

#### Army Corps of Engineers (COE)

Project proponents proposing to locate a structure, excavate, or discharge dredged or fill materials into waters of the United States must obtain a COE 404 Permit.

#### U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS)

Consultation with the USFWS and NMFS is required if a proposed project has the potential to impact any federally listed threatened or endangered species.

# **SECTION 2**

### 2.1 PROJECT DESCRIPTION SUMMARY

This document is a Supplemental Program Environmental Impact Report (SPEIR) on the updated Countywide Integrated Waste Management Plan (2003 CoIWMP), prepared by the Sonoma County Waste Management Agency (SCWMA) in compliance with its environmental procedures, the California Environmental Quality Act (CEQA), and the California Integrated Waste Management Act of 1989 (AB 939) respectively. It provides an analysis of the potential environmental effects which would be associated with the implementation of the programs and facilities proposed in the 2003 CoIWMP. Certification of the SPEIR, by the SCWMA as lead agency, is required prior to the adoption of the proposed 2003 CoIWMP.

This SPEIR carries forward and incorporates by reference the impacts and mitigation measures certified in the 1996 CoIWMP EIR. Impacts and mitigation measures in this SPEIR are identified as either unchanged, revised, additions, or new. These impacts and mitigation measures address the implementation and operation of the programs and facilities proposed in the 2003 CoIWMP, in accordance with the more recent CEQA requirements adopted subsequent to the certified 1996 CoIWMP EIR. The impacts and mitigation measures identified in the SPEIR are summarized in Table 2-1.

In general, the 2003 CoIWMP proposes: 1) a formal agreement among all cities and the County to direct flow of refuse and green waste to solid waste facilities in Sonoma County; 2) a mandatory access to recycling facilities for residential, commercial, industrial, and institutional waste generators; 3) an expansion of the Central Landfill beyond its current permitted capacity (e.g., beyond the year 2015); and 4) the siting of an integrated RMF to include organic processing (anaerobic digestion), green waste composting and landfilling.

The proposed 2003 CoIWMP includes the following elements and components:

Source Reduction and Recycling Element (SRRE)

- Mandatory Recycling Opportunities.
- Flow Control Policy.
- Resource Management Facility (RMF).
- Composting Facility(s) at Location(s) other than the Central Disposal Site.
- New Transfer Station in the Santa Rosa Area.
- Conversion of the Central Disposal Site to a Transfer Station.

#### Household Hazardous Waste Element (HHWE)

• Minor revisions/updates will be made to the HHWE.

#### Non-Disposal Facility Element (NDFE)

• Revisions/updates will be made to the NDFE to reflect changes in programs in the SRRE.

#### Siting Element

• Revision to Central Disposal Site Expansion.

- Revision to New Landfill Siting including :
  - Landfilling Residue from the RMF.
  - Landfill Management with the Bioreactor Technology.

# 2.2 IMPACT SUMMARY

This SPEIR addresses each of the potential impacts identified in the Initial Study Checklist for the Notice of Preparation (Appendix B). Significant and unavoidable impacts have been identified for Land Use (Section 4), Soils and Agricultural Resources (Section 6), Hydrology and Water Quality (Section 7), Public Safety (Section 8), Transportation (Section 9), Air Quality (Section 10), Noise (Section 11), Vegetation and Wildlife (Section 12), and Visual Resources (Section 14). Significant and unavoidable cumulative impacts have not changed from the 1996 CoIWMP EIR and have been identified in this SPEIR for land use, geology and seismicity, soils and agricultural resources, hydrology and water quality, public safety, transportation, air quality, noise, vegetation and wildlife, cultural and paleontological resources, visual impact, population and housing, public services, recreation, utilities, and energy. All other impacts would be less than significant or could be reduced to a less-than-significant level with the implementation of the proposed mitigation measures.

The Siting Element of the 2003 CoIWMP includes plans for expansion of the Central Landfill and siting of a new landfill. General impacts of these facilities are described and program-level mitigation measures are identified. Site specific impacts of future disposal and non-disposal projects will be evaluated pursuant to CEQA after the certification of this document. Table 2.1 provides a summary of environmental impacts of both non-disposal and disposal projects.

# 2.3 AREAS OF CONTROVERSY

Section 15123(b) of the CEQA Guidelines requires identification of areas of controversy known to the Lead Agency and issues to be resolved.

The SCWMA is not aware of any controversy related to the proposed 2003 CoIWMP. However, it is anticipated that controversy may occur regarding the expansion of the existing Central Landfill and the development of new non-disposal facilities. Disposal site expansion and development of transfer stations and composting operations can be challenging because people generally prefer that disposal and non-disposal sites not be located near their own properties. By soliciting early consultation in the siting process, controversial issues are expected to benefit from public participation.

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

SECTION 4 - LAND USE (LU)					
<ul> <li>LU Impact 4-1 Surrounding Land Use Conflicts (Non-Disposal Facilities)</li> <li>The construction of new solid waste non-disposal facilities could conflict with surrounding land uses.</li> </ul>	S	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.	LTS		
LU Impact 4-2 Surrounding Land Use Conflicts (Landfill) The construction of new and expanded solid waste disposal facilities could conflict with surrounding land uses.	S	<i>Mitigation Measure 4-2</i> Same as Mitigation Measure 4-1.	SU		
<i>LU Impact 4-3 Open Space (Landfill)</i> The construction of new solid waste disposal facilities could result in the loss of important open space or other resource lands.	S	<i>Mitigation Measure 4-3</i> There are no mitigation measures for the loss of important resource lands or for the change in character of the lands.	SU		
* LU Impact 4-4 Mineral Resources (Landfill) Location of a new landfill may affect availability of mineral resources.	S	* <i>Mitigation Measure 4-4</i> 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.	LTS		

Revised Impacts & Mitigation Measures; •Additions to Impacts & Mitigation Measures; \* New Impacts & Mitigation Measures

Before	After
Mitigation	Mitigation

SECTION 5 - GEOLOGY (G)					
G Impact 5-1 Surface Faulting and Ground Shaking (Non-Disposal Facilities) New and expanded non-disposal facilities could be subject to potentially damaging seismically-induced surface faulting and ground shaking.	S	<ul> <li>Mitigation Measure 5-1 <ul> <li>(a) Non-disposal facilities shall be built a sufficient distance from earthquake fault zones as restricted by state and federal regulatory requirements.</li> <li>(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.</li> <li>(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 jurisdiction's building department indicating compliance with the UBC.</li> <li>(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.</li> </ul> </li> </ul>	LTS		
<b>G Impact 5-2 Liquefaction (Non-Disposal Facilities)</b> New and expanded non-disposal facilities could be subject to potentially damaging seismically-induced liquefaction.	S	<ul> <li>Mitigation Measure 5-2</li> <li>(a) Same as Mitigation Measures 5-1 (b) and 5-1 (d).</li> <li>(b) All new or expanded non-disposal facilities that are susceptible to seismic ground failure shall include project designs for building and road foundations to withstand potential liquefaction impacts.</li> </ul>	LTS		

Revised Impacts & Mitigation Measures; •Additions to Impacts & Mitigation Measures; \* New Impacts & Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
G Impact 5-3 Surface Faulting and Ground Shaking (Landfill) New and expanded solid waste disposal facilities could be subject to potentially damaging seismically induced surface faulting and ground shaking.	S	<ul> <li>Mitigation Measure 5-3</li> <li>(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.</li> <li>(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.</li> <li>(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.</li> <li>(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.</li> <li>(c) In accordance with state and federal regulations, restrict the development of landfills in geologically unstable areas.</li> <li>(f) In accordance with state and federal regulations, restrict the development of landfills in seismic impact zones unless containment structures are engineered and constructed to preclude failure during rapid geologic change.</li> </ul>	LTS
■ G Impact 5-4 Liquefaction (Landfill) New solid waste disposal facilities could be subject to potentially damaging seismically induced liquefaction.	S	<ul> <li>Mitigation Measure 5-4</li> <li>(a) Same as Mitigation Measures 5-3 (a through f)</li> <li>(b) All new or expanded disposal facilities that are susceptible to seismic ground failure shall include project designs for building and road foundations to withstand potential liquefaction impacts.</li> </ul>	LTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
* <i>G Impact 5-5 Slope Failures (Landfill)</i> The West Expansion area at the Central Disposal Site and the future landfill could cause significant damage on- and off-site as a result of slope failures, and landsliding could potentially bring refuse to the surface, creating health hazards.	S	* <i>Mitigation Measure 5-5</i> The grading plan for the West Expansion area at the Central Disposal Site and the future landfill will incorporate design features and grading procedures 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.	LTS
*G Impact 5-6 Subsidence and Settlement (Landfill) Settlement of the landfill material at the Central Disposal Site and the future landfill is expected to occur during decomposition of the refuse material. Settlement of refuse has the potential for disrupting the surface drainage pattern and causing ponding on the landfill, and it could also potentially disrupt the gas collection system.	S	*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.	LTS

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

SECTION 6 - SOILS AND AGRICULTURAL RESOURCES (SA)			
<ul> <li>SA Impact 6-1 Erosion and Siltation (Non-Disposal Facilities)</li> <li>Siting and construction of new or expanded non-disposal facilities on sites with unstable slope conditions or high erosion potential could result in erosion and siltation.</li> </ul>	<u>S</u>	<ul> <li>Mitigation Measures 6-1 <ul> <li>(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.</li> <li>(b) All new facilities shall meet the requirements of the County or cities' standards pertaining to site design, grading, and erosion control.</li> <li>(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.</li> </ul> </li> </ul>	LTS
		<ul> <li>(d) Employ Best Management Practices as required under the NPDES Permit for Construction grading.</li> <li>(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.</li> <li>(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: <ol> <li>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.</li> <li>Areas of surface disturbance should be minimized.</li> <li>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.</li> </ol> </li> </ul>	

Impact	Significance	Mitigation Measures	Significance
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■ SA Impact 6-2 Agricultural Production (Non- Disposal Facilities) Siting new or expanded non-disposal facilities on agricultural land will impair agricultural production.	S	<i>Mitigation Measures 6-2</i> 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.	SU
• SA Impact 6-3 (a) Erosion and Siltation (Landfill) Development of a new landfill and the expansion of the Central Landfill could have potentially significant adverse soil related impacts. These potential impacts include substantial erosion and siltation.	S	<ul> <li>Mitigation Measure 6-3 (a)</li> <li>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:</li> <li>(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.</li> <li>(b) A construction schedule for components of the erosion control system.</li> <li>(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 tackfier 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.</li> <li>(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.</li> <li>(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.</li> </ul>	SU

S=Significant; LTS=Less than Significant; SU=Significant Unavoidable

■ Revised Impacts & Mitigation Measures; ●Additions to Impacts & Mitigation Measures; \* New Impacts & Mitigation Measures

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	Mitigation		Mitigation

■ SA Impact 6-3 (a) Erosion and Siltation (Landfill) (continued)	S	<ul> <li>(Mitigation Measure 6-3(a) continued)</li> <li>(g) An inspection and/or maintenance schedule for critical parts of the sediment control system, including sediment ponds and drainage ways.</li> <li>(h) A schedule for winterizing that will ensure that critical work is done prior to October 15th each</li> </ul>	SU
		year.	
* Impact 6-3(b) Conversion of Agricultural Land (Landfill) Development of a new landfill and the expansion of the Central Landfill could significantly impact agricultural lands. These potential impacts could include the conversion of prime farmland, unique farmland, farmland of statewide importance; conflicts with existing zoning for agricultural use, or a Williamson Act contract; or involve other changes to the environment that could result in the conversion of farmland to non-agricultural use.	S	* <i>Mitigation Measure 6-3(b)</i> 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.	SU

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

SE	SECTION 7 - HYDROLOGY AND WATER QUALITY (HWQ)			
HWQ Impact 7-1 Pollutants in Stormwater Runoff (Non-Disposal Facilities) Construction and operation of new and expanded non- disposal facilities could adversely affect the quality of stormwater runoff.	S	<ul> <li>Mitigation Measure 7-1         <ul> <li>(a) Stormwater runoff from waste handling areas shall be treated on site or routed to the sanitary sewer for treatment prior to discharge.</li> <li>(b) To the extent feasible, materials handling and storage areas shall be covered to prevent contact with stormwaters.</li> <li>(c) All exterior drainage from each site shall be managed in accordance with the requirements of federal NPDES, state, and local regulations.</li> </ul> </li> </ul>	LTS	
HWQ Impact 7-2 Flooding and Increased Runoff (Non-Disposal Facilities) Construction and operation of new and expanded non- disposal facilities could increase runoff volumes and could contribute to flooding downstream.	S	<ul> <li>Mitigation Measure 7-2</li> <li>(a) To the extent feasible, new facilities shall be located outside of areas at high risk for flooding.</li> <li>(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.</li> </ul>	LTS	
HWQ Impact 7-3 Soil Erosion (Non-Disposal Facilities) Grading activities associated with the new and expanded non-disposal facilities could adversely affect water quality.	S	<ul> <li>Mitigation Measure 7-3         <ul> <li>(a) Employ Best Management Practices as required under the NPDES Permit for Construction grading.</li> <li>(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.</li> <li>(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:</li></ul></li></ul>	LTS	

S=Significant; LTS=Less than Significant; SU=Significant Unavoidable

■ Revised Impacts & Mitigation Measures; ●Additions to Impacts & Mitigation Measures; \* New Impacts & Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
HWQ Impact 7-3 Soil Erosion (Non-Disposal Facilities) (continued)	S	<ul> <li>(Mitigation Measure 7-3 continued)</li> <li>2. Areas of surface disturbance should be minimized.</li> <li>3. 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.</li> <li>• (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.</li> <li>• (c) All new facilities shall meet the requirements of the County or cities' standards pertaining to site design, grading, and erosion control.</li> <li>• (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.</li> <li>(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.</li> <li>(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 co</li></ul>	LTS
HWQ Impact 7-4 Household Hazardous Waste (Non- Disposal Facilities) On-site handling and temporary storage of household hazardous waste at non-disposal facilities could adversely affect water quality.	S	<ul> <li>Mitigation Measure 7-4</li> <li>(a) Same as Mitigation Measures 7-1(a), 7-1(b) and 7-1(c).</li> <li>(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.</li> </ul>	LTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<i>HWQ Impact 7-5 Leachate (Landfill)</i> The operation of new and expanded solid waste disposal facilities could result in an increase in leachate production, which could lead to degradation of County water quality.	S	<ul> <li>Mitigation Measure 7-5 <ul> <li>(a) Cover materials (soil) shall be placed over waste materials at the end of each day to prevent water from ponding on the landfill.</li> <li>(b) A low-permeability final landfill cover, as required by CCR, Title 23, Chapter 15, shall be placed over the landfill during closure.</li> <li>(c) The volume of fluid that enters the landfill shall be minimized by prohibiting the disposal of liquid waste.</li> <li>(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.</li> <li>(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).</li> <li>(f) Current industry standards for leachate management shall be implemented (e.g., storing leachate to the nearest wastewater treatment plant capable of treating the lachate and not exceeding effluent discharge limits.</li> <li>(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.</li> <li>(h) Construction of all new landfill cells will comply with the requirements of Title 27 for liner impermeability.</li> <li>(i) A landfill leachate and wastewater management program will be implemented which will include monitoring leachate levels and wastewater and emptying ponds as necessary to ensure adequate storage capacity.</li> </ul> </li> </ul>	LTS

S=Significant; LTS=Less than Significant; SU=Significant Unavoidable

Revised Impacts & Mitigation Measures; •Additions to Impacts & Mitigation Measures; \* New Impacts & Mitigation Measures

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

HWQ Impact 7-5 Leachate (Landfill) (continued)	S	<ul> <li>(Mitigation Measure 7-5 continued)</li> <li>•(j) Investigate and consider methods for treatment of leachate and wastewater on-site and disposal by irrigation at any expanded or new landfill site.</li> <li>•(k) All exterior drainage from each landfill site shall be managed in accordance with the requirements of federal NPDES, state, and local regulations.</li> </ul>	L TS
<i>HWQ Impact 7-6 Quality of Stormwater Runoff</i> ( <i>Landfill</i> ) The construction and operation of new and expanded solid waste disposal facilities could adversely affect the quality of stormwater runoff.	S	<ul> <li>Mitigation Measure 7-6</li> <li>(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.</li> <li>(b) All exterior drainage from each site shall be managed in accordance with the requirements of federal NPDES, state, and local regulations.</li> </ul>	LTS
■ <i>HWQ Impact 7-7 Water Quality (Landfill)</i> Grading activities associated with the new and expanded solid waste disposal facilities could adversely affect water quality.	S	<ul> <li>Mitigation Measure 7-7</li> <li>Same as Mitigation Measures 7-3 (a) through (f) and (h). In addition the following Mitigation Measure is added:</li> <li>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.</li> </ul>	LTS

Revised Impacts & Mitigation Measures; •Additions to Impacts & Mitigation Measures; \* New Impacts & Mitigation Measures

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

HWQ Impact 7-8 Volume and Flow of Surface Waters(Landfill) The operation of new and expanded solid waste disposal facilities could significantly alter the volume and flow of surface waters.	S	<ul> <li>Mitigation Measure 7-8 <ul> <li>(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).</li> <li>(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.</li> <li>(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.</li> <li>(d) Prior to the rainy season, drainage facilities shall be inspected and, if necessary, cleared of debris.</li> <li>(e) Drainage facilities shall be inspected after the first significant rain of the season to ensure that the system is functioning.</li> <li>(f) Runoff from areas upgradient of the landfill shall be routed around the landfill.</li> </ul> </li> </ul>	LTS
		(g) Landfills shall not be developed within a 100-year floodplain (40 CFR 258).	
*HWQ Impact 7-9 Water Supply (Landfill and Non- Disposal Facilities) Construction and operation of an expanded or new landfill, the RMF or other proposed facilities such as composting operations could use significant amounts of groundwater.	S	<ul> <li>* Mitigation Measure 7-9</li> <li>(a) New waste management facilities will use water conservation techniques such as reclaimed water use and water recycling where feasible.</li> <li>(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 support of a properties.</li> </ul>	SU

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

* <i>HWQ Impact 7-10 Blasting Spills (Landfill)</i> Blasting for excavation of landfill cells could involve spills of blasting materials, resulting in surface water contamination.	S	* <i>Mitigation Measure 7-10</i> 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.	LTS
*HWQ Impact 7-11 Ground Vibrations from Blasting (Landfill) Blasting near an existing landfill could cause fractures to open in bedrock or damage or displace the landfill liner as a result of ground vibrations. This would create the potential for leachate intrusion into groundwater.	S	* <i>Mitigation Measure 7-11</i> 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.	LTS
* HWQ Impact 7-12 Groundwater Recharge (Non- Disposal Facilities) Loss of groundwater recharge from large non-disposal facilities (i.e., composting facilities) could occur from impermeable surfaces.	S	* <i>Mitigation Measure 7-12</i> 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.	LTS

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

SECTION 8 - PUBLIC SAFETY (PS)			
PS Impact 8-1 Injury & Illness (Non-Disposal Facilities and Landfill) New and expanded non-disposal facilities and landfill may give rise to the potential for injury and illness among collection program and facility employees.	S	<ul> <li>Mitigation Measure 8-1 <ul> <li>(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.</li> <li>(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.</li> <li>(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.</li> <li>(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.</li> <li>(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.</li> <li>(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.</li> <li>(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.</li> </ul> </li> </ul>	LTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
PS Impact 8-2 Fungi and Bacteria (Non-Disposal Facilities) Workers in new and expanded non-disposal facilities and participation by the general public in backyard composting programs identified in the CoIWMP could result in health problems for susceptible persons exposed to allergenic fungi and infectious bacteria (e.g. aspergillous).	S	<ul> <li>Mitigation Measure 8-2 <ul> <li>(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.</li> <li>(b) Composting operations at new or expanded composting facility(ies) shall include the following procedures:</li> <li>1. Proper moisture content shall be maintained in compost piles or windrows.</li> <li>2. Proper temperatures and oxygen content shall be maintained in compost piles or 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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li></ul></li></ul>	LTS
<ul> <li>PS Impact 8-3 Household Hazardous Wastes (Non- Disposal Facilities and Landfill)</li> <li>HHW programs identified in the 2003 CoIWMP may increase the potential for public health impacts in surrounding areas.</li> </ul>	S	<ul> <li>Mitigation Measure 8-3</li> <li>(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.</li> </ul>	LTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
PS Impact 8-3 Household Hazardous Wastes (Non- Disposal Facilities and Landfill) (continued)	S	<ul> <li>Mitigation Measure 8-3 continued <ul> <li>(b) An emergency response 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.</li> <li>(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.</li> <li>(d) Employee safety meetings shall be conducted, as necessary, by the program safety inspector.</li> <li>(e) All vehicles shall be inspected, as necessary, for safety violations by the program safety inspector and facility employees.</li> <li>(f) An on-site eye wash and shower station shall be provided at all mobile and stationary HHW collection sites.</li> <li>(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.</li> <li>(h) A training program for facility personnel in CPR and first aid shall be provided by the program safety inspector.</li> <li>(h) A training program for facility personnel in CPR and first aid shall be provided by the program safety inspector. All spilled material shall be collected and treated separately to prevent the spread of any hazardous constituents.</li> <li>(j) Any risk posed by unauthorized access to any non-disposal site shall be mitigated by posting warning signs, fincing, part personnel, or the disabiling of equipment when not in use. Daily inspections would be the responsibility of the facility operations manager.</li> </ul> </li> </ul>	LTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
PS Impact 8-4 Exposure of Employees and the General Public to Accidental Injury (Non-Disposal Facilities) Construction and operation of new and expanded non-disposal facilities and landfills could expose employees and the general public to accidental injury.	S S	<ul> <li>Mitigation Measures 8-4 <ul> <li>(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.</li> <li>(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.</li> <li>(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.</li> <li>(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 sev bath and emergency showers shall be installed in the facility by the project sponsor.</li> <li>(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 by either the program operations manager or the safety inspector.</li> </ul> </li> </ul>	LTS
		facility employees.	

Impact	Significance	Mitigation Measures	Significance
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	Mitigation		Mitigation

<ul> <li>PS Impact 8-5 Accidental Combustion and Exposure of Toxic Substances (Non-Disposal Facilities and Landfill)</li> <li>Processes inherent in the operation of new and expanded non-disposal facilities and landfills could result in accidental combustion of materials accumulated for transfer and storage and expose area residents to toxic substances and/or increased fire or explosion potential.</li> </ul>	S	<ul> <li>Mitigation Measure 8-5 Same as Mitigation Measure 8-4 (a) through (e). In addition, the following Mitigation Measures have been added:</li> <li>(a) 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.</li> <li>(b) 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.</li> <li>(c) 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.</li> </ul>	LTS
PS Impact 8-6 Vectors (Non-Disposal Facilities and Landfill) Operation of new and expanded non-disposal facilities and landfills may lead to habitation of vectors in and around the facilities.	S	<ul> <li>Mitigation Measures 8-6</li> <li>(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.</li> <li>(b) Landscape materials shall exclude plants, such as ivy, which may provide hidden nesting areas for rodents.</li> <li>(c) Standing water and moist areas shall be controlled to prevent mosquito breeding. This shall be monitored by the facility operations manager.</li> </ul>	LTS

Revised Impacts & Mitigation Measures; •Additions to Impacts & Mitigation Measures; \* New Impacts & Mitigation Measures

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

PS Impact 8-7 Public Safety (Non-Disposal Facilities and Landfill) Development of a new and expanded non-disposal facilities and landfill or expansion of the Central Landfill would likely have potentially significant adverse impacts on public safety.	S	<ul> <li>Mitigation Measure 8-7 Mitigation measures will result from the site specific CEQA review process, and will include the general following mitigation measures:</li> <li>(a) Same as Mitigation Measures 8-3 (b), (d), (e), (g), (h), and (j) and Mitigation Measures 8-4 (c) and (d).</li> <li>(b) 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.</li> <li>(c) Standing water and moist areas shall be controlled to prevent mosquito breeding. This shall be monitored by the facility operations manager.</li> <li>(d) 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.</li> </ul>	SU
*PS Impact 8-8 Biorefining Chemicals (Non-Disposal Facility) One type of organics processing being considered for the RMF known as chemical or biological digestion, could involve the transportation, use and disposal of hazardous material to facilitate the digestion process. Improper handling could result in spills, which could expose people to these materials.	S	<ul> <li>* Mitigation Measure 8-8</li> <li>If hazardous materials are used at the RMF, the following mitigations will be implemented:</li> <li>(a) Same as Mitigation Measures 8-3 (b) through (d) and (f) through (j).</li> <li>(b) 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.</li> </ul>	LTS
Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
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*PS Impact 8-9 Blasting for Landfill Excavation (Landfill) Significant vibration impacts could result from blasting for the excavation for landfill construction.	S	<ul> <li>* Mitigation Measure 8-9</li> <li>(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: <ol> <li>All blasts will be designed to minimize peak particle velocity at the nearest off-site structures.</li> <li>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.</li> </ol> </li> <li>(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</li> </ul>	LTS
*PS Impact 8-10 State-Designated Contaminated Sites (Non-Disposal Facilities and Landfill) New facilities could be sited on lands designated by the state as containing hazardous materials contamination.	S	* Mitigation Measure 8-10 In the event that a facility is located on a designated contaminated site, a 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.	LTS
*PS Impact 8-11 Emergency Response and Evacuation Plans (Non-Disposal Facilities and Landfill) New facilities or expansion of existing non-disposal facilities or landfill may not be covered by existing emergency response and evacuation plans of the county or incorporated cities.	S	* <i>Mitigation Measure 8-11</i> Update the existing or develop an Emergency Response and Evacuation Plan for each new or expanded facility in accordance with relevant county or city emergency response plans, and follow it in the event of a fire, earthquake, hazardous materials spill or other emergency. Each emergency response 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.	LTS

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

*PS Impact 8-12 Hazardous Materials Adjacent to Schools (Non-Disposal Facilities and Landfill) Hazardous materials could be handled within a quarter mile of a school.	S	<ul> <li>* Mitigation Measure 8-12</li> <li>(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.</li> <li>(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.</li> </ul>	LTS
* Impact 8-13 Wildland Fires (Non-Disposal Facilities and Landfill) Wildland fires could occur adjacent to new or expanded non-disposal facilities and landfills.	S	<ul> <li>* Mitigation Measure 8-13</li> <li>(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.</li> <li>(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.</li> <li>(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.</li> </ul>	LTS

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

	S	ECTION 9 - TRANSPORTATION (T)	
■ T Impact 9-1 Operations (Non-Disposal Facilities) The operation of new and expanded non-disposal facilities could result in significant impacts to transportation in Sonoma County.	S	<ul> <li>Mitigation Measure 9-1 <ul> <li>(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;</li> <li>(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.</li> <li>(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 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.</li> </ul> </li> <li>(d) Countywide Traffic Mitigation fees shall be paid for new facilities implemented in accordance with the 2003 ColWMP to belp mitigate off-site cumulative traffic impacts.</li> </ul>	LTS
• <i>T Impact 9-2 Operations (Landfill)</i> The operation of new solid waste disposal facilities, including rock extraction activities, could add to existing congestion on roads or intersections that currently operate at an unacceptable level of service, or could cause those roads or intersections to operate at an unacceptable level of service.	S	<ul> <li>Mitigation Measure 9-2         <ul> <li>(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.</li> <li>(b) A site-specific traffic evaluation shall be conducted as part of the siting study 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.</li> <li>(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.</li> </ul> </li> </ul>	SU

S=Significant; LTS=Less than Significant; SU=Significant Unavoidable

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
*T Impact 9-3 Central Disposal Site Rock Extraction Traffic (Landfill) Removal of rock at the Central Disposal Site for commercial purposes would generate significant truck traffic trips hauling rock which would increase congestion at the Stony Point/Roblar or Stony Point/West Railroad intersections.	S	<ul> <li>* 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: <ul> <li>(a) Trucks hauling rock from the landfill quarry shall be restricted so that they do not add traffic to the</li> </ul></li></ul>	SU
		<ul> <li>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.</li> <li>(b) The quarry operator shall pay a traffic mitigation fee to provide a fair-share contribution toward the cost of signalizing the intersections.</li> </ul>	
*T Impact 9-4 Central Disposal Site Expansion Traffic (Landfill) Expansion of the landfill at the Central Disposal Site and permanent operation of the site as a landfill and transfer station would extend existing traffic further into the future (past 2015).	LTS	* <i>Mitigation Measure 9-4</i> 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:	LTS
		(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 the 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.	
		<ul><li>(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.</li><li>(d) Consider restricting traffic 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.</li></ul>	

Impact	Significance	Mitigation Measures	Significance
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*T Impact 9-5 Rock Extraction Traffic Safety (Landfill) Rock extraction at the Central Disposal Site could create transportation safety hazards on haul routes and at the site.	S	* <i>Mitigation Measure 9-5</i> 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.	LTS
*T Impact 9-6 New Facilities Traffic (Non-Disposal Facilities and Landfill) Construction and operation of a new landfill and non- disposal facilities could cause safety problems at its driveway entrance or its access road, or on minor streets that serve the new facility.	S	<ul> <li>* Mitigation Measure 9-6</li> <li>(a) Driveways and access roads for the new landfill and non-disposal facilities shall be designed to the AASHTO standards to ensure safety hazards are minimized. These standards include driveway width, acceleration-deceleration lanes, and turning radius requirements.</li> <li>(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.</li> <li>(c) Design access roads for new facilities to accommodate emergency vehicles in accordance with County Fire Safe Standards.</li> </ul>	LTS

Impact	Significance	Mitigation Measures	Significance
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SECTION 10 - AIR QUALITY (AQ)			
■ AQ Impact 10-1 Air Emissions (Non-Disposal Facilities) Construction and operation of the new and expanded non-disposal facilities could result in significant emissions of carbon monoxide, NO <sub>x</sub> , and ROG. Also, diesel emissions from trucks and equipment would include TACs which could be potentially hazardous if sensitive receptors (homes, schools, hospitals) are located near a new non-disposal facility.	S	<ul> <li>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.</li> <li>Mitigation Measure 10-1 (b) (Construction) <ol> <li>New facilities shall be sited to maximize separation between haul routes/facilities and sensitive receptors to the extent practical.</li> <li>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.</li> <li>The contractor shall reduce NO<sub>xx</sub> 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: <ul> <li>(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.</li> <li>(b) The contractor shall utilize new technologies to control ozone precursor emissions as they become available and feasible.</li> <li>(d) The contractor shall substitute gasoline-powered for diesel-powered equipment where feasible. The contractor shall substitute gasoline-powered for diesel-powered equipment where feasible.</li> </ul> </li> <li>4. Asphalt paving materials shall conform to the most recent guidelines by the air district having jurisdiction. (continued)</li> </ol></li></ul>	SU

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
b. <u></u>	Intigation		Initigation
AQ Impact 10-1 Air Emissions (Non-Disposal Facilities) (continued)	S	<ul> <li>Mitigation Measure 10-1 (c) (Operations)         <ol> <li>Contracts for operation of facilities described in the 2003 CoIWMP shall require contractors 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.</li> <li>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.</li> <li>Alternate technology, such as fuel cell or cleaner burning engines, shall be considered for any electricity generation plant implemented by programs in the 2003 CoIWMP.</li> <li>Mitigation Measure 10-1 (d)</li> <li>If emissions of criteria pollutants are produced by 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.</li> </ol> </li> </ul>	SU
■ AQ Impact 10-2 Construction PM <sub>10</sub> (Non-Disposal Facilities) Construction of new and expanded non-disposal facilities could create significant emissions of PM <sub>10</sub> .	S	<ul> <li>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:         <ol> <li>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.</li> <li>The contractor shall use tarpaulins or other effective covers for haul trucks that travel on public streets and roads.</li> <li>The contractor shall increase the watering frequency for exposed and erodible soil surfaces whenever winds exceed 15 mph.</li> <li>The contractor shall water exposed soil surfaces, including cover stockpiles, roadways, and parking and staging areas, to minimize dust and soil erosion.</li> <li>The contractor shall sweep streets adjacent to the new and expanded non-disposal facilities at the end of each day.</li> <li>The contractor shall control construction, operation, and site maintenance vehicle speed to 15 mph on unpaved roads.</li> </ol> </li> </ul>	LTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
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■ AQ Impact 10-3 Odors (Landfill and Non-Disposal Facilities) Expanded composting operations at the Central Landfill Organic Material Processing Facility could increase odorous gas emissions. In addition, landfill operations including the active landfill face and leachate ponds, and composting facilities at the Central Disposal Site, or elsewhere, could generate odors that could result in offsite complaints at the Central Disposal Site or at a new landfill in a location where people live or work nearby.	S	<ul> <li>Mitigation Measures 10-3 <ul> <li>(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.</li> <li>(b) If odor persists as a problem, compost piles or windrows shall be covered with soil or finished compost to reduce emissions of odors.</li> <li>(c) The landfill will be covered at the end of every day with plastic, soil or other appropriate material.</li> <li>(d) Any cracks in the landfill surface will be repaired as soon as practical.</li> <li>(e) Acidity levels in leachate ponds will be monitored and pH adjusted as necessary to reduce odor problems.</li> <li>(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.</li> </ul> </li> </ul>	SU
■AQ Impact 10-4 (a) Construction (Landfill) The construction of a new landfill or expansion of the Central Landfill could cause significant emissions of criteria pollutants. Also, diesel emissions from trucks and equipment would include TACs which could be potentially hazardous if sensitive receptors (homes, schools, hospitals) are located nearby.	S	■ <i>Mitigation Measure 10-4 (a)</i> Same as Mitigation Measures 10-1 (a), (b), and (c) and 10-2.	SU
• AQ Impact 10-4 (b) Operation (Landfill) The operation of a new landfill or expansion of the Central Landfill could cause significant emissions of criteria pollutants. Also, diesel emissions from trucks and equipment would include TACs which could be potentially hazardous if sensitive receptors (homes, schools, hospitals) are located nearby.	S	<ul> <li>Mitigation Measure 10-4 (b)</li> <li>Same as Mitigation Measure 10-1 (a), (b), and (c). In addition, the following mitigation measure is added:</li> <li>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.</li> </ul>	SU

S=Significant; LTS=Less than Significant; SU=Significant Unavoidable

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*AQ Impact 10-5 Rock Extraction $PM_{10}$ Emissions (Landfill) Blasting and rock crushing for the construction of a new landfill, or expansion of the Central Landfill, may result in $PM_{10}$ emissions that exceed the BAAQMD's or the NSCAPCD's significance thresholds of 15 tons/year.	S	<ul> <li>* Mitigation Measure 10-5</li> <li>Same as Mitigation Measure 10-2. In addition, the following mitigations measures are added:</li> <li>(a) Blasting operations for landfill construction shall be restricted as follows to control dust emissions: <ul> <li>(1) To the extent possible, remove all loose dirt and overburden material from blasting areas prior to drilling blast holes.</li> <li>(2) Spray water over blast areas prior to blasting.</li> <li>(3) No loading of explosives in blast holes or blasts will be conducted when wind speed on site exceeds 15 mph.</li> </ul> </li> <li>(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.</li> </ul>	SU
*AQ Impact 10-6 Rock Extraction Emissions of Criteria Pollutants and TACs (Landfill) Rock extraction for the construction of a new landfill, or expansion of the Central Landfill could result in $NO_x$ emissions from blasting. Operation of excavating equipment, rock crushers, and haul trucks could cause significant emissions of criteria pollutants (e.g., carbon monoxide, $NO_x$ , and ROG) and TACs.	S	<ul> <li>* Mitigation Measure 10-6</li> <li>Same as Mitigation Measures 10-1 (a), (b), and (c). In addition, the following mitigation measure is added:</li> <li>(a) To prevent excessive NO<sub>x</sub> 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.</li> </ul>	SU

Impact	Significance	Mitigation Measures	Significance
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SECTION 11 - NOISE (N)				
■N Impact 11-1 Construction Noise (Non-Disposal Facilities) Construction of new and expanded non-disposal facilities could cause temporary increases in noise levels on, and around, the proposed facilities over the entire period of construction.	S	<ul> <li>Mitigation Measure 11-1         <ul> <li>(a) Construction activities shall be limited to the hours between 7AM and 7PM to the extent practical.</li> <li>(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.</li> <li>(c) The contractor shall attempt to locate stationary noise sources as far away as possible from noise-sensitive land uses.</li> </ul> </li> </ul>	LTS	
■N Impact 11-2 Traffic Noise (Non-Disposal Facilities) Implementation of proposed 2003 CoIWMP non- disposal programs could produce increased noise levels. New and expanded non-disposal facilities could cause traffic increases resulting in noise level increases along roadways, which would general impacts on nearby land uses.	S	<ul> <li>Mitigation Measure 11-2 <ul> <li>(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.</li> <li>(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 does not make direct purchases of such vehicles, they will require their licensed/franchised haulers, via their license/franchise agreements, to include noise as an evaluation criterion in their purchase of vehicles.</li> <li>(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.</li> </ul> </li> </ul>	SU	

1	Impact	Significance	Mitigation Measures	Significance
l		Before		After
L		Mitigation		Mitigation

■(N) Impact 11-3 Operations Noise (Non-Disposal Facilities) New and expanded non-disposal facilities could produce operational noise.	S	<ul> <li>Mitigation Measure 11-3         <ul> <li>(a) Same as Mitigation Measure 11-2 (b) and (c).</li> <li>(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.</li> </ul> </li> </ul>	SU
■N Impact 11-4 Construction Noise (Landfill) Construction of new or expanded solid waste disposal facilities, including any potential rock extraction, could cause temporary increases in noise levels on, and around, the proposed facilities over the entire period of construction.	S	Mitigation Measure 11-4 Same as Mitigation Measure 11-1.	LTS
N Impact 11-5 Traffic Noise (Landfill) Operation of new and expanded solid waste disposal facilities could cause traffic increases resulting in noise level increases along roadways, which would generate impacts on nearby land uses.	S	Mitigation Measure 11-5 Same as Mitigation Measures 11-2 (a) and (b).	SU
■N Impact 11-6 Operations Noise (Landfill) Landfill expansion in the west portion of the Central Disposal Site, including rock extraction activities and development of any new landfill, could produce noise levels that exceed the Sonoma County General Plan noise criteria or cause a substantial, permanent increase in ambient noise levels.	S	<ul> <li>Mitigation Measure 11-6 <ul> <li>(a) Same as Mitigation Measure 11-2 (b). In addition the following mitigation measure is added:</li> <li>(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.</li> </ul> </li> </ul>	SU

Impact	Significance	Mitigation Measures	Significance
-	Before		After
	Mitigation		Mitigation
	8		

SECTION 12 -VEGETATION AND WILDLIFE (VWL)				
■VWL Impact 12-1 Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites (Non-Disposal Facilities) New and expanded non-disposal facilities could significantly impact wetlands, listed or sensitive species or their habitat, and/or sensitive/natural communities.	S	<ul> <li>Mitigation Measure 12-1</li> <li>(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.</li> <li>(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.</li> <li>(c) Before construction during the active nesting period between March 1 and September 1, a qualified biologist 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 shall be consult that the young birds are able to leave the nest and forage on their own. A qualified wildlife biologist shall be consult 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.</li> </ul>	LTS	

<b>TABLE 2-1</b> :	SUMMARY	OF ENVIRONMENTAL EFFECTS	

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<ul> <li>VWL Impact 12-2 Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites (Landfill)</li> <li>The development of a new landfill or the expansion of the Central Landfill could potentially affect listed and sensitive species and sensitive natural communities. The new and expanded landfill could have the following effects on the resources listed above:</li> <li>a. Eradication of existing biological component in the active landfill area.</li> <li>b. Disturbance to adjacent sites and buffers due to containment and clean-up activities where sensitive species may occur.</li> <li>c. Increased traffic on local roads leading to the landfill, resulting in vehicle collisions with listed and sensitive animals.</li> <li>d. Creating an attractive nuisance for certain listed and sensitive animals choosing to forage in landfills, subjecting them to toxic substances, crushing by heavy equipment, and unnatural food sources.</li> <li>e. Providing conditions which allow populations of native and exotic species to congregate and/or increase, resulting in competition with and/or predation upon listed and sensitive species.</li> </ul>	S	<ul> <li>Mitigation Measure 12-2 <ul> <li>(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]).</li> <li>(b) Same as Mitigation Measure 12-1 (a).</li> <li>(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.</li> <li>(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.</li> </ul></li></ul>	SU

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

SECTIO	SECTION 13 - CULTURAL RESOURCES AND PALEONTOLOGY (CRP)				
CRP Impact 13-1 Cultural and Paleontological Resources (Non-Disposal Facilities) New or expanded non-disposal facilities could result in impacts to cultural and paleontological resources.	S	<ul> <li>Mitigation Measure 13-1 <ul> <li>(a) Intensive on-site cultural and paleontological resources surveys shall be conducted by a qualified archeologist 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 NWIC will be consulted to determine if previously recorded archeological sites exist on or in the vicinity of the project site. The purpose of this survey will be to precisely locate and map significant cultural and paleontological resources. The services of the archaeological resources are found to exist on the site, the project sponsor.</li> <li>(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 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 idnose 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.</li> </ul> </li> <li>(c) If paleontological resources can not be avoided by changing the site layout, a program of data collection and recovery shall be implemented.</li> <li>(continued)</li> </ul>	LTS		

#### Impact Significance **Mitigation Measures** Significance Before After Mitigation Mitigation **CRP** Impact 13-1 Cultural and Paleontological S LTS Mitigation Measure 13-1 (continued) **Resources (Non-Disposal Facilities) (continued)** (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. These additional measures shall be implemented. **CRP 13-2** Cultural and Paleontological Resources S ■ Mitigation Measure 13-2 LTS (Landfill) Same as Mitigation Measure 13-1 (a) through (e). Development of a new or expanded solid waste disposal facility could result in impacts to cultural and paleontological resources.

## TABLE 2-1: SUMMARY OF ENVIRONMENTAL EFFECTS

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
*CRP Impact 13-3 Architectural Historical Resources (Non-Disposal Facilities and Landfill) New non-disposal facilities or a new landfill could result in impacts to historical resources.	S	<ul> <li>* Mitigation Measure 13-3 <ul> <li>(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.</li> <li>(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.</li> </ul> </li> </ul>	LTS

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

SECTION 14 - VISUAL RESOURCES (VR)				
VR Impact 14-1 Visible Facilities (Non-Disposal Facilities) New and expanded non-disposal facilities could be visible from surrounding areas, which could impact scenic vistas, waterways, routes, ridges, and degrade the existing character or quality of the site and its surroundings, that may result in significant aesthetic impacts.	S	<ul> <li>Mitigation Measure 14-1 <ul> <li>(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.</li> <li>(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.</li> <li>(c) Existing trees shall be retained to the extent feasible as a visual screen.</li> <li>(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.</li> <li>(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.</li> <li>(f) Disturbed areas that are not directly a part of the project shall be revegetated immediately following construction.</li> <li>(g) Project lighting equipment shall be of low-profile design, unobtrusive, and consistent with adjacent land uses.</li> </ul> </li> </ul>	SU	

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
VR Impact 14-2 Litter (Non-Disposal Facilities) New and expanded non-disposal facilities could potentially impact visual resources through the generation of litter in site areas and along transportation routes.	S S	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 blowing onto off-site areas.         (c) Litter along on-site roads shall be collected and removed routinely.         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.	SU SU
		<ul> <li>(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.</li> <li>(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.</li> </ul>	

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
• VR Impact 14-3 Visible facilities (Landfill) New and expanded solid waste disposal facilities (including lighting plans) could be visible from surrounding areas, which could impact scenic vistas, waterways, routes, trees, rock outcroppings, ridges, including historic buildings within a state scenic highway, and could result in significant aesthetic impacts.	S S	<ul> <li>Mitigation Measure 14-3 Same as Mitigation Measures 14-1 (a), (b), (c), and (g). In addition, the following mitigation measures are added:</li> <li>(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.</li> <li>(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.</li> <li>(f) Disturbed areas that are not directly a part of the project shall be revegetated as soon as practicable.</li> <li>(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.</li> </ul>	Alter Mitigation SU
		• (i) Visual analysis of the Central Landfill expansion or a new landfill shall include photo simulation, three dimensional terrain modeling or similar methods to evaluate change in visual character as seen from nearby public roads.	

Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
•VR Impact 14-4 Litter (Landfill) New and expanded solid waste disposal facilities could potentially impact visual resources through the generation of litter at the site and along transportation routes to the site.	S	<ul> <li>Mitigation Measure 14-4 Same as Mitigation Measure 14-2(a), (c), (d) and (e). In addition, the following mitigation measures are added: On-site Mitigation:         <ul> <li>(b) Litter fences shall be established around active landfill areas to prevent litter from blowing onto off-site areas.</li> <li>Offsite Mitigation:                  <ul></ul></li></ul></li></ul>	SU

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation

SECTION 1	SECTION 15 - SOCIOECONOMICS, PUBLIC SERVICES AND UTILITIES (SPU)			
SPU Impact 15-1 Fire and Police Services (Non- Disposal Facilities) Non-disposal facilities and programs may impact existing fire and police services.	S	<ul> <li>Mitigation Measure 15-1         <ul> <li>(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 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.</li> <li>(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).</li> <li>(c) Private project sponsors shall pay development impact fees to cover the cost of additional fire protection services, if necessary.</li> </ul> </li> </ul>	LTS	
<b>SPU Impact 15-2 Fire and Police Services (Landfill)</b> New and expanded solid waste disposal facilities may impact existing fire and police services.	S	<i>Mitigation Measure 15-2</i> Same as Mitigation Measure 15-1 (a) and (c).	LTS	
*SPU Impact 15-3 Substantial Adverse Physical Impacts Associated with New or Altered Government Facilities (Non-Disposal Facilities and Landfill) Construction of new or expanded facilities would have significant impacts on many aspects of the physical environment as described in this SPEIR.		See Sections 4 through 14 of this document for a complete discussion of these impacts and mitigation measures.		
*SPU Impact 15-4 Exceed Wastewater Treatment Requirements (Non-disposal Facilities and Landfill) Future landfill expansion, a new landfill or other facilities could involve activities that produce discharge to waterways and, therefore, would be required to comply with wastewater treatment requirements of the Regional Water Quality Control Board.	S	* <i>Mitigation Measure 15-4</i> Any projects which involve discharge to waterways or stormwater runoff shall comply with the permitting provisions of the applicable Regional Water Quality Control Board.	LTS	

Impact	Significance	Mitigation Measures	Significance
	Before		After
	Mitigation		Mitigation
	<u> </u>		

SECTION 16 - ENERGY					
None identified.					

S=Significant; LTS=Less than Significant; SU=Significant Unavoidable

## 3.1 INTRODUCTION

The Sonoma County Waste Management Agency (SCWMA) intends to update the County Integrated Waste Management Plan (CoIWMP) to include the programs identified below. This Supplemental Program Environmental Impact Report identifies impacts and issues of the 2003 CoIWMP.

In 1994 the County of Sonoma (County) and the incorporated cities within the County adopted the first Countywide Integrated Waste Management Plan which was approved by the California Integrated Waste Management Board (CIWMB) in 1996 (1996 CoIWMP). The 1996 CoIWMP is the principal planning document for solid waste management in Sonoma County as required by the California Integrated Waste Management Act of 1989 (AB 939). It identifies goals and objectives for the County and the incorporated cities in the County with respect to solid waste reduction, recycling, diversion, and disposal. Concurrent with the preparation of the 1996 CoIWMP, all the cities in Sonoma County and the County entered into a Joint Powers Agreement (JPA) which formed the SCWMA to deal with household hazardous waste, yard and wood waste and public education. In 1996, the JPA was amended to establish the SCWMA as a Regional Agency, the public planning agency for solid waste management in Sonoma County.

In 1999, the County began an alternatives analysis to identify a long term integrated waste management strategy with the goal of assuring adequate future capacity for solid waste disposal. In December 2000, a final report was prepared (see *Solid Waste Management Alternatives Analysis Final Report 2000*, hereafter "Alternatives Analysis"), which recommended the following four key components for the solid waste strategy in the planning period 2015 to 2050:

- 1. Formal agreement among all cities and the County to direct flow of refuse and green waste to a new integrated resource management facility.
- 2. Mandatory source separation of recyclables from waste for residential, commercial, industrial, and institutional waste generators.
- Expansion of Central Landfill beyond its current permitted capacity (i.e., beyond the year 2015). (Figure 3-1 illustrates the locations of existing transfer stations and the Central Landfill.)
- 4. Siting of an integrated resource management facility to include organics processing (anaerobic digestion or chemical or biological digestion), green waste composting and landfilling.

The SCWMA proposes to revise the1996 CoIWMP to: (1) require that all waste generators have access to recycling services; (2) create a formal flow control agreement between Sonoma County jurisdictions; (3) site a Resource Management Facility to process wastes that have not been recycled or diverted by other programs; (4) implement further changes pursuant to the recommendations of the SCWMA, specifically: a) siting a new transfer station in the Santa Rosa area and b) additional construction and demolition debris recycling efforts; and (5) generally update the 1996 CoIWMP. After revision, the SCWMA, the County, and the cities and town would implement the 2003 CoIWMP.

#### **3.2 OBJECTIVES OF THE PROJECT**

The objectives of the 2003 CoIWMP have changed from those identified in the 1996 CoIWMP Program EIR. These changes have been made to reflect the achievement of some of the objectives, rewording of some objectives for clarification, revision of some objectives based on updated information, and the addition of new objectives. In some cases the objectives are changed or new objectives are written to reflect the implementation of the authority of the SCWMA. In most cases the project objectives are taken from the language of the 2003 CoIWMP. The objectives of the 2003 CoIWMP include the following:

- Obj-1 In order to help ensure the sustainability of our communities and to conserve natural resources and landfill capacity, the 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.
- Obj-2 The County and the cities will achieve a 50 percent diversion of wastes being disposed of in County landfills by the year 2003 and a 70 percent diversion rate by 2015 based on 1990 rates.
- Obj-3 Satisfy the AB 939 solid waste planning and diversion mandates in a manner that is consistent with the objectives of the community, as reflected by the deliberations and documents of the AB 939 Local Task Force and SCWMA.
- Obj-4 The solid waste management system in Sonoma County will be planned and operated in a manner to protect public health, safety and the environment.
- Obj-5 The County will provide alternative disposal options for recyclable items or materials such as, but not limited to, yard debris, recyclable wood waste, whole tires, and appliances and ban the landfill disposal of these items.
- Obj-6 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.
- Obj-7 The County and the Cities will provide access to residential recycling programs for all households, including single-family, multifamily, and mobile homes, that subscribe to garbage services by the end of the short-term planning period.
- Obj-8 The County's solid waste disposal facilities will be sited and operated in a manner to minimize energy use, conserve natural and financial resources, and protect prime agricultural lands and other environmentally sensitive or culturally sensitive areas.
- Obj-9 The County will develop disposal capacity for solid waste, not handled by other elements of the management hierarchy, for a 50-year horizon. Disposal capacity is addressed in the Siting Element of the 2003 CoIWMP.



- Obj-10 Use the existing landfill parcel to maximize its useful life and maximize the return on the public infrastructure improvements so far as it is consistent with protection of the environment.
- Obj-11 Provide landfill capacity at least through the year 2017 as required by state law by expanding the Central Landfill.
- Obj-12 Direct the flow of all refuse produced in Sonoma County to integrated waste management facilities publicly owned and located within Sonoma County or its incorporated cities in order to provide cost effective waste disposal services to all community residents.
- Obj-13 Maintain local control over costs and environmental impacts of disposal by siting facilities within Sonoma County.
- Obj-14 The SCWMA, County and the cities will encourage and support the use of waste minimization practices for business, government agencies, and the public by distributing information on the availability of waste minimization options.
- Obj-15 Complement existing and planned private sector operations for collection/processing of both refuse and recyclables.
- Obj-16 Create and maintain employment opportunities for Sonoma County residents and growth opportunities for Sonoma County businesses, industries and entrepreneurs who make productive use of otherwise wasted materials.
- Obj-17 Make productive use of waste that is not reused or recycled through energy production.
- Obj-18 The SCWMA, County and the Cities will provide access to composting opportunities through implementation of composting facilities and programs which may be regional or local, public or private.
- Obj-19 The County and/or 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 1996 CoIWMP is a compilation of solid waste planning documents including: (1) Source Reduction and Recycling Elements (SRRE), (2) Household Hazardous Waste Elements (HHWE), and (3) Non-Disposal Facility Elements (NDFE) for each jurisdiction, (4) a Siting Element, and (5) a Summary Plan describing all the elements.

Following is a description of the elements, with a discussion of the changes that must be made to incorporate the proposed programs and policies. It should be noted that, compared to the 1996 CoIWMP, the 2003 CoIWMP is now a regional document. The County and the cities no longer write separate elements as they did in the 1996 CoIWMP. This is a result of the designation of the SCWMA as a Regional Agency described in the Introduction to this Section.

#### 3.3 SUMMARY OF SOURCE REDUCTION AND RECYCLING ELEMENT REVISIONS

The Source Reduction and Recycling Element (SRRE) details the goals, policies, programs and activities that will be used in Sonoma County to comply with the waste management hierarchy and diversion goals established by AB 939. The 1990 Solid Waste Generation Study describes the quantity, source, category and type of solid waste generated and diverted, providing baseline data for the SRRE. The Facility Capacity Component contains information about capacity of existing solid waste landfills.

The SRRE also includes Source Reduction, Recycling, Composting and Special Waste Components. Source reduction efforts, which are generally educational, are intended to prevent waste generation. Recycling is the reuse of material after it has been discarded. Composting programs manage yard debris and other organic materials to produce beneficial soil amendments. Special waste programs target hardto-manage materials, including asphalt, concrete, tires, white goods (appliances), brown goods (furniture, electronics) and wood waste. The SRRE also includes a discussion of education and public information and funding and marketing for source reduction, recycling, composting and special waste. There is also an Integration Component describing how the programs will achieve the AB 939 diversion mandates.

There are no existing or proposed waste transformation (incineration) facilities in Sonoma County.

Minor revisions/updates will be made to the 1996 SRRE as necessary to reflect new information, subsequent legislation and a request approved by the CIWMB to extend the 2000 50% diversion deadline to 2003.

The following new programs will be included in the SRRE.

## 3.3.1 Mandatory Recycling Opportunities

The SRRE currently provides for voluntary curbside recycling. The proposed revision would require that all residential, commercial, industrial and institutional waste generators have access to recycling services so that recyclables could be separated at the source to keep them out of the waste stream. This may include municipal regulations prohibiting recyclables to be mixed with disposed waste. Emphasis is placed on recycling any material that can be easily and economically recycled such as yard waste, wood, newspapers, cardboard, magazines, office paper, glass containers, tin cans, aluminum cans and scrap metals. A penalty and education program could also be included to emphasize the need to make recycling service available.

Making provision of recycling facilities mandatory would not result in any physical changes other than the potential slight traffic increase from hauling additional recycled materials.

#### 3.3.2 Flow Control

Although no formal policy was described in the 1996 CoIWMP to require disposal of waste in Sonoma County facilities, it assumed that there is in-County disposal of all solid waste generated in Sonoma County. The proposed flow control policy would assure that this waste is available for processing in Sonoma County so that the investment in the construction of large new facilities, such as the resource management facility described below, is assured a reliable source of Municipal Solid Waste (MSW). The municipalities and the County would adopt a countywide flow control policy, creating a formal agreement to direct all refuse and green waste to a new resource management facility. Similar language would also be adopted into waste service contracts between the county's private waste haulers and the various jurisdictions. The County and cities would adopt common terms and stipulations for all new, renewed or extended refuse service franchises/contracts. Such terms and stipulations would direct the flow of disposed waste to one or more disposal sites as cooperatively designated by the County and jurisdictions.

The flow control policy would not change the existing level of waste being processed in Sonoma County. Therefore, there would be no physical changes caused by adoption of the flow control policy.

#### 3.3.3 Resource Management Facility

A major new component of the solid waste management system planned for Sonoma County is a resource management facility (RMF). This non-disposal facility would include several waste processing elements, primarily conducted inside buildings or other enclosed spaces, including preliminary waste sorting, the primary organic waste processing operation, and potentially, an on-site power plant using the fuel created by the organic waste processing operation. Other supporting activities would be conducted outdoors, including traffic circulation, parking and recycled material preparation, and handling and shipping activities.

The facility would process solid waste that is not recycled or diverted into other county programs, ranging from approximately 1,300 tons per day in 2010 to approximately 1,600 tons per day (annual average) in 2050. Typical materials for processing would include wastes such as mixed MSW from garbage collection, as well as biosolids, food waste, manure from horse and other farms, waste straw and sawdust from animal bedding, lees and pomace from wineries, and wash water from milk barns and creameries. Approximately 25% of this tonnage would remain as residue for disposal following processing. This facility would be open to commercial haulers only.

The preliminary waste sorting step would be intended to remove non-organic, hazardous materials and/or recyclables. This step may include human labor and/or mechanical equipment to physically remove these items from the waste stream before it is processed further.

The major function of the RMF is to process the solid waste in a manner that recovers energy from the organic portion of the waste and produces, to the extent feasible, compost products. There are various conversion technologies available to accomplish this objective, including anaerobic digestion. Although the specific technology will be selected at a future date, they would all share several elements including an initial grinding step to reduce the various waste items to a relatively homogeneous size, mixing of the solid waste with water in a closed container followed by either chemical or biological digestion, extraction of a clean fuel in the form of methane and/or ethanol, and screening the residue. The residual solid waste would be treated and disposed consistent with Water Quality Regulations.

After processing the organic fraction of the waste, the clean fuel can be used on-site to produce electricity or transported off-site to be used as vehicle fuel or as a clean, renewable source of energy for other activities. If an on-site energy plant is built, it may be similar to the existing power plant at the Central Disposal Site. This plant uses landfill gas to fuel internal combustion engines that run electric generators. The RMF energy plant may also use other technologies.

The RMF, regardless of technology selected, will require about 5 acres for the building and related traffic circulation with a building a minimum of 40,000 to 50,000 square feet in size, as well as electric, water and wastewater service. The RMF could be co-located with a landfill or could be at a separate location.

## 3.3.4 Composting

The 1996 SRRE currently identifies a compost production program for yard debris possibly including grape pomace, sawdust and manure. A pilot project for composting other source-separated organics such as food waste, paper waste and other compostable organics, and possibly sewage sludge, is also identified.

The updated SRRE describes existing composting facilities, including several large private compost facilities, and a sewage sludge composting facility owned and operated by the City of Santa Rosa Utilities Department. It also includes programs for additional composting facilities, a large site serving the entire county (e.g., 30 acres or more), with possibly several smaller additional sites. The existing yard waste composting program may be expanded to a source-separated organic composting program that may include biosolids, food waste, manure from horse and other small farms, waste straw and sawdust from animal bedding, lees and pomace from wineries, and wash water from milk barns and creameries. The green waste composting facility would be similar to the compost facility currently operating at the Central Disposal Site, in that green waste (grass clippings, leaves, prunings, etc.) would be separated from the solid waste stream and composted to make a useable landscaping product. The exact process or physical characteristics of the facility may be different from the existing facility. Access to the facilities would be open to the public as well as to commercial haulers.

The composting facility(ies) could be enclosed but are more likely to have a covered area with open sides. The large facility will include approximately 10 to 15 acres with an additional 20 to 30 acres for curing and storage, and the smaller facilities may be under 10 acres and located at multiple sites. It is expected that the composting facility(ies) will have features for water quality control such as roofing or a collection system to treat runoff.

## 3.3.5 New Transfer Station

The 1996 CoIWMP will be revised to add a new transfer station site. It would be located in the Santa Rosa area, either inside or outside the city limits and owned by the county or other public entity. It would reduce the number of MSW collection trucks traveling to the Central Disposal Site and to the Healdsburg transfer station. It would combine the loads into larger transfer trailers prior to hauling to the landfill or RMF. This facility could be open to the public and commercial haulers or limited to franchised waste haulers. For purposes of evaluation, it is

assumed that it will be publicly built and operated by a contractor in a manner similar to the other County transfer stations.

#### 3.3.6 Conversion of Central Disposal Site to a Transfer Station/Recycling and Reuse Center

After the closure of the Central Landfill, the existing public tipping building at the Central Disposal Site will continue to accept MSW. It will become a transfer station that operates in the same manner as other existing transfer stations, with diversion for recycling and reuse available to private users prior to dumping. Refuse would be accepted from both the general public and commercial haulers. Refuse would be hauled to a different landfill, or the RMF for processing, and then landfilled. This use of the Central Disposal Site would be a revision to the1996 CoIWMP. The landfill gas-to-energy facility and the household hazardous waste collection facility would continue to operate at this site.

## 3.4 SUMMARY OF HOUSEHOLD HAZARDOUS WASTE ELEMENT REVISIONS

The Household Hazardous Waste Element (HHWE) identifies the quantities of household hazardous waste generated and specifies the means to safely collect, recycle, treat and dispose of hazardous waste generated by households. Collection services include special one-day events, drop-off sites, and mobile collection. Exchange, reuse and recycling alternatives for waste oil, paint, batteries and other household hazardous waste are described. Load checking programs at solid waste facilities are also addressed.

While there are no new programs being proposed, minor revisions/updates will be made to the HHWE as necessary to reflect new information and regulations.

## 3.5 SUMMARY OF NON-DISPOSAL FACILITY ELEMENT REVISIONS

The Non-Disposal Facility Element (NDFE) is a summary document of the non-disposal facilities used to process the materials collected by the programs described in the SRRE. Facilities which recover materials for reuse or recycling, including existing and proposed transfer stations and any proposed modifications to existing transfer stations are identified. Other facilities such as composting operations and drop-off recycling facilities (e.g., redemption/buyback centers, yard waste drop-off centers) are also included. Disposal facilities are discussed in the Siting Element.

Minor revisions will be made to the NDFE as necessary. In addition, new facilities proposed to be added to the NDFE are the Santa Rosa transfer station, the conversion of the Central Disposal Site tipping building to a transfer station, the integrated RMF, construction and demolition debris recycling facilities and composting facilities located at a site other than the Central Disposal Site.

## 3.6 SUMMARY OF SITING ELEMENT REVISIONS

The 1996 Siting Element provides an integrated strategy to ensure long-term disposal capacity in the county. CIWMB regulations require the County to demonstrate its ability to provide 15 years of combined permitted disposal capacity from the year of submission of the 2003 CoIWMP to the CIWMB. In addition, the 1996 Siting Element describes six options for expansion of the landfill at the Central Disposal Site. The goals, objectives and policies of the Siting Element, combined with the siting criteria

described below, guide the development of additional disposal capacity, through the expansion of existing and/or the construction of new solid waste disposal facilities. Siting criteria are required by state law and include 1) exclusionary criteria, which are those factors that would exclude the site or portion of the site from further consideration for a landfill, and 2) comparative criteria, which would be used to evaluate sites not in the exclusionary areas that are potentially suitable.

The 2003 CoIWMP includes a revision to the Exclusionary Criteria for landfill siting which changes the requirement for exclusion of sites within earthquake fault zones to agree with applicable local, state and federal regulatory requirements. (See Section 3.6 Summary of Siting Element Revisions.)

Comparative criteria evaluate across a wide spectrum of a) environmental considerations including water, air quality impacts, vegetation and wildlife impacts, etc.; b) engineering criteria such as soils and geology, floods, precipitation and erosion potential; c) socioeconomic factors including transportation systems, land use, etc.; d) administrative concerns, such as distance from airports, capacity and proximity to agricultural land and groundwater supplies for drinking; and e) economic factors including cost of the land, transportation, and operating and development costs. No changes to the Comparative Criteria, as adopted in the 1996 CoIWMP, are proposed.

Minor updates will be made to the Siting Element as needed. In addition, the Siting Element will be revised as described below to meet the disposal capacity needs with 1) creation of additional landfill capacity at the Central Disposal Site (see Landfill Expansion, below); 2) construction of new facilities for materials recovery, organic processing, composting and reduction of the volume of waste which will require landfill disposal (see Summary of Source Reduction and Recycling Element Revisions above); 3) allowing acquisition of land to provide buffer areas surrounding existing solid waste facilities (see Acquiring Buffer Areas Surrounding Existing Disposal Facilities below); and 4) siting and permitting of a new landfill, in accordance with the exclusionary and comparative criteria, which will provide additional disposal capacity and which will be able to accept both mixed solid waste and waste that has been processed to produce energy (see New Landfill Siting below). The programs described below exceed the minimum required 15 years combined permitted disposal capacity.

#### 3.6.1 Waste Generation Projections

Population and waste generation projections have been updated to reflect current conditions. Future waste disposal capacity needs have been estimated using a formula that includes increased waste recycling partially offsetting population growth. Therefore, the projected total amount of waste requiring disposal is less than the assumed rate of population growth. The adopted 1989 Sonoma County General Plan (as amended) and the California Department of Finance population projections are used for near term population growth forecasts. A one percent (1%) growth rate was assumed beyond 2011 through the end of the project planning period (2050) to account for urban growth limits and other future measures that may impact the quantity of wastes generated in the County. The net result by 2050 will be a 16 % increase over the 1998 annual landfilled tonnage, compared to a 32-36 % increase in population for the same period.

## 3.6.2 Central Landfill Expansion

The 1996 CoIWMP Siting Element recommends expanding the Central Landfill. A specific project was not identified, but the Element describes six expansion scenarios taken from a 1992 Capacity Study

(EBA, 1992). These scenarios include various combinations of expansions into the East Canyon, West Canyon, and filling to a higher elevation in the Central Canyon. None of the scenarios considered expanding the landfill outside the boundaries of the existing County-owned parcel. The scenarios describe potential disposal capacity ranging from the year 2010 to 2028.

In 1998, the County approved a project to expand the Central Landfill into the East and West canyons. That expansion would create capacity for solid waste disposal through approximately 2014. In the same year, the County approved a rock extraction project (quarry) at the Central Landfill that would create a small amount of additional capacity. With these two projects, the landfill will have enough capacity to last through approximately 2015.

The proposed revision to the 1996 CoIWMP adds a seventh scenario for further expansion of the Central Landfill. This scenario would be primarily on the existing landfill parcel, but would also require the purchase of additional land from parcels adjacent to the landfill. (See Figure 3-1.) Under this scenario, it is likely that additional rock extraction would be used to create additional landfill space between the Central and West Canyons.

An analysis of site conditions to determine the feasibility of expanding the landfill was conducted *(Siting and Classification Study Proposed West Area Expansion, Geo Logic, March 2003)*. The analysis concluded that expansion in this area is feasible; seismic faulting is not recent, and does not constrain additional expansion. See Section 5, Geology and Seismicity, for further discussion of the study results.

While the expansion proposed in the 2003 CoIWMP would be generally consistent with the expansions considered in the existing Siting Element, there would be two substantial differences. First, the expansion may not be restricted to the existing County-owned parcel, while the expansion envisioned in the existing 1996 Siting Element would be totally within the existing parcel. The second departure will be the use of a rock extraction project (quarry) as an integral part of the landfill expansion plan. The quarried rock could be taken to a commercial quarry for crushing and resale.

The proposed landfill expansion could involve relocation of existing facilities to other parts of the landfill parcel. The landfill infrastructure includes numerous systems designed to protect and monitor water and air quality. These systems would be maintained and expanded as necessary to comply with site permits and environmental regulations. New waste cells would include leachate collection and recovery systems (LCRS) and landfill gas (LFG) emissions control systems. The existing landfill gas-to-energy operations would be continued and expanded as necessary. Operational changes would be incorporated as needed to comply with new regulations, or to take advantage of improved landfill technologies (e.g., use of new alternative daily cover materials).

## 3.6.3 Acquiring Buffer Areas Surrounding Existing Disposal Facilities

Section 6.1.1 of the Siting Element of the 2003 CoIWMP has been revised to acknowledge that properties adjacent to solid waste facilities may be acquired to provide physical and visual buffer zones. The purpose of these acquisitions would be to provide buffer space between the site and adjacent uses. If the properties have an existing agricultural use, that use would generally continue. Buffer spaces may also be used to mitigate the solid waste site's physical impacts on neighboring properties. For example, biotic habitat may be created, or enhanced, to offset impacts to habitat both on and off site; or settling ponds may be constructed to reduce the discharge of sediment from the solid waste sites. It is not

intended that new or expanded solid waste facilities be constructed in buffer areas; any such future use would require additional environmental review at the time the use is proposed.

#### 3.6.4 New Landfill Siting

The 1996 CoIWMP Siting Element considered the siting of a new landfill to meet disposal capacity needs in the long term (beyond the year 2009). The 1996 CoIWMP addressed the siting of a new landfill, but it did not address the concept of the landfill containing residue from the RMF.

The revisions to the new Siting Element would extend available capacity to satisfy the needs of all Sonoma County residents and businesses for approximately 35 years beyond the existing capacity (i.e., until 2050), and address a landfill containing both mixed solid waste and residue from the RMF. Following construction of the RMF, it is expected that most or all MSW will be sorted and processed at the facility before it is disposed of in regular landfill cells. Some unprocessed MSW could also be disposed of in the landfill. The landfill capacity needed to accommodate the same amount of MSW would be less than that needed without the RMF, which could potentially reduce the volume needed for landfilling by up to 75%.

As described in the 1996 CoIWMP, the new municipal (Class III) landfill would be sited, designed, constructed, operated and closed under guidelines of the CoIWMP Siting Element (including the exclusionary and comparative criteria), California Environmental Quality Act, county land use policy and regulatory requirements of CCR Title 27, and the Federal Resource Conservation and Recovery Act, Subtitle D. It would be owned by the County and operated by County staff and private contractors. Refuse cells would be excavated and constructed with engineered base liners and LCRS prior to waste placement. Ancillary features to be constructed could include storm water detention basins, leachate treatment or recirculation facilities, an entrance facility and scale house, office building, maintenance building and a LFG extraction system and blower/flare station. Depending on waste availability and economics, an LFG-to-energy facility may be constructed for electrical power generation, or conversion of LFG to vehicle fuel/pipeline gas.

Daily site operations would include soil excavation and waste placement. Excavated soils would be used for road construction, liner placement and daily, intermediate and final cover. Development of the landfill would be phased so that only portions of the site would be disturbed at any one time.

The landfill could accept both mixed solid waste and "inert" waste. Mixed solid waste would be unsorted waste that is collected directly from residential, commercial and/or institutional sources. Inert waste includes the residue from the RMF. Access to the new landfill could be limited to commercial haulers only.

Site operations at the new landfill may involve future landfill management strategies, including gas-toenergy generators and/or "bioreactor" technology. This is achieved through controlled additions of liquid and leachate recirculation in lined cells. Liquid recirculation enhances biodegradation and waste decomposition processes. By accelerating waste decomposition, filled cells settle more rapidly and can create additional airspace. Long-term water quality and LFG monitoring and maintenance liabilities can also be reduced. As with the new landfill described in the 1996 CoIWMP, when landfill operations reach permitted final elevations, the site will be formally closed in accordance with state and federal regulatory standards. Closure activities include final grading, placement of final cover and drainage systems, revegetation of site surfaces and decommissioning of ancillary structures. Monitoring programs would be implemented throughout the post-closure period.

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# SECTION 4 LAND USE AND MINERAL RESOURCES

#### 4.1 INTRODUCTION

This section describes potential impacts on land use and mineral resources identified for the proposed 2003 CoIWMP. The setting, impacts and mitigations identified in Section 4 of the 1996 CoIWMP Program EIR are revised as described below.

#### 4.2 SETTING

Refer to Section 4.2 of the 1996 CoIWMP Program EIR for a discussion of the land use setting for Sonoma County. The following information provides an update to that discussion. Population and land development has increased approximately 7 percent over the last six years, reaching 461,748 in the 2000 census. Because the 2003 CoIWMP includes a plan to further expand the Central Landfill, additional information on the setting of this disposal facility is provided.

#### **Existing On-Site and Surrounding Land Uses**

The Central Disposal Site is located southwest of the City of Cotati. The site is bounded on the east by Mecham Road and to the south by Hammel Road (see Figure 4-1). The project site is designated "Public/Quasi-Public" on the adopted 1989 General Plan (as amended) Land Use map and is zoned Public Facilities (PF).

The site has been operated as a landfill since 1971. Within the site boundaries are a 172 acre landfill, a tipping facility, associated administrative buildings and equipment yard, a recycle/reuse facility, a wood chipping and composting operation, a household hazardous waste collection facility and a power plant which converts methane gas produced by solid waste into electricity.

Figure 4-2 shows that adjacent land uses (within a 1-mile radius of the site) include rural residential uses and agricultural operations such as dairy and cattle ranches and grazing lands. The nearest residence to the north (associated with Gray View Ranch) is located about 120 feet north of the Central Disposal Site's northern boundary. Dairy operations on the Bloom Ranch (also called Camozzi Dairy) and a home associated with the dairy are located about 1,000 feet to the northeast. To the east, the nearest residence (owned by Sonoma County) is on the hilltop across from the site access road. To the south the nearest residences are on Mecham Road about 800 feet from the site's southern boundary. To the southwest is the Diamond M Dairy, which contains several residences located about 500 feet from the site boundary. Additional residences are located north and south of the site along Mecham Road, and to the north along Stony Point Road.

The nearest established subdivision of land is the Happy Acres development, which is located about <sup>1</sup>/<sub>2</sub> mile northeast of the Central Disposal Site. Happy Acres was created as a subdivision with 120 lots in the late 1950's. In the early 1970's, the subdivision contained about 10 single family dwelling units (SFDs). Since then, the number of SFDs in the subdivision has increased to 85. With the exception of the Happy Acres development, the nearest residential areas are located in the City of Cotati, approximately 3 miles northeast of the site, and the City of Petaluma, approximately 8 miles south.

The nearest schools are the Dunham Elementary School and the Quest private elementary school on Roblar Road about 1 mile to the northwest of the landfill. There are no other schools within a 1-mile radius of the site.

Other notable land uses near the site include the Button Ranch and the Stony Point Quarry. Located about ½ mile to the west of the landfill is the Button Ranch, a 1,121-acre dairy ranch donated to the University of California in 1974. The site has been described as a unique biological resource and was considered for inclusion in the University's Natural Reserve System. However, in 1996 the property was purchased by a private landowner, and the future use of this ranch is unknown at this time. The Stony Point Quarry is located about 2 miles north of the landfill on Stony Point Road. Soils for landfill cover have on some occasions been obtained from this quarry, and rock has been excavated from the landfill excavations and sold to Stony Point Quarry.

#### 4.3 IMPACTS AND MITIGATION MEASURES

#### STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts to land use as described below. According to the CEQA Guidelines (Appendix G: Environmental Checklist Form), land use or planning impacts are based on the project's potential to:

#### Land use-

- a) Physically divide an established community;
- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan;

#### Mineral Resources-

- d) 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; or
- e) 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.

#### CoIWMP PROGRAMS AND ACTIVITIES

The 1996 CoIWMP Program EIR identified three significant land use impacts (Impacts 4-1 through 4-3) and corresponding mitigation measures. The impacts and mitigation measures are revised as described below, or carried forward unchanged.

#### Applicable Impacts and Mitigation Measures From 1996 CoIWMP Program EIR

#### **Revised Impact 4-1 Surrounding Land Use Conflicts (Non-Disposal Facilities)**

The construction of new solid waste non-disposal facilities could conflict with surrounding land uses.





#### 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.

#### Impact 4-2 Surrounding Land Use Conflicts (Landfill)

The construction of new and expanded (the Central Landfill) solid waste disposal facilities could conflict with surrounding land uses.

#### 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.

The following discussion provides additional information about Impact 4-2 and potential new land use impacts of the proposed 2003 CoIWMP programs and facilities, which have come about either because of changes in programs in the 2003 CoIWMP, changed conditions, or changes in the requirements of CEQA.

Comments on the 1998 Central Disposal Site Improvement Program EIR included neighborhood complaints related to odors, noise and litter (nuisance effects), water quality issues (potential health risk), as well as traffic (safety) that may be associated with the landfill. Some neighbors expressed concern regarding adequacy of the Emergency Response Plan for the operations at the site and regarding the safety of the household hazardous waste facility.

The specific impacts of the Central Landfill expansion and construction of other future facilities are described in detail in other sections of this Supplemental Program EIR and are summarized here to highlight their effect on neighboring land uses.

- Landfill related traffic would affect the roadways used to access the site, including Mecham Road. Effects of traffic are discussed in Section 9.3 of this document and Section 9.3 of the 1996 CoIWMP Program EIR, and mitigation measures are presented to avoid or reduce impacts to a less-than-significant level.
- Traffic noise levels would exceed noise standards applicable to residential areas. As described in Section 11.3, traffic noise levels could be significant and unavoidable.
- Noise from construction and operation of the West Expansion at the Central Disposal Site would cause a significant impact on residences near the west landfill boundary. The mitigation measures that apply to these impacts are discussed in Section 11.3.
- Odor problems at the Central Disposal Site are due primarily to the compost facility rather than the landfill. Expansion of the landfill is not expected to result in new odor problems. However,

there will always be a possibility that landfill-related odors would generate off-site complaints at the Central Disposal Site or a new landfill. This unavoidable impact is discussed in Section 10.3.

Impacts on surface or groundwater are not expected from normal operations in the landfill expansion or at a new landfill. Measures to avoid and/or rectify accidental releases would be included in project design. Impacts to the primary water supply source for Happy Acres are not likely because the water company groundwater well is not located in geologic units that could accidentally be affected by the groundwater from the landfill expansion. Additionally, groundwater flows in the expansion area move in a south-southeasterly direction and not towards Happy Acres. The impacts and mitigation measures that would reduce them to a less-thansignificant level are discussed in Section 7.3.

Most of the above-described conflicts between residential uses and the landfill expansion, new landfill, or other facilities would be eliminated by the proposed mitigation measures. However, the potential for landfill odors would be a *significant and unavoidable* impact that would affect other parcels. (See Section 10.3.) New and expanded disposal facilities will also be subject to a separate site-specific CEQA process.

#### Impact 4-3 Open Space (Landfill)

The construction of new solid waste disposal facilities could result in the loss of important open space or other resource lands.

#### Mitigation Measure 4-3

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 resource lands or for the change in character of the lands. Therefore, this impact is considered *significant and unavoidable*.

#### New Impacts and Mitigation Measures Associated With 2003 CoIWMP

Impact 4-3 above analyzes the effect of new solid waste disposal facilities on important resource lands including mineral resources. The following impact analysis provides additional information regarding the effect of landfill expansion and non-disposal facilities on the availability of mineral resources.

#### New Impact 4-4 Mineral Resources (Landfill)

Location of a new landfill may affect availability of mineral resources.

A deposit of useful rock for construction was found at the Central Disposal Site and a portion of it was quarried under contract by a local operator. Rock extraction is planned as part of the West Expansion at the Central Disposal Site. If deposits of rock are located under the landfill expansion area or a new landfill, the mineral deposits could be made unavailable by the construction of overladen landfill cells. Implementation of the following mitigation measure would reduce the impact to a less-than-significant level.

#### 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.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

# LESS-THAN-SIGNIFICANT IMPACTS

*Mineral Resources at Non-Disposal Facilities* Non-disposal facilities would not be located where mineral resources have been identified by the 1989 Sonoma County General Plan (as amended) and Aggregate Resource Management (ARM) Plan. Because of the small areas used by non-disposal facilities, the potential loss of usable rock would not be significant.

Land Use Impacts To An Established Community Location of a new landfill in lands designated Urban Residential, Rural Residential, General or Limited Commercial, Recreation and Visitor Serving Commercial, General or Limited Industrial or Public/Quasi-Public (unless the designation is applied to accommodate a landfill) would be prohibited by the exclusionary landfill siting criteria (2003 CoIWMP Section 6.4.2). The 1996 CoIWMP Program EIR addressed the impacts of CoIWMP facilities affecting adjacent land uses. This analysis continues to apply to programs in the 2003 CoIWMP. However, it is not expected that the proposed programs in the 2003 CoIWMP would have environmental impacts that would physically divide an established community. Site specific analysis of the potential effects of future projects developed in accord with the 2003 CoIWMP will be done at the time those facility locations are proposed.

#### 4.4 CONSISTENCY WITH ADOPTED GENERAL AND REGIONAL PLANS

Section 15125 (d) of the CEQA Guidelines requires that an EIR discuss any inconsistencies between the proposed project and applicable general plans and regional plans.

#### Sonoma County General Plan

No inconsistencies have been identified between the County General Plan and the 2003 CoIWMP, except that the potential conversion of agricultural land to landfill use for the proposed West expansion of the Central Landfill would need to be addressed with a General Plan Amendment (GPA). Also, as other facilities are sited, inconsistencies with specific land use designations or policies may result in the need for a GPA or a revision of the future proposal.

Expansion of the Central Disposal Site to provide additional disposal capacity is not inconsistent with Section LU-4d of the land Use Element and Section 3.4 of the Public Facilities Element of the current County General Plan. Acquisition of agricultural land at the Central Disposal Site would need to be addressed as described above.

#### City General Plans

No inconsistencies have been identified between the cities' general plans and the proposed project. However, as facilities are sited, inconsistencies with specific land use designations or policies may result in the need for a GPA or revisions to the proposal. A transfer station located in the City of Santa Rosa would be restricted to land designated in the General Plan as "General Industry." (*Personal communication Joey Briglio, Santa Rosa Community Development Department, September 25, 2002*)

#### Metropolitan Transportation Commission 1998 Regional Transportation Plan

No inconsistencies have been identified between the Metropolitan Transportation Commission 1998 Regional Transportation Plan and the proposed project.

#### Sonoma County Transportation Authority 2001 Countywide Transportation Plan

No inconsistencies have been identified between the Sonoma County Transportation Authority 2001 Countywide Transportation Plan and the 2003 CoIWMP.

#### Sonoma County Local Coastal Plan

No inconsistencies have been identified between the Sonoma County Local Coastal Plan and the proposed project. Siting criteria for new disposal facilities specifically exclude the coastal zone from consideration.

#### Bay Area 2000 Clean Air Plan/San Francisco Bay Area Ozone Attainment Plan, June 1999

In accordance with the Bay Area Air Quality Management District CEQA Guidelines (1996, revised 1999) no inconsistencies have been identified between the 2000 Clean Air Plan or the Ozone Attainment Plan and the proposed project except for potentially significant impacts from  $NO_x$  and ROG which have been described in the Air Quality sections of this document and the 1996 CoIWMP Program EIR. Projects which involve industrial stationary air emissions will be required to obtain a Permit to Construct and a Permit to Operate from the Bay Area Air Quality Management District or the Northern Sonoma County Air Pollution Control District.

# Water Quality Control Plans for the San Francisco Bay and North Coast Regional Water Quality Control Boards

The San Francisco Bay and North Coast Regions of the Regional Water Quality Control Board (RWQCB) have regulatory authority over water quality in the southern and northern portions of the County, respectively. The RWQCB administers Title 23, Chapter 3, Subchapter 15 of the California Code of Regulations. The regulations govern the siting, design, construction, operation, and closure of landfills.

No inconsistencies have been identified between the Water Quality Control Plans for the San Francisco Bay and North Coast Regional Water Quality Control Boards and the proposed project.

New or expanded solid waste facilities would be required to obtain an Industrial Stormwater Discharge Permit from the applicable RWQCB, administered under the U.S. EPA's National Pollutant Discharge Elimination System (NPDES). Compliance with these permitting requirements would ensure that each new and expanded solid waste facility was sited, constructed, and operated, in a way that is consistent with the appropriate water quality control plan.

#### **Habitat Conservation Plans**

Habitat Conservation Plans and Natural Community Conservation Plans are site-specific plans to address effects on sensitive species of plants and animals. There are currently no Habitat Conservation Plans or Natural Community Conservation Plans applicable to projects at the Central Landfill. Further site-specific analysis of potential impacts to Habitat Conservation Plans and Natural Community Conservation Plans will be done when facilities are proposed.

# **SECTION 5**

### 5.1 INTRODUCTION

This section describes the potential new geology and seismicity impacts identified for the proposed 2003 CoIWMP programs and facilities, and mitigation measures designed to reduce the identified impacts to less-than-significant levels. Setting information, impacts, and mitigations identified in Section 5 of the 1996 CoIWMP Program EIR are revised as described below.

#### 5.2 SETTING AND REGULATORY OVERSIGHT

The solid waste programs and facilities proposed in the 2003 CoIWMP would operate under the jurisdiction and oversight of the regulatory framework identified in the 1996 CoIWMP Program EIR. Refer to the 1996 CoIWMP Program EIR for a complete discussion of the geologic setting.

Exclusionary criteria include land use and environmental constraints that could prevent general areas to be used as landfill sites (e.g. FEMA designated floodplain, and location within an Alquist-Priolo fault zone). Revision of the siting criterion for location of landfills adjacent to earthquake faults is proposed to describe the exclusion thus: "Lands within designated earthquake fault zones defined by applicable regulatory requirements."

#### **CORRECTION TO THE 1996 PROGRAM EIR**

The 1996 CoIWMP Program EIR inaccurately describes County General Plan policies with regard to slope stability (page 5-12). The Public Safety Element and Resource Conservation Element of the General Plan contain policies about geologic hazards and soil erosion. Development in unincorporated areas with extensive grading on slopes greater than 26 percent <u>is permitted</u> subject to the recommendations of geologic and geotechnical site studies.

#### 5.3 IMPACTS AND MITIGATION MEASURES

#### **STANDARDS OF SIGNIFICANCE**

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts from geology and seismicity as described below. According to the CEQA Guidelines (Appendix G), a project will have a significant impact on the environment if it will:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault,
  - ii) Strong seismic ground shaking,
  - iii) Seismic-related ground failure, including liquefaction (several phenomena commonly occur as a result of liquefaction, such as the formation of sand boils, lateral ground spreading, and mud flows), or
  - iv) Landslides (Landslides and mudflows may occur in natural colluvial soils. In addition, slope failures are possible on fill embankments and on cut slopes.); or

b) 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.

See Sections 6 and 7 for a discussion of loss of topsoil, expansive soils, and soil incapable of supporting alternative waste water systems.

#### **CoIWMP PROGRAMS AND ACTIVITIES**

The 1996 CoIWMP Program EIR identified four potentially significant impacts related to geology and seismicity (Impacts 5-1 through 5-4) and the corresponding mitigation measures. These are revised as described below.

#### Applicable Impacts and Mitigation Measures From 1996 CoIWMP Program EIR

**Revised Impact 5-1 Surface Faulting and Ground Shaking (Non-Disposal Facilities)** New and expanded non-disposal facilities could be subject to potentially damaging seismicallyinduced surface faulting and ground shaking.

#### **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.

#### Revised Impact 5-2 Liquefaction (Non-Disposal Facilities)

New and expanded non-disposal facilities could be subject to potentially damaging seismicallyinduced liquefaction.

#### **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.

#### Impact 5-3 Surface Faulting and Ground Shaking (Landfill)

New and expanded (the Central Landfill) solid waste disposal facilities could be subject to potentially damaging seismically induced surface faulting and ground shaking.

Mitigation Measure 5-3 is carried forward with some revisions based on current regulations.

#### **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.

#### Revised Impact 5-4 Liquefaction (Landfill)

New solid waste disposal facilities could be subject to potentially damaging seismically induced liquefaction.

Extensive geologic study conducted at the Central Landfill since the 1996 CoIMWP Program EIR has produced no evidence of liquefaction hazard at that site, and it is concluded that this impact would be less than significant at the Central Disposal Site. Any new landfill site would require evaluation of this impact.

#### **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.

#### New Impacts and Mitigation Measures Associated With 2003 CoIWMP

This section identifies new potential geologic impacts resulting from the 2003 CoIWMP programs and facilities, which have come about either because of changes in programs in the 2003 CoIWMP, changed conditions, or changes in the requirements of CEQA.

#### New Impact 5-5 Slope Failures (Landfill)

The West Expansion area at the Central Disposal Site and the future landfill could cause significant damage on- and off-site as a result of slope failures, and landsliding could potentially bring refuse to the surface, creating health hazards.

Failure of embankment and landfill slopes would be considered a significant impact. The acceptable minimum factor of safety used recently by the engineering industry for landfill design has been 1.5 (i.e., representing 50% more soil strength than theoretically determined by stability analysis) for static stability. The potential for damage to the landfill from slope failure would be a significant impact if landfill slopes were not designed with a minimum safety factor of 1.5.

The potential for slope failure would also be a significant impact if the slope failure would result in a hazard to people or structures. The effect of subsidence from landfill settlement would be significant if it resulted in failure of the structures that control leachate, surface drainage, erosion or landfill gas collection. The impact could be reduced to less than significant by design features, as required by the following mitigation measure.

#### 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 and grading procedures 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.

#### New Impact 5-6 Subsidence and Settlement (Landfill)

Settlement of the landfill material at the Central Disposal Site and the future landfill is expected to occur during decomposition of the refuse material. Settlement of refuse has the potential for disrupting the surface drainage pattern and causing ponding on the landfill, and it could also potentially disrupt the gas collection system.

Settlement of landfill material was not analyzed in the 1996 CoIWMP Program EIR. Since refuse would be placed and compacted daily, any short-term settlement would be corrected during normal operations. Long-term settlement impacts would be addressed by implementation of the following mitigation measures.

#### 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.

The County is responsible for ongoing maintenance of the site, and has established a trust fund to ensure that money will be available for any remedial work needed to repair damage from settlement or other causes after the site is closed. The Franciscan bedrock underlying the landfill and expansion areas is not prone to subsidence.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

# LESS-THAN-SIGNIFICANT IMPACTS

*Earthquake Fault Rupture – Central Disposal Site* A geologic analysis of the age and location of the Dunham fault on the Central Disposal Site was conducted to address site suitability for further landfill development (*Geo Logic, 2003*). The results of the study indicate that the Dunham fault traverses the site close to the western boundary. The study also conclusively determined that the activity of the Dunham fault does not extend into the recently-active (Holocene) period. As a result, any setback for landfill construction from the fault trace will be determined upon the recommendation of the geotechnical analysis for the West Expansion.

The 1996 CoTWMP Siting Criteria established a 200-foot setback requirement from fault traces that were active during the Holocene period and Alquist Priolo fault zones. Current state and federal regulations do not require a 200-foot setback for Class 3 landfills, and accordingly, this siting criteria was revised to exclude "lands restricted by state and federal regulatory requirements over earthquake fault zones."

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#### 6.1 INTRODUCTION

This section describes the potential soils and agricultural resources impacts identified for the proposed 2003 CoIWMP programs and facilities, and mitigation measures designed to reduce those impacts. Setting information in Section 6 of the 1996 CoIWMP Program EIR is unchanged. The impacts and mitigation measures from Section 6 of the 1996 CoIWMP are revised as shown below. This section considers soil erosion, loss of topsoil, expansive soils, soils for waste water disposal, and the conversion of agricultural lands.

#### 6.2 SETTING

Refer to the 1996 CoIWMP Program EIR for a complete discussion of the soil characteristics affecting land use activities in Sonoma County.

# 6.3 IMPACTS AND MITIGATION MEASURES

#### STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts on soils and agricultural resources as described below. According to the CEQA Guidelines (Appendix G), a project will have a significant impact on the environment if it will:

#### Soils-

- a) Result in substantial soil erosion or the loss of topsoil;
- b) 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;
- c) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;

#### Agricultural Resources-

- d) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- e) Conflict with existing zoning for agricultural use or Williamson Act contract; or
- f) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

#### CoIWMP PROGRAMS AND ACTIVITIES

The 1996 CoIWMP Program EIR identified three significant impacts related to soils and agricultural resources (Impacts 6-1 through 6-3) and the corresponding mitigation measures. The impacts and mitigation measures are revised or carried forward unchanged as described below.

#### Applicable Impacts and Mitigation Measures From 1996 CoIWMP Program EIR

#### Revised Impact 6-1 Erosion and Siltation (Non-Disposal Facilities)

Siting and construction of new or expanded non-disposal facilities on sites with unstable slope conditions or high erosion potential could result in erosion and siltation.

#### **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:

- 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. Topsoil should be stockpiled and used for the revegetation of disturbed areas.

#### **Revised Impact 6-2 Agricultural Production (Non-Disposal Facilities)**

Siting new or expanded non-disposal facilities on agricultural land will impair agricultural production.

#### 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.

#### Revised Impact 6-3(a) Erosion and Siltation (Landfill)

Development of a new landfill and the expansion of the Central Landfill could have potentially significant adverse soil related impacts. These potential impacts include substantial erosion and siltation.

#### 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.

#### 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.

The above measures may be sufficient to reduce erosion impacts to less than significant. However, without a specific project and site to analyze, it is not possible to conclude that impacts would, in fact, be reduced to less than significant, and therefore, the impact is considered *significant and unavoidable*.

#### New Impact 6-3(b) Conversion of Agricultural Land (Landfill)

Development of a new landfill and the expansion of the Central Landfill could significantly impact agricultural lands. These potential impacts could include the conversion of prime farmland, unique farmland, farmland of statewide importance; conflicts with existing zoning for agricultural use, or a Williamson Act contract; or involve other changes to the environment that could result in the conversion of farmland to non-agricultural use.

The 1996 CoIWMP Program EIR identified a *significant and unavoidable* impact from conversion of prime agricultural land to a new landfill. Prime agricultural land may also be included in a Williamson Act contract and/or zoned for agricultural use. No further significant impact beyond that identified in the 1996 CoIWMP Program EIR would occur as a result of land converted being included in a Williamson Act contract and/or zoned for agricultural use. No further analysis is needed.

#### 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*.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

#### LESS-THAN-SIGNIFICANT IMPACTS

**Long Term Landfill Erosion** Long term erosion after landfill closure would be less than significant. When the landfill is full, a final soil cover will be placed over the refuse. Grass will be planted on the landfill cover, reducing the potential for erosion. The erosion potential will also be reduced by having slopes no steeper than 3H:1V and by constructing a horizontal bench for every 50-foot vertical rise as specified in Mitigation Measure 5.5. The benches will intercept runoff and direct it to ditches and down drains that can accommodate the flow without erosion.

*Expansive Soils* Expansive soils shrink and swell as moisture conditions change. It is not expected that there would be significant impacts from expansive soils resulting from construction of facilities described in the 2003 CoIWMP. If expansive soils are encountered when sites are proposed, site-specific analysis would be conducted to ensure facilities are not affected. Typically expansive soils are replaced if they are not adequate for compaction for building foundations in accordance with the UBC.

*Septic Tank Suitability* Certain soil types are suitable for development of septic systems in areas where public sewer service is not available. It is not expected that there would be significant impacts from soils unsuitable for septic systems resulting from construction of facilities described in the 2003 CoIWMP because new facilities would either be served by sewer or designed to meet all requirements for waste disposal system development during project engineering. If septic systems are proposed for facilities in

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the 2003 CoIWMP when sites are proposed and public sewer is not available, site specific analysis would be conducted to ensure septic system designs comply with county standards.

# 7.1 INTRODUCTION

This section describes the potential impacts identified for the proposed 2003 CoIWMP Programs and facilities on local and regional hydrology and water quality and mitigation measures designed to reduce the identified impacts. The settings, impacts, and mitigation measures identified in Section 7 of the 1996 CoIWMP Program EIR are revised as described below or carried forward unchanged. This section considers potential hydrologic, water quality, and soil siltation and erosion impacts.

# 7.2 SETTING

The hydrology setting as described in the 1996 CoIWMP Program EIR remains generally accurate. The body of knowledge about groundwater supply has not increased substantially, although there is considerably less optimism statewide about water supply, and in Sonoma County particularly about groundwater supply.

The solid waste programs and facilities proposed in the 2003 CoIWMP would continue to operate under the jurisdiction and oversight of the San Francisco Bay and North Coast Regions of the State Water Resources Control Board as described in the 1996 CoIWMP Program EIR.

#### 7.3 IMPACTS AND MITIGATION MEASURES

#### STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding hydrology and water quality as described below. According to the CEQA Guidelines (Appendix G), a project would normally be considered to have a significant adverse impact on hydrology or water quality if it were to:

- a) Violate any water quality standards or waste discharge requirements,
- b) 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted),
- c) Substantially alter the existing drainage pattern of the site or area, including through 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,
- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site,
- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff,
- f) Otherwise substantially degrade water quality,
- g) Place housing within a 100-year hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map,
- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows,
- i) 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, or

j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow.

### COIWMP PROGRAMS AND ACTIVITIES

The 1996 CoIWMP Program EIR identified eight significant hydrology and water quality impacts (Impacts 7-1 through 7-8) and the corresponding mitigation measures. These have been revised as described below or carried forward unchanged. Additional mitigation measures have been identified where appropriate.

#### Applicable Impacts and Mitigation Measures From 1996 CoIWMP Program EIR

#### Revised Impact 7-1 Pollutants in Stormwater Runoff (Non-Disposal Facilities)

Construction and operation of new and expanded non-disposal facilities could adversely affect the quality of stormwater runoff.

#### **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.

#### Revised Impact 7-2 Flooding and Increased Runoff (Non-Disposal Facilities)

Construction and operation of new and expanded non-disposal facilities could increase runoff volumes and could contribute to flooding downstream.

#### 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.

The 1996 CoIWMP Program EIR addressed the impacts of CoIWMP non-disposal facilities affecting flooding downstream as described above. That analysis continues to apply to projects in the 2003 CoIWMP. It is not expected that there would be additional significant flooding impacts resulting from implementation of non-disposal facilities, new landfills or expansion of the landfill at the Central Disposal Site as described in the 2003 CoIWMP. Site specific analysis of the potential effects of flooding in areas shown on federal Flood Insurance Rate Maps, failure of a levee or dam, or effects of seiche, tsunami or mudflow would be done at the time facility locations are proposed. Location of a new landfill within the FEMA designated 100-year floodplain would be prohibited by the exclusionary landfill siting criteria.

#### Revised Impact 7-3 Water Quality (Non-Disposal Facilities)

Grading activities associated with the new and expanded non-disposal facilities could adversely affect water quality.

The existing landfill has a Storm Water Discharge Permit issued by the State Water Resources Control Board, which includes a Storm Water Pollution Prevention Plan (SWPPP). This plan includes measures to reduce erosion from the entire site. The plan must satisfy specific criteria of the State Water Resources Control Board. Any new facilities would also be required to obtain the same permit. The following mitigation measure will ensure that erosion and sedimentation are minimized during construction and operation of facilities described in the 2003 CoIWMP. Site specific mitigation measures would also be developed at the time facility locations are proposed.

#### **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:

- 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. 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.

#### Revised Impact 7-4 Household Hazardous Waste (Non-Disposal Facilities)

On-site handling and temporary storage of household hazardous waste at non-disposal facilities could adversely affect water quality.

#### 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.

#### Impact 7-5 Leachate (Landfill)

The operation of new and expanded solid waste disposal facilities could result in an increase in leachate production, which could lead to degradation of County water quality.

Leachate is produced when stormwater runoff mixes with waste in exposed refuse cells. Leachate from landfills is typically collected and stored in ponds and disposed of by evaporation and by treating it and transporting it to a wastewater disposal facility. In unusually wet winters, there is a potential for leachate to leak or overflow from ponds and be released to reach surface water.

Leachate may also leak from landfill liner systems and mix with groundwater. If the West Expansion at the Central Disposal Site involves placing waste over the original landfill where the liner is not designed to comply with modern standards, there could be groundwater contamination from leachate.

Potential water quality impacts related to leachate contamination of groundwater or surface water would be mitigated to less than significant by incorporating the following mitigation measures.

#### **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.

In addition to the above mitigation measures from the 1996 CoIWMP Program EIR, the following additional mitigation measures would further reduce the potential water quality impacts produced by leachate and wastewater.

#### 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.

#### Impact 7-6 Quality of Stormwater Runoff (Landfill)

The construction and operation of new and expanded solid waste disposal facilities could adversely affect the quality of stormwater runoff.

#### 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.

#### Revised Impact 7-7 Water Quality (Landfill)

Grading activities associated with the new and expanded solid waste disposal facilities could adversely affect water quality.

#### **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.

#### Impact 7-8 Volume and Flow of Surface Waters (Landfill)

The operation of new and expanded solid waste disposal facilities could significantly alter the volume and flow of surface waters.

#### **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).

#### New Impacts and Mitigation Measures Associated With CoIMWP Update

This section identifies new potential hydrology and water quality impacts of the proposed 2003 CoIWMP programs and facilities, which have come about either because of changes in programs in the 2003 CoIWMP or changes in the requirements of CEQA. Therefore, Impact 7-9 would be significant and unavoidable with the implementation of the following mitigation measure.

#### New Impact 7-9 Water Supply (Non-Disposal Facilities and Landfill)

Construction and operation of an expanded or new landfill, the RMF or other proposed facilities such as composting operations could use significant amounts of groundwater.

Some disposal and non-disposal facilities may require substantial amounts of groundwater for operation. Landfills require water for dust control and compost facilities require water to maintain the correct moisture content in the compost. In addition, the RMF will require water for the biological digestion. Depending on the technology chosen in the site-specific environmental document for the RMF, the amount of water required for the digestion process could vary significantly. Anaerobic digestion, one of the organics processing alternatives being considered for the RMF, would require approximately 20,000 to 30,000 gallons of water per day to process the organic materials. There is also a potential for some of this water to be recycled within the digestion process, thereby reducing the need for additional water. Chemical digestion, another alternative organics processing technology, would use approximately 240 gallons of water per day because it relies more heavily on chemical input to complete the digestion process.

When rock is excavated to construct the landfill expansion, it will be necessary to pump groundwater to dewater the excavation. If substantial water is removed, groundwater elevations outside the landfill could be lowered, causing off-site wells to go dry. The same impact could occur if excavations for a new landfill encounter groundwater. The impacts are potentially significant, but cannot be fully analyzed until specific projects are proposed.

Potential water supply impacts would be reduced by incorporating the following mitigation measures. Without specific project analysis, it is not possible to determine whether impacts would be reduced to less than significant.

#### 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.

Substantial changes to groundwater volumes or levels that would be required to construct and operate the proposed landfill and non-disposal facilities could be considered a *significant and unavoidable* impact.

#### New Impact 7-10 Blasting Spills (Landfill)

Blasting for excavation of landfill cells could involve spills of blasting materials, resulting in surface water contamination.

Blasting for landfill construction would increase the potential for spills of construction related contaminants because the explosives could be spilled while they are being loaded into the blasting holes. Most commercial explosives contain 70 to 90% ammonium nitrate by weight. If spilled and not cleaned up, some ammonia and nitrate could be carried in surface water runoff to local streams during the rainy season.

This impact can be avoided by requiring all contractors to use proper procedures when handling explosives.

#### 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.

#### New Impact 7-11 Ground Vibrations From Blasting (Landfill)

Blasting near an existing landfill could cause fractures to open in bedrock or damage or displace the landfill liner as a result of ground vibrations. This would create the potential for leachate intrusion into groundwater.

#### 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.

#### New Impact 7-12 Groundwater Recharge (Non-Disposal Facilities)

Loss of groundwater recharge from large non-disposal facilities (i.e., composting facilities) could occur from impermeable surfaces.

#### 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.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

#### LESS-THAN-SIGNIFICANT IMPACTS

*Groundwater Recharge* Siting criteria for new landfills rank sites outside of groundwater recharge areas as more desirable. This reduces the likelihood that a new landfill would affect groundwater recharge to less-than-significant levels.

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#### 8.1 INTRODUCTION

This section describes the potential impacts identified for the proposed 2003 CoIWMP programs and facilities on public health and safety from hazards and hazardous materials, and the mitigation measures designed to reduce the identified impacts. Setting information from Section 8 of the 1996 CoIWMP Program EIR is carried forward unchanged. Impacts and mitigations are revised as described below.

#### 8.2 SETTING

The solid waste programs and facilities proposed in the 2003 CoIWMP would operate under the jurisdiction and oversight of various solid waste, hazardous waste, and other environmental regulatory agencies as identified in the 1996 CoIWMP Program EIR.

The risks identified in the 1996 CoIWMP Program EIR adequately characterize the environmental setting today.

#### 8.3 IMPACTS AND MITIGATION MEASURES

#### STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts from hazards and hazardous materials as described below. According to the CEQA Guidelines (Appendix G), public health impacts from hazards and hazardous materials are based on the project's potential to:

- a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials,
- b) 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,
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school,
- d) 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,
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area,
- f) For a project located within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area,
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, or
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

# CoIWMP UPDATE PROGRAMS AND ACTIVITIES

The 1996 CoIWMP Program EIR identified seven significant public safety impacts (Impacts 8-1 through 8-7) and the corresponding mitigation measures. They are revised as described below.

Applicable Impacts and Mitigation Measures from 1996 CoIWMP Program EIR

### Revised Impact 8-1 Injury & Illness (Non-Disposal Facilities and Landfill)

New and expanded non-disposal facilities and landfill may give rise to the potential for injury and illness among collection program and facility employees.

#### **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.

# Revised Impact 8-2 Fungi and Bacteria (Non-Disposal Facilities)

Workers in new and expanded non-disposal facilities and participation by the general public in backyard composting programs identified in the CoTWMP could result in health problems for susceptible persons exposed to allergenic fungi and infectious bacteria (e.g aspergillous).

# **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

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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.

**Revised Impact 8-3 Household Hazardous Wastes (Non-Disposal Facilities and Landfill)** Household hazardous waste (HHW) programs identified in the 2003 CoIWMP may increase the potential for public health impacts in surrounding areas.

#### **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.

#### Revised Impact 8-4 Exposure of Employees and the

#### General Public to Accidental Injury (Non-Disposal Facilities and Landfill)

Construction and operation of new and expanded non-disposal facilities and landfills could expose employees and the general public to accidental injury.

#### **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.

# Revised Impact 8-5 Accidental Combustion and Exposure

#### of Toxic Substances (Non-Disposal Facilities and Landfill)

Processes inherent in the operation of new and expanded non-disposal facilities and landfills could result in accidental combustion of materials accumulated for transfer and storage and expose area residents to toxic substances and/or increased fire or explosion potential.

#### **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.

#### Revised Impact 8-6 Vectors (Non-Disposal Facilities and Landfill)

Operation of new and expanded non-disposal facilities and landfills may lead to habitation of vectors in and around the facilities.
# 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.

# Revised Impact 8-7 Public Safety (Non-Disposal Facilities and Landfill)

Development of new and expanded non-disposal facilities and landfill or expansion of the Central Landfill would likely have potentially significant adverse impacts on public safety.

Implementation of the following mitigation measures would reduce the impact, but not to a less-thansignificant level. The impact would remain *significant and unavoidable*.

# **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.

(1) 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.

# New Impacts and Mitigation Measures Associated With 2003 CoIWMP

This section identifies new potential impacts from hazards or hazardous materials of the proposed 2003 CoIWMP programs and facilities, which have come about either because of changes in programs in the 2003 CoIWMP or changes in the requirements of CEQA.

# New Impact 8-8 Chemical or Biological Digestion (Non-Disposal Facility)

One type of organics processing being considered for the RMF known as chemical or biological digestion, could involve the transportation, use and disposal of hazardous material to facilitate the digestion process. Improper handling could result in spills, which could expose people to these materials.

There are various conversion technologies available to produce energy from the organic portion of waste. Chemical or biological digestion is a type of organics processing that uses hazardous material to facilitate the process. Hazardous material would be brought to the site in trucks and stored indoors. Hazardous material would be used to break down the organic part of the waste. Following the digestion process the water would be recycled, lime would be used to neutralize the solids and the residue would be inert.

Although this is a potentially significant impact, with the implementation of the following mitigation measure, this impact can be reduced to less than significant.

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# 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.

# New Impact 8-9 Blasting for Landfill Excavation (Landfill)

Significant vibration impacts could result from blasting for the excavation for landfill construction.

Site preparation at the Central Disposal Site or a new landfill could involve quarrying rock, including periodic blasting to break up large formations prior to excavation. Blasting explosions cause ground vibrations that could cause damage to on-site or off-site structures. An analysis of blasting effects conducted in 1998 for the Central Disposal Site Improvement project shows that blasting for rock extraction could affect people or structures, although the risk could be reduced by following certain procedures (Geotek, 1998). The study recommended parameters for the site that would reduce ground vibration impacts to less-than-significant levels.

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# 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.

Implementation of these mitigation measures would reduce the impact to a less-than-significant level.

New Impact 8-10 State-Designated Contaminated Sites (Non-Disposal Facilities and Landfill) New facilities could be sited on lands designated by the state as containing hazardous materials contamination.

The State of California maintains a list of site addresses where hazardous materials contamination has been identified, particularly leaking underground fuel storage tanks. If a facility is located on such a site, the following mitigation measure should be implemented to ensure that the contamination is avoided or handled properly, thus reducing this impact from hazardous materials to less than significant.

# 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.

# New Impact 8-11 Emergency Response and Evacuation Plans (Non-Disposal Facilities and Landfill)

New facilities or expansion of existing solid waste or non-disposal facilities may not be covered by existing emergency response and evacuation plans of the county or incorporated cities.

If new facilities are built or existing facilities are expanded, there could be increased or changed need for emergency response during fires, earthquakes or other emergencies. New facilities or expansion of existing facilities would need to comply with countywide and city emergency response and evacuation

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plans. In addition, emergency response and evacuation plans for the facilities should be prepared or revised in accordance with relevant county or city plans.

# 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.

Also see Mitigation Measure 8-4 above regarding preparation of emergency response and evacuation plans.

#### New Impact 8-12 Hazardous Materials Adjacent to Schools (Non-Disposal Facilities and Landfill) Hazardous materials could be handled within a quarter mile of a school.

Depending on the location selected for new facilities, there could be schools located within a quarter mile. The following mitigation measure would reduce the impact to less than significant.

# 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.

Also see Mitigation Measure 8-3 above regarding handling of household hazardous waste. Site specific analysis of the effect of facilities on schools would be done at the time facility locations are proposed.

# New Impact 8-13 Wildland Fires (Non-Disposal Facilities and Landfill)

Wildland fires could occur adjacent to new or expanded non-disposal facilities and landfills.

# 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.

With the implementation of the above mitigation measures, impacts associated with wildland fires will be reduced to less than significant.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

LESS-THAN-SIGNIFICANT IMPACTS None identified.

# 9.1 INTRODUCTION

This section describes potential transportation impacts identified for the proposed 2003 CoIWMP programs and facilities and mitigation measures designed to reduce the identified impacts. Setting information from Section 9 of the 1996 CoIWMP Program EIR is carried forward unchanged. Impacts and mitigations are revised as described below.

# 9.2 SETTING

The environmental setting described in the 1996 CoIWMP Program EIR adequately characterizes the transportation setting in existence today. The Sonoma County General Plan is in the process of being updated; updated traffic standards will apply to County projects pursuant to the 2003 CoIWMP when the General Plan is revised.

# 9.3 IMPACTS AND MITIGATION MEASURES

# STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts to transportation as described below. According to the CEQA Guidelines (Appendix G), transportation impacts are based on the project's potential to:

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);
- e) Result in inadequate emergency access;
- f) Result in inadequate parking capacity; or
- g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

# CoIWMP PROGRAMS AND ACTIVITIES

The 1996 CoIWMP Program EIR identified two potentially significant transportation impacts (Impacts 9-1 and 9-2) and the corresponding mitigation measures. These are revised as described below.

#### Applicable Impacts and Mitigation Measures from 1996 CoIWMP Program EIR

#### **Revised Impact 9-1 Operations (Non-Disposal Facilities)**

The operation of new and expanded non-disposal facilities could result in significant impacts to transportation in Sonoma County.

## **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 nondisposal 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.

Since the new non-disposal facilities are likely to be located where they will be served by existing arterial and collector streets, traffic impacts could result from construction and operation if those streets are already at an unacceptable Level of Service. If the new facilities are located in a manner that would require traffic to travel over an existing minor road, the increase in traffic volumes could be significant. Additional mitigation measures could include:

#### 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.

# **Revised Impact 9-2 Operations (Landfill)**

The operation of new solid waste disposal facilities, including rock extraction activities, could add to existing congestion on roads or intersections that currently operate at an unacceptable level of service, or could cause those roads or intersections to operate at an unacceptable level of service.

Because the new landfill is likely to be located where it will be served by existing arterial and collector streets, traffic impacts could result from construction and operation if those streets are already at an unacceptable Level of Service. If the new facilities are located in a manner that would require traffic to travel over an existing minor road, the increase in truck traffic volumes could be significant. Additional mitigation measures could include:

# **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.

# 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.

The above mitigation measures may not reduce the impact to a less-than-significant level, and the impact would remain potentially *significant and unavoidable*.

# New Impacts and Mitigation Measures Associated With 2003 CoIWMP

This section identifies new potential impacts from traffic and transportation activities of the proposed 2003 CoIWMP programs and facilities, which have come about either because of changes in programs in the 2003 CoIWMP or changes in the requirements of CEQA.

# New Impact 9-3 Central Disposal Site Rock Extraction Traffic (Landfill)

Removal of rock at the Central Disposal Site for commercial purposes would generate significant truck traffic trips for hauling rock which would increase congestion at the Stony Point/Roblar or Stony Point/West Railroad intersections.

The 1998 Central Disposal Site Rock Extraction Project EIR analyzed impacts caused by hauling rock from the Central Disposal Site to a commercial quarry. Traffic hauling rock to a commercial processing facility would most likely have significant impacts at the intersections of Stony Point/Roblar Roads or Stony Point Road/West Railroad Avenue. The intersections of Stony Point/Mecham Roads, Stony Point/Pepper Roads and Stony Point Road/Highway 116 have been recently upgraded to improve traffic flow and it is not expected that there would be significant traffic impacts to those intersections resulting from implementing the 2003 CoIWMP programs at the Central Disposal Site. The 1998 Central Disposal Site Rock Extraction Project EIR found that the following mitigation would reduce or avoid the traffic impact of rock extraction at the Central Disposal Site. The increased number of trucks per hour analyzed in that EIR was 12 round-trips per hour for nine hours per day during peak hauling periods. Future truck traffic for rock extraction is unknown, but it could be substantially more than the previous project.

#### 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.

The above mitigation measures may not reduce the impact to a less-than-significant level, and the impact would remain potentially *significant and unavoidable*.

# New Impact 9-4 Central Disposal Site Expansion Traffic (Landfill)

Expansion of the landfill at the Central Disposal Site and permanent operation of the site as a landfill and transfer station would extend existing traffic further into the future (past 2015).

Programs in the 2003 CoIWMP include the expansion of the Central Landfill towards the western boundary and conversion of the tipping floor to a transfer station when all available landfill space is filled. Accordingly, truck traffic hauling refuse to the Central Disposal Site would continue further into the future (after 2015).

The traffic analysis for the 1998 Central Disposal Site Improvement Program EIR identified significant impacts from the addition of project traffic to a number of road intersections, resulting primarily from the landfill operation and the household hazardous waste facility. The analysis was done for the morning peak traffic hour, because the greatest project traffic occurs during that time. Significant traffic impacts would most likely occur at the intersections of Stony Point/Roblar Roads and Stony Point Road/West Railroad Avenue if traffic signals have not been installed at those intersections by 2015.

The intersections of Stony Point/Mecham Roads, Stony Point/Pepper Roads, and Stony Point Road/Highway 116 have been recently upgraded to improve traffic flow and it is not expected that there would be significant traffic impacts to those intersections. If the Stony Point/Roblar Roads and Stony Point Road/West Railroad Avenue intersections are not signalized by 2015, the following mitigation measure would reduce traffic impacts to a less-than-significant level.

## 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.

# New Impact 9-5 Rock Extraction Traffic Safety (Landfill)

Rock extraction at the Central Disposal Site could create transportation safety hazards on haul routes and at the site.

A large volume of heavy-duty trucks could be used at the Central Disposal Site and on local roadways during quarry operations at the Central Disposal Site. As a result, there would be a greater potential for violations and accidents due to congestion and limited sight distance at the landfill and on haul routes.

# 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.

# New Impact 9-6 New Facilities Safety (Non-Disposal Facilities and Landfill)

Construction and operation of a new landfill or non-disposal facility could cause safety problems at its driveway entrance, access road, or on minor streets that serve the new facility.

#### 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.

Site specific analysis would be done at the time facility locations are proposed. In addition, see Impact 8-12 for an analysis of the impacts to emergency access from programs and facilities proposed in the 2003 CoIWMP.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

# LESS-THAN-SIGNIFICANT IMPACTS

**Transport of Explosives** Rock extraction sometimes requires blasting to break up and loosen the rock. The explosives typically consist of fertilizer and diesel fuel. Since no long term storage of explosives is permitted at the Central Disposal Site, all materials will be brought to the site as needed. All trucks that transport explosives must comply with the Code of Federal Regulations, Section 40 (Hazardous Materials Transport), which includes requirements for safety gear and vehicle signage. Compliance with these regulations will ensure that impacts associated with the transport of explosives for use in rock excavation at the landfill would be less than significant.

*Air Traffic Patterns, Parking, Alternative Transportation* It is not expected that there would be significant impacts to air traffic patterns, parking or alternative transportation resulting from implementation of programs and facilities in the 2003 CoIWMP. According to the exclusionary landfill siting criteria, a new landfill cannot be located within 10,000 feet of a runway used by jet aircraft or 5,000 feet of a runway used by propeller-driven aircraft.

# **10.1 INTRODUCTION**

This section describes the potential new impacts on air quality identified for the proposed 2003 CoIWMP programs and facilities, and mitigation measures designed to reduce the identified impacts. Setting information, impacts, and mitigations identified in Section 10 of the 1996 CoIWMP Program EIR are revised as described below.

# 10.2 SETTING

Sonoma County is located in the Northern Sonoma County Air Pollution Control District (NSAPCD) and the Bay Area Air Quality Management District (BAAQMD).

The environmental setting for air quality in Sonoma County remains as described in the 1996 CoIWMP Program EIR, except for changes with regard to the following:

New generators have been added to the electricity production plant at the Central Disposal Site, bringing the total number of generators fueled by landfill gas to ten, and the potential annual production of electricity from landfill gas to 7.5 megawatts.

Some new facilities described in the 2003 CoIWMP such as grinders for compost production, electricity generators and the resource management facility (RMF) may need project permits from the applicable air quality district.

# POLLUTANTS AND STANDARDS

The solid waste programs and facilities proposed in the 2003 CoIWMP would operate under the same regulatory standards as those described in the 1996 CoIWMP Program EIR except where modified as discussed below.

**Suspended Particulate Matter**: Both air districts in Sonoma County are in non-attainment status under the state regulations for particulate matter less than 10 microns in diameter ( $PM_{10}$ ). The federal standards, which are less stringent, are being met, and the area is not considered a "non-attainment area" under federal standards. The current California standard for  $PM_{10}$  is 30 micrograms per cubic meter. The federal standard is 50 micrograms per cubic meter.

A new national particulate matter standard, for particles less than 2.5 microns in diameter ( $PM_{2.5}$ ) has been promulgated by the federal government. The standard is 15 micrograms per cubic meter. Classifications of attainment for this standard will be made based on a three-year average.

**Ozone**: The Environmental Protection Agency (EPA), which administers the Clean Air Act of 1970, as amended, has designated both air quality districts in Sonoma County as "non-attainment area" for ozone.

Following the preparation of the 1996 CoIWMP, the BAAQMD was redesignated as an attainment area for the national 1-hour ozone standard. However, hot stagnant weather led to new exceedances of the national ozone standard in the summers of 1995 and 1996. As a result, in 1998 US EPA redesignated the region as a non-attainment area for the national 1-hour ozone standard. Although air quality meets the

1-hour national ozone standard more than 99.9% of the time, further exceedances were recorded in 1998 and subsequent years.

**Toxic Air Contaminants**: The Federal Environmental Protection Agency (EPA), California Air Resources Board (CARB), and the air districts also regulate toxic air contaminants (TACs). There are 189 substances which are designated by the CARB as TACs, many of which are from stationary sources and can be regulated by the air quality management districts by permit. Also, in August, 1998 the CARB identified diesel particulates as a TAC. The air districts have established standards for stationary source emissions of diesel particulate matter, based on potential cancer and non-cancer health effects which are evaluated on a case-by-case basis. Stationary source standards are based on project-specific risk assessment. Mobile source emissions are regulated at the state and federal level with vehicle and fuel standards. In December, 2000 the EPA approved rules regulating diesel fuel and emissions.

**Regional Air Quality Planning:** The State Implementation Plan (SIP) for federal ozone standards in the BAAQMD described in the 1996 CoIWMP Program EIR has been updated. The new plan was adopted in October, 2001 and shows how the federal ozone standards are to be attained in that district by 2006. The BAAQMD plan also applies to the NSCAPCD since the ozone problems there are the result of transport of polluted air. There is also a Clean Air Plan for state ozone standards for the BAAQMD which was adopted in December, 2000.

# **10.3 IMPACTS AND MITIGATION MEASURES**

# STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP, including Table 10.1–Federal and State Ambient Air Quality Standards. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts to air quality as described below. According to the CEQA Guidelines (Appendix G), air quality impacts are based on the project's potential to:

- 1) Conflict with or obstruct implementation of the applicable air quality plan;
- 2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- 3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- 4) Expose sensitive receptors to substantial pollutant concentrations; or
- 5) Create objectionable odors affecting a substantial number of people.

Since 1996, air districts have established project-level significance criteria for criteria pollutants. Significance criteria published in the most recent *BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans* will be used to analyze air impacts of future projects. The significance criteria in the current (1999) version of the Guidelines are summarized in the following table.

#### **BAAQMD Significance Criteria**

<u>Pollutant</u>	<u>ton/yr</u>	<u>lb/day</u>
ROG (NMHC) <sup>a</sup>	15	80
NO <sub>x</sub>	15	80
$PM_{10}$	15	80
CO <sup>b</sup>	N/A	550
SO <sub>2</sub> <sup>c</sup>	27	150
Pb	N/A	N/A

<sup>a</sup> Reactive organic gases (non-methane hydrocarbons)

<sup>b</sup> From vehicle emissions

<sup>c</sup> SO<sub>2</sub> significance level derived from previous BAAQMD CEQA Guidelines

Source: BAAQMD CEQA Guidelines (1999)

NSCAPCD has adopted slightly different thresholds as described below.

#### NSCAPCD Significance Criteria

<u>Pollutant</u>	<u>ton/yr</u>	<u>lb/day</u>
ROG	40	219
NO <sub>x</sub>	40	219
<b>PM</b> <sub>10</sub>	15	80
CO	100	550
SO <sub>2</sub>	40	219
Pb	0.6	N/A

Source: NSCAPCD Rule 130 (1980)

#### METHODOLOGY

Impact analysis methodology as described in the 1996 CoIWMP Program EIR also applies to the analysis of impacts in this supplemental document; emissions are addressed qualitatively. Project specific analysis will be done at the time facilities are planned for construction.

#### COIWMP PROGRAMS AND ACTIVITIES

The 1996 CoIWMP Program EIR identified four significant air quality impacts (Impacts 10-1 through 10-4) and corresponding mitigation measures to reduce the impacts. Impacts and mitigation measures are revised as described below.

The 1996 CoIWMP Program EIR concluded that because the southern portion of the County was nonattainment for  $PM_{10}$  and ozone precursor (Nitrogen Oxides  $[NO_x]$  and Reactive Organic Gases [ROG]) standards, any increase in air emissions would be considered significant even with mitigation measures. Consequently, the impact was determined to be significant and unavoidable. However, the BAAQMD CEQA Guidelines significance criteria allow emissions of criteria pollutants up to threshold levels before a significant impact is reached. Therefore, an increase in emissions is not automatically a significant impact. The significance criteria must be applied to new projects to determine whether impacts exceed threshold levels. In addition to emissions of criteria pollutants, if sensitive receptors are located in close proximity to sites where diesel equipment and trucks are operated, there could be significant impacts from TACs. Diesel powered haul trucks would have a potentially significant impact along the access roads and near facilities described in the 2003 CoIWMP, including the new landfill and non-disposal facilities. Other TACs would also be emitted from the landfill at the Central Disposal Site and the electrical generation plant.

# Revised Impact 10-1 Air Emissions (Non-Disposal Facilities)

Construction and operation of the new and expanded non-disposal facilities could result in significant emissions of carbon monoxide,  $NO_x$ , and ROG. Also, diesel emissions from trucks and equipment would include TACs which could be potentially hazardous if sensitive receptors (homes, schools, hospitals) are located near a new non-disposal facility.

All these emissions would contribute to regional air quality problems to the extent that they are caused by new traffic, rather than existing traffic that is re-distributed over different roads. Localized air quality impacts could also occur if homes or other sensitive receptors are near the facility and if operations at the facility cause emissions of TACs. Likely sources of TACs would be diesel engines in equipment or vehicles. The main source of criteria pollutants, such as  $NO_x$ , ROG, and CO, is likely to be vehicle traffic using the non-disposal facilities.

The following mitigation measures will reduce local area impacts relating to emissions of criteria pollutants, TACs, and exposure to sensitive receptors.

#### 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.

#### 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.

# 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.

# 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.

It is possible that the smaller non-disposal facilities would have less-than-significant emissions of criteria pollutants and TACs, even if they result in an increase in vehicle miles traveled. This is contrary to the 1996 CoIWMP Program EIR conclusion that any increase in vehicle miles traveled would be a significant impact. When projects are proposed, impacts will be analyzed using the most recent threshold established by the air district having jurisdiction.

It is possible that large non-disposal facilities (e.g., RMF, transfer station) could have significant emissions if they generate high traffic volumes, include equipment or processes that generate high emissions of pollutants, or have sensitive receptors nearby. The mitigation measures described above may not reduce impacts to less than significant, and it must be concluded that such facilities may have a *significant and unavoidable* impact on air quality.

#### Revised Impact 10-2 Construction PM<sub>10</sub> (Non-Disposal Facilities)

Construction of new and expanded non-disposal facilities could create significant emissions of  $PM_{10}$ .

High emissions of  $PM_{10}$  may occur during earthmoving operations, traffic on unpaved roads, or wind blown dust from unprotected soil stockpiles. The BAAQMD recommends Best Management Practices to reduce construction emissions.

# **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.

(Note: Mitigation Measure 10-2 (b) and (c) from the 1996 CoIWMP PEIR have been moved to Mitigation Measure 10-1 (b) 3 and 4.)

With the above mitigation measures, emissions of  $PM_{10}$  during construction would be reduced to a less than significant level. This is consistent with the guidance provided by the BAAQMD CEQA Guidelines. This conclusion differs from the 1996 CoIWMP Program EIR, which concluded that the construction impact was significant and unavoidable.

#### **Revised Impact 10-3 Odors (Non-Disposal Facilities and Landfill)**

Expanded composting operations at the Central Landfill Organic Material Processing Facility could increase odorous gas emissions. In addition, landfill operations including the active landfill face and leachate ponds, and composting facilities at the Central Disposal Site, or elsewhere, could generate odors that could result in off-site complaints at the Central Disposal Site or at a new landfill in a location where people live or work nearby.

#### **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.

#### 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.

Implementation of these mitigation measures would reduce the impacts, but not to a level of insignificance. Therefore, this impact is considered *significant and unavoidable*.

# Revised Impact 10-4 (a) Construction (Landfill)

The construction of a new landfill or expansion of the Central Landfill could cause significant emissions of criteria pollutants. Also, diesel emissions from trucks and equipment would include TACs which could be potentially hazardous if sensitive receptors (homes, schools, hospitals) are located nearby.

The construction of a new landfill or expansion of the Central Landfill could result in short-term ROG emissions that may exceed the BAAQMD's or the NSCAPCD's significance thresholds of 15 tons/year (80 lb/day) and 40 tons/year (219 lb/day) respectively, as well as short-term exceedances of  $PM_{10}$  (15 tons/yr [80 lbs/day]).

At the Central Disposal Site, ROG is mainly emitted from decomposing refuse. However, other sources of ROG in the programs in the 2003 CoIWMP would include the short-term use of equipment to build the landfill. The following mitigation measure would reduce the amount of criteria pollutants from constructing the expansion of the Central Landfill or constructing a new landfill. However, it is possible that a *significant and unavoidable* impact would remain.

#### 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.

# Revised Impact 10-4 (b) Operation (Landfill)

The operation of a new landfill or expansion of the Central Landfill could cause significant emissions of criteria pollutants. Also, diesel emissions from trucks and equipment would include TACs which could be potentially hazardous if sensitive receptors (homes, schools, hospitals) are located nearby.

The operation of a new landfill, or expansion of the Central Landfill could result in long-term ROG emissions that exceed the BAAQMD's or the NSCAPCD's significance thresholds of 15 tons/year (80 lb/day) and 40 tons/year (219 lb/day) respectively, as well as long-term exceedances of  $PM_{10}$  (15 tons/yr [80 lbs/day]). At the Central Disposal Site, ROG is mainly emitted from decomposing refuse. Other sources of ROG in the programs in the 2003 CoIWMP would be the refuse in a new landfill and long-term equipment used to operate the landfill. The following mitigation measure would reduce the amount of ROG emissions from expansion of the Central Landfill or operation of a new landfill. However, it is possible that a *significant and unavoidable* impact would remain.

#### 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).

#### New Impacts and Mitigation Measures Associated with 2003 CoIWMP

The following impacts and mitigations were not considered in the 1996 CoIWMP Program EIR because the 1996 CoIWMP did not include rock extraction as a component of new or expanded landfills.

#### New Impact 10-5 Rock Extraction PM<sub>10</sub> Emissions (Landfill)

Blasting and rock crushing for the construction of a new landfill, or expansion of the Central Landfill, may result in  $PM_{10}$  emissions that exceed the BAAQMD's or the NSCAPCD's significance thresholds of 15 tons/year.

The following new mitigation measures would be implemented for landfill construction or expansion.

#### 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.

New Impact 10-6 Rock Extraction Emissions of Criteria Pollutants and TACs (Landfill) Rock extraction for the construction of a new landfill, or expansion of the Central Landfill could result in  $NO_x$  emissions from blasting. Operation of excavating equipment, rock crushers, and haul trucks could cause significant emissions of criteria pollutants (e.g., carbon monoxide,  $NO_x$ , and ROG) and TACs.

Blasting for landfill construction could cause  $NO_x$  emissions if insufficient fuel oil is mixed with the ammonium nitrate explosive, or if the bore hole contains water and the explosive is not a water-resistant type. The following mitigation measure would ensure that blasting does not contribute to  $NO_x$  emissions.

#### 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.

These mitigation measures may not reduce Impacts 10-5 and 10-6 to less than significant; therefore, it is concluded that rock extraction projects associated with new or expanded landfills may have *significant and unavoidable* air quality impacts.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

# LESS-THAN-SIGNIFICANT IMPACTS

None identified.

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# 11.1 INTRODUCTION

This section describes the potential noise impacts identified for the proposed 2003 CoIWMP programs and facilities, and mitigation measures designed to reduce the identified impacts. Noise impacts and mitigations identified in Section 11 of the 1996 CoIWMP Program EIR are revised as described below.

# 11.2 SETTING

The setting described in the 1996 CoIWMP Program EIR adequately characterizes the noise environment and regulations currently in effect.

# 11.3 IMPACTS AND MITIGATION MEASURES

#### STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts from noise as described below. According to the CEQA Guidelines (Appendix G) noise impacts are based on the project's potential to:

- a) Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- b) Expose persons to or generate excessive ground borne vibration or ground borne noise levels;
- c) Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- d) Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels; or
- f) For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Table NE-2 in the Sonoma County General Plan indicates the permissible noise levels that may be generated by new land uses at the nearest property line of a parcel having a residential use. The General Plan states that if the ambient noise level already exceeds the values given in the table, then the ambient levels become the standard (Policy NE-1c).

In the unincorporated areas of Sonoma County, the most recent revision of the Sonoma County General Plan will be used to evaluate noise impacts of future projects needed to implement the 2003 CoIWMP. Within incorporated areas, the appropriate city/town plan or ordinance will be used.

# **CoIWMP PROGRAMS AND ACTIVITIES**

The 1996 CoIWMP Program EIR identified six significant noise impacts (Impacts 11-1 through 11-6) and the corresponding mitigation measures. They are revised as described below.

#### Applicable Impacts and Mitigation Measures From 1996 CoIWMP Program EIR

#### **Revised Impact 11-1 Construction Noise (Non-Disposal Facilities)**

Construction of new and expanded non-disposal facilities could cause temporary increases in noise levels on, and around, the proposed facilities over the entire period of construction.

#### **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.

#### Revised Impact 11-2 Traffic Noise (Non-Disposal Facilities)

Implementation of proposed 2003 CoIWMP non-disposal programs could produce increased noise levels. New and expanded non-disposal facilities could cause traffic increases resulting in noise level increases along roadways, which would generate impacts on nearby land uses.

#### **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.

Since the new non-disposal facilities are likely to be located where they will be served by existing arterial and collector streets, noise impacts could result along these haul routes. Additional mitigation measures could include:

#### 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)).

The preceding mitigation measures will reduce the impacts, but in some cases may not reduce them to a level of insignificance. The impacts may be *significant and unavoidable*.

New and expanded non-disposal facilities could produce operational noise.

# **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.

The preceding mitigation measures will reduce the impacts, but in some cases may not reduce them to a level of insignificance. The impacts may be *significant and unavoidable*.

# **Revised Impact 11-4 Construction Noise (Landfill)**

Construction of new or expanded solid waste disposal facilities, including any potential rock extraction, could cause temporary increases in noise levels on, and around, the proposed facilities over the entire period of construction.

# **Revised Mitigation Measure 11-4**

Same as Mitigation Measure 11-1.

Noise impacts from landfill construction are analyzed in Impact 11-1. It should be noted that site-specific analysis of noise impacts from construction and operations at the Central Disposal Site was conducted as part of the Central Disposal Site Improvement Program EIR (*December, 1998*). The impacts of the landfill expansion and the associated rock quarry will likely be similar to those identified for the West Canyon expansion in the 1998 EIR. Both construction and operation could cause noise levels at the south property line and adjacent residences that would exceed General Plan noise criteria. It was determined in the 1998 EIR that noise would be from earthmoving equipment and rock processing equipment and would be directed toward the south, because the topography is open in this direction and shielded in other directions. Further expansion of the Central Landfill will require a new noise analysis.

Refer to Impact 8-9 for analysis of vibration impacts from blasting for the rock extraction in the Central Disposal Site west expansion.

# Impact 11-5 Traffic Noise (Landfill)

Operation of new and expanded solid waste disposal facilities could cause traffic increases resulting in noise level increases along roadways, which would generate impacts on nearby land uses.

# **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.

The preceding mitigation measures will reduce the impacts, but may not reduce them to a level of insignificance. The impacts may be *significant and unavoidable*.

# Revised Impact 11-6 Operations (Landfill)

Landfill expansion in the west portion of the Central Disposal Site, including rock extraction activities and development of any new landfill, could produce noise levels that exceed the Sonoma County General Plan noise criteria or cause a substantial, permanent increase in ambient noise levels.

#### **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.

#### 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.

The preceding mitigation measures will reduce the impacts, but may not reduce them to a level of insignificance. The impacts may be *significant and unavoidable*.

Refer to Impact 8-9 for analysis of vibration impacts from blasting for the rock extraction in the Central Disposal Site west expansion.

New Impacts and Mitigation Measures Associated With 2003 CoIWMP

This section identifies new potential noise impacts of the proposed 2003 CoIWMP programs and facilities, which have come about either because of changes in programs in the 2003 CoIWMP, changed conditions, or changes in the requirements of CEQA.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

# LESS-THAN-SIGNIFICANT IMPACTS

Airport Noise It is not expected that programs and facilities implemented pursuant to the 2003 CoIWMP would involve exposure of people residing or working at the project or in the project area to excessive noise levels from public or private airports. A landfill is not a noise sensitive land use. Also, landfill siting criteria restrict the location of new landfills to at least 10,000 feet from a runway used by jet aircraft and at least 5,000 feet from a runway used by propeller-driven aircraft. Further analysis would be conducted at the time new sites are proposed for solid waste facilities.

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# 12.1 INTRODUCTION

This section describes potential vegetation and wildlife impacts identified for the proposed 2003 CoIWMP programs and facilities and mitigation measures designed to reduce the identified impacts to less-than-significant levels. Setting information, impacts and mitigations identified in Section 12 of the 1996 CoIWMP Program EIR are revised as described below.

# 12.2 SETTING

Refer to the 1996 CoIWMP Program EIR for a complete discussion of vegetation and wildlife types in Sonoma County. Refer to 1998 Central Disposal Site Improvement Program EIR for a full discussion of wetland and riparian impacts and mitigation measures at the Central Disposal Site as summarized below.

#### SENSITIVE PLANT AND ANIMAL SPECIES

There are now 19 federally listed (Endangered) plant species and 14 federally listed (Threatened or Endangered) animal species that have been known to occur in Sonoma County. In addition there are 18 plant species and 7 animal species that are listed as Threatened or Endangered under the California Endangered Species Act (CESA). Numerous other species have sensitive status, either federal, state, local or California Native Plant Society species of concern. Refer to the 1996 CoIWMP Program EIR for a complete discussion of sensitive species terms.

#### HABITAT CONSERVATION PLANS/NATURAL COMMUNITY CONSERVATION PLANS

When nonfederal projects affect federally listed species or their habitat, the federal Endangered Species Act requires that a Habitat Conservation Plan/Natural Community Conservation Plan (HCPs/NCCPs) be prepared to provide the measures to ensure that the continued existence of listed species is not jeopardized. In Sonoma County, property with HCPs/NCCPs includes certain timber production areas in the northwest county and the Petaluma River-Sonoma Creek watershed. A habitat conservation plan for salmonids is in process for the Russian River. Proposed projects on land included in such plans would be required to comply with provisions regarding listed species and their habitat.

# 12.3 IMPACTS AND MITIGATION MEASURES

#### STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts to vegetation and wildlife as described below. According to the CEQA Guidelines (Appendix G), vegetation and wildlife impacts are based on the project's potential to:

- a) 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;
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- c) 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;
- d) 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;
- e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance; or
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

#### CoIWMP PROGRAMS AND ACTIVITIES

The 1996 CoIWMP Program EIR identified two significant impacts to vegetation and wildlife (Impacts 12-1 and 12-2) and the corresponding mitigation measures. These are revised as described below.

#### Applicable Impacts and Mitigation Measures from 1996 CoIWMP Program EIR

Revised Impact 12-1 Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites (Non-Disposal Facilities) New and expanded non-disposal facilities could significantly impact wetlands, listed or sensitive species or their habitat, and/or sensitive/natural communities.

#### **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.

(Note: Mitigation Measures 12-1 (a) and (b) have been combined into Revised Mitigation Measure 12-1 (a).)

Loss of any riparian vegetation would be considered significant due to the sensitivity and value of this vegetation type as wildlife habitat.

#### 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.

Construction of non-disposal facilities could involve the removal of trees that have been used by raptors as nesting sites. If the tree removal is done when the nests are being used, the young could be harmed.

The impact could be mitigated by avoiding work near the trees during the time that the parents may be raising young in the nest and by removing the trees only when the nests are inactive. The following mitigation measure will reduce the impact to a level of insignificance.

(c) Before construction during the active nesting period between March 1 and September 1, a qualified biologist 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.

# Impact 12-2 Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites (Landfill)

The development of a new landfill or the expansion of the Central Landfill could potentially affect listed and sensitive species and sensitive natural communities. The new and expanded landfill could have the following effects on the resources listed above:

- a. Eradication of existing biological component in the active landfill area.
- b. Disturbance to adjacent sites and buffers due to containment and clean-up activities where sensitive species may occur.
- c. Increased traffic on local roads leading to the landfill, resulting in vehicle collisions with listed and sensitive animals.
- d. Creating an attractive nuisance for certain listed and sensitive animals choosing to forage in landfills, subjecting them to toxic substances, crushing by heavy equipment, and unnatural food sources.
- e. Providing conditions which allow populations of native and exotic species to congregate and/or increase, resulting in competition with and/or predation upon listed and sensitive species.

#### **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.

Expansion of the Central Landfill into the West Canyon would result in the loss of wetland habitat which exists in the vicinity of hillside seeps and springs. The 1998 Central Disposal Site Improvement Program EIR identified wetlands in the West Canyon portion of the Central Disposal Site that would be removed if the landfill was expanded in that area. Mitigation measures were identified in that EIR, and have already been implemented. A wetland preserve has been established which includes creation of replacement wetlands, enhancement of existing wetlands, and enhancement of riparian habitat on a parcel adjacent to the Central Disposal Site. Even though the impact to wetlands in the West Canyon has not occurred yet, this mitigation program has fully mitigated the potential loss of wetlands in both the East and West Canyon areas. No further mitigation is required.

The development of a new landfill, expansion of the Central Landfill or implementation of other facilities described in the 2003 CoIWMP could potentially affect riparian areas.

Loss of any riparian vegetation would be considered significant due to the sensitivity and value of this vegetation type as wildlife habitat. Loss of riparian habitat due to expansion of the Central Landfill has been fully mitigated as described above.

#### 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.

Expansion of the Central Landfill in the western portion of the Central Disposal Site could remove trees that have been used by raptors as nesting sites. If the tree removal is done when the nests are being used, the young could be harmed. Eucalyptus trees such as those used by raptors are abundant in the vicinity of the Central Disposal Site, and there will not be a shortage of nesting sites caused by removal of the trees in the West Expansion area. The impact could be mitigated by avoiding work near the trees during the time that the parents may be raising young in the nest and by removing the trees only when the nests are inactive. The following mitigation measure will reduce the impact to a level of insignificance.

(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.

With the implementation of the above mitigation measure, impacts will be reduced but will remain *significant and unavoidable*.

Sensitive Species at Central Disposal Site During preparation of the EIR for the Central Disposal Site Improvement Program biotic surveys for sensitive plant and animal species were completed. The Northern red legged frog (a California species of Special Concern) was found in one sediment pond. The pond was physically removed as part of the East Canyon Landfill expansion. However, prior to its removal, replacement ponds were constructed off-site and red-legged frogs were moved to the new ponds. No other sensitive species were identified on the landfill parcel, and no habitat for sensitive species is known to exist in the area of the parcel that is being considered for expansion. Therefore, sensitive species are not likely to be impacted at the Central Disposal Site. In addition, future projects at the Central Landfill will require subsequent environmental review.

#### New Impacts and Mitigation Measures Associated With 2003 CoIWMP

No new potential vegetation and wildlife impacts of the proposed 2003 CoIWMP programs and facilities have been identified.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

#### **LESS-THAN-SIGNIFICANT IMPACTS** None identified.

# SECTION 13 CULTURAL RESOURCES AND PALEONTOLOGY

# 13.1 INTRODUCTION

This section describes the potential new impacts on cultural resources and paleontology identified for the proposed 2003 CoIWMP programs and facilities, and mitigation measures designed to reduce the identified impacts to less-than-significant levels. Impacts and mitigation measures identified in Section 13 of the 1996 CoIWMP Program EIR are revised as described below.

# 13.2 SETTING

Refer to the 1996 CoIWMP Program EIR for a complete discussion of the paleontological and cultural resources setting.

# 13.3 IMPACTS AND MITIGATION MEASURES

# STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts to cultural resources and paleontology as described below. According to the CEQA Guidelines (Appendix G) cultural resources and paleontology impacts are based on the project's potential to:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5;
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- d) Disturb any human remains, including those interred outside of formal cemeteries.

# **CoIWMP PROGRAMS AND ACTIVITIES**

The 1996 CoTWMP Program EIR identified two significant cultural resources and paleontology impacts (Impacts 13-1 and 13-2) and corresponding mitigation measures. These are revised as described below.

Applicable Impacts and Mitigation Measures from 1996 CoIWMP Program EIR

#### Revised Impact 13-1 Cultural and Paleontological Resources (Non-Disposal Facilities)

New or expanded non-disposal facilities could result in impacts to cultural and paleontological resources.

# **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.

Mitigation measures for Impacts 13-1 and 13-2 have been revised in accordance with current CEQA practices as described below. Paragraphs 13-1 (d) and 13-2 (d) are deleted and replaced with the following paragraph:

(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.

# Impact 13-2 Cultural and Paleontological Resources (Landfill)

Development of a new or expanded solid waste disposal facility could result in impacts to cultural and paleontological resources.

**Revised Mitigation Measure 13-2** Same as Mitigation Measure 13-1.

#### New Impacts and Mitigation Measures Associated With 2003 CoIWMP

This section identifies a single new cultural resources impact which has come about as a result of changes to CEQA during the intervening time period.

New Impact 13-3 Architectural Historical Resources (Non-Disposal Facilities and Landfill) New non-disposal facilities or a new landfill could result in impacts to architectural historical resources.

Potential impacts to historical resources would be mitigated to less than significant by incorporating the following mitigation measure into the selection process for any new or expanded facilities.

#### 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.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

# LESS-THAN-SIGNIFICANT IMPACTS

None identified.

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# **SECTION 14**

# 14.1 INTRODUCTION

This section describes the impacts of proposed 2003 CoIWMP programs and facilities on visual resources, and mitigation measures designed to reduce the identified impacts. Visual Resources mitigations identified in Section 14 of the 1996 CoIWMP Program EIR are revised as described below.

# 14.2 SETTING

The visual setting and General Plan policies described in the 1996 CoIWMP Program EIR adequately characterize the environmental setting today. There have been no significant changes in visual character or policies since the approval of the 1996 CoIWMP.

# 14.3 IMPACTS AND MITIGATION MEASURES

# STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts to visual resources as described below. According to the CEQA Guidelines (Appendix G), visual impacts are based on the project's potential to:

- 1) Have a substantial adverse effect on a scenic vista,
- 2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway,
- 3) Substantially degrade the existing visual character or quality of the site and its surroundings, or
- 4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

# CoIWMP PROGRAMS AND ACTIVITIES

The 1996 CoIWMP Program EIR identified four significant visual resources impact (Impacts 14-1 through 14-4) and corresponding mitigation measures. These are revised as described below.

#### Applicable Impacts and Mitigation Measures from 1996 CoIWMP Program EIR

#### Revised Impact 14-1 Visible Facilities (Non-Disposal Facilities)

New and expanded non-disposal facilities could be visible from surrounding areas, which could impact scenic vistas, waterways, routes, ridges, and degrade the existing character or quality of the site and its surroundings, that may result in significant aesthetic impacts.

Mitigation Measures 14-1 (a) and (d) have been revised to reflect that the purpose of the mitigation is to show that screening may be needed in Scenic Resource Areas if non-disposal facilities would be visible from public roads.

# **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.

It is now recognized that screening of facilities may not reduce all visual impacts to less-than-significant levels. While the mitigation measures would be effective in screening facilities from scenic views, there would sometimes be portions of facilities that would remain visible or would include night lighting that could not be completely screened from view. This impact is potentially *significant and unavoidable*.

#### **Revised Impact 14-2 Litter (Non-Disposal Facilities)**

New and expanded non-disposal facilities could potentially impact visual resources through the generation of litter in site areas and along transportation routes.

# **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 collected and removed routinely.

#### 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.

The 1996 CoIWMP Program EIR assumed that using litter fences, requiring covered loads and collecting litter at the site, along with any mitigation measures that would be imposed during site-specific review, would adequately mitigate any significant impacts from litter.

It is now recognized that litter control measures cannot prevent all litter at non-disposal facilities. While the mitigation measures would be effective in 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 unavoidable. The following additional mitigation measure would contribute further to reducing the impact of litter, although not to a less-than-significant level; therefore, Impact 14-2 is *significant and unavoidable*.

# 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.

# Revised Impact 14-3 Visible Facilities (Landfill)

New and expanded solid waste disposal facilities (including lighting plans) could be visible from surrounding areas, which could impact scenic vistas, waterways, routes, trees, rock outcroppings, ridges, including historic buildings within a state scenic highway, and could result in significant aesthetic impacts.

Mitigation Measures 14-3 (a) and (d) have been revised because screening will be required in Scenic Resource Areas if solid waste disposal facilities would be visible from public roads.

To the extent possible, changes in the views seen from nearby public roads shall be minimized with the following measures:

# **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.

Mitigation Measure 14-3 (g) and the following additional mitigation measure address potential impacts from light and glare at projects identified in the 2003 CoIWMP. Further analysis would be done when site-specific projects are proposed.

#### 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.

Impact 14-3 describes impact and mitigation measures related to the visibility of landfills from surrounding areas. Design plans for the proposed West Expansion at the Central Disposal Site have not been initiated. However, it is expected that there could be a noticeable increase in the ultimate height of the landfill compared to the current design elevation, which would increase the impact on views from U.S. Highway 101, Pepper Road, Meacham Road, Roblar Road, Stony Point Road, State Highway 116, and other roads. Development of a new landfill could also involve significant visual impacts to Scenic Resources, even with mitigation measures.

#### 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.

Mitigation Measure 14-3 and is expected to reduce the impacts, but perhaps not to a less-than-significant level. Therefore, the impact would remain potentially *significant and unavoidable*.

#### Revised Impact 14-4 Litter (Landfill)

New and expanded solid waste disposal facilities could potentially impact visual resources through the generation of litter at the site and along transportation routes to the site.

#### **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.

The 1996 CoIWMP Program EIR assumed that using litter fences, requiring covered loads and collecting litter at the site, along with any mitigation measures that would be imposed during site-specific review, would adequately mitigate any significant impacts from litter.

It is now recognized that litter control measures cannot prevent all litter at landfills. While the mitigation measures would be effective in 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 unavoidable. The following additional mitigation measures would contribute further to reducing the impact of litter, although not to a less-than-significant level. Therefore, Impact 14-4 is considered to be *significant and unavoidable*.

# 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.

# New impacts and Mitigation Measures Associated With 2003 CoIWMP

No new potential visual impacts associated with the proposed 2003 CoIWMP have been identified.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

**LESS-THAN-SIGNIFICANT IMPACTS** None identified.

# POPULATION & HOUSING, PUBLIC SERVICES, RECREATION, & UTILITIES

# **15.1 INTRODUCTION**

This section describes the potential impacts to population and housing, public services, recreation, and utilities and service identified for the proposed 2003 CoIWMP programs and facilities, and mitigation measures designed to reduce the identified impacts to less-than-significant levels. The impacts and mitigations identified in Section 15 of the 1996 CoIWMP Program EIR are carried forward with this supplemental information.

# 15.2 SETTING

In general, the public services setting and regulatory framework remains the same. However, a number of smaller fire departments have consolidated so that there are fewer fire districts in the county, each serving a greater area.

#### 15.3 IMPACTS AND MITIGATION MEASURES

# STANDARDS OF SIGNIFICANCE

Standards of significance described in the 1996 CoIWMP Program EIR are still applicable to the 2003 CoIWMP. Changes to CEQA during the intervening time period have improved the focus of standards of significance regarding impacts to population and housing, public services, recreation, and utilities and service as described below. According to the CEQA Guidelines (Appendix G), public services impacts are based on the project's potential to:

#### Population and Housing-

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere;
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere;

#### **Public Services-**

d) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services including fire protection, police protection, schools, parks, or other public facilities;

#### **Recreation**-

- e) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;
- f) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment;

#### Utilities and Service Systems-

- g) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
  - h) 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;
- i) 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;
- j) Have sufficient water supplies available to serve the project from existing entitlements and resources, or need new or expanded entitlements;
- k) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the providers existing commitments;
- 1) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- m) Comply with federal, state, and local statutes and regulations related to solid waste.

# **CoIWMP PROGRAMS AND ACTIVITIES**

The 1996 CoIWMP Program EIR identified two significant public utility impacts. Impacts 15-1 and 15-2 and the corresponding mitigation measures below also apply to the proposed 2003 CoIWMP.

Applicable Impacts and Mitigation Measures from 1996 CoIWMP Program EIR

#### Revised Impact 15-1 Fire and Police Services (Non-Disposal Facilities)

Non-disposal facilities and programs may impact existing fire and police services.

# **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.

# Impact 15-2 Fire and Police Services (Landfill)

New and expanded solid waste disposal facilities may impact existing fire and police services.

# 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.

# New Impacts and Mitigation Measures Associated With 2003 CoIWMP

This section identifies new potential public utility impacts of the proposed 2003 CoIWMP programs and facilities, which have come about because of changes in programs in the 2003 CoIWMP or changes in the requirements of CEQA.

# New Impact 15-3 Substantial Adverse Physical Impacts Associated with New or Altered Government Facilities (Non-Disposal Facilities and Landfill)

Construction of new or expanded facilities could have significant impacts on many aspects of the physical environment as described in this SPEIR. See Sections 4 through 14 of this document for a complete discussion of these impacts and mitigation measures.

# New Impact 15-4 Exceed Wastewater Treatment Requirements (Non-Disposal Facilities and Landfill)

Future landfill expansion, a new landfill or other facilities could involve activities that produce discharge to waterways and, therefore, would be required to comply with wastewater treatment requirements of the Regional Water Quality Control Board.

When a project involves discharge of pollutants that could enter waterways, the Regional Water Quality Control Board permitting program is applicable. The following mitigation would ensure that projects implemented under the 2003 CoIWMP would not exceed the wastewater treatment requirements of the Regional Water Quality Control Board, reducing the impact to less than significant.

# 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.

Refer to Impacts 7-5 for a discussion of impacts of leachate collection and disposal. Refer to Impact 7-9 for a discussion of the availability of water supplies.

Unless the above impacts are identified as significant and unavoidable, the above mitigation measures would reduce potential impacts to a less-than-significant level.

# LESS-THAN-SIGNIFICANT IMPACTS

It is not expected that programs in the 2003 CoIWMP would affect population growth or displace substantial numbers of people or existing housing. The siting of a new landfill and RMF could involve the construction of new roads. However, it is unlikely that new roads to the facility would induce population growth or the need for additional schools or recreational facilities. It is possible that construction of adequate solid waste disposal facilities could have an indirect effect on population if development construction had previously been limited by lack of solid waste facilities; however, that is not the situation in Sonoma County.

Expansion of facilities at the Central Disposal Site or construction of new facilities could involve the development of a new well and/or septic system and stormwater drainage facilities. It is not expected

that construction of wells, septic systems, and stormwater drainage facilities for proposed facilities would involve significant environmental impacts. Site specific analysis of water use will be done when projects are proposed.

Programs described in the 2003 CoIWMP would comply with federal, state and local statutes and regulations related to solid waste because the purpose of updating the CoIWMP is to ensure continued compliance with all solid waste laws.

# 16.1 INTRODUCTION

No new or significant potential impacts related to energy use (e.g., inefficient energy consumption) were identified for the proposed 2003 CoIWMP programs and facilities. The energy impacts and mitigation measures identified in Section 16 of the 1996 CoIWMP EIR are not carried forward because no significant or relevant effects have been identified in the 2003 CoIWMP as outlined in Section 15126.4(a)(1)(A) and (C) of the more recent CEQA Guidelines.

A number of energy recovery programs (e.g., landfill and RMF gas-to-energy) are included in the 2003 CoIWMP. These type of facilities would provide a net increase in energy supply as compared to the projected energy demand anticipated for the Central Disposal Site. Transport of solid waste between non-disposal and disposal facilities would result in a mix of energy gains and losses, depending on the design and location of future transfer stations and landfills. Both energy supply (production) and demand (consumption) for non-disposal and disposal facilities proposed in the 2003 CoIWMP would be approximately the same as the 1996 CoIWMP. In addition, the SCWMA will continue to strive for reduced energy impacts by considering the energy efficiency and conservation measures recommended in the CEQA Guidelines Appendix F (Energy Conservation) when implementing future projects proposed in the 2003 CoIWMP.

Therefore, no new or significant potential impacts related to energy use are anticipated from the proposed 2003 CoIWMP.

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# SECTION 17 OTHER ENVIRONMENTAL CONSIDERATIONS

Section 15126 of the CEQA Guidelines lists several subjects that must be discussed in an EIR. This section discusses the subjects or identifies other parts of the SPEIR in which the subjects are discussed.

# 17.1 SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Sections 4 through 16 discuss significant environmental impacts. These impacts are summarized in Table 2-1 of this SPEIR.

# 17.2 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

This section summarizes the significant unavoidable impacts identified in this SPEIR pursuant to Section 15126.2 (b) of the CEQA Guidelines. Significant and unavoidable effects include land use, soils and agricultural resources, public safety, transportation, air quality, noise, and visual resources as identified in Summary Table 2-1. Below is a summary of these impacts.

#### **SECTION 4 LAND USE**

Impact 4-2 Surrounding Land Use Conflicts (Landfill) Impact 4-3 Open Space (Landfill)

#### SECTION 6 SOILS & AGRICULTURAL RESOURCES

Revised Impact 6-2 Agricultural Production (Non-Disposal Facilities) Revised Impact 6-3(a) Erosion and Siltation (Landfill) Revised Impact 6-3(b) Conversion of Agricultural Land (Landfill)

# SECTION 7 HYDROLOGY AND WATER QUALITY

New Impact 7-9 Water Supply (Non-Disposal Facilities and Landfill)

# SECTION 8 PUBLIC SAFETY

Impact 8-7 Public Safety (Non-Disposal Facilities and Landfill)

# **SECTION 9 TRANSPORTATION**

Revised Impact 9-2 Operations (Landfill) New Impact 9-3 Central Disposal Site Rock Extraction Traffic (Landfill)

# SECTION 10 AIR QUALITY

Revised Impact 10-1 Air Emissions (Non-Disposal Facilities) Revised Impact 10-3 Odors (Non-Disposal Facilities and Landfill) Revised Impact 10-4 (a) Construction (Landfill) Revised Impact 10-4 (b) Operation (Landfill) New Impact 10-5 Rock Extraction PM<sub>10</sub> Emissions (Landfill) New Impact 10-6 Rock Extraction Emissions of Criteria Pollutants and TACs (Landfill)

# **SECTION 11 NOISE**

Revised Impact 11-2 Traffic Noise (Non-Disposal Facilities) Revised Impact 11-3 Operations (Non-Disposal Facilities) Impact 11-5 Traffic Noise (Landfill) Revised Impact 11-6 Operations (Landfill)

# SECTION 12 VEGETATION AND WILDLIFE

Impact 12-2 Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites (Landfill)

# SECTION 14 VISUAL RESOURCES

Revised Impact 14-1 Visible Facilities (Non-Disposal Facilities) Revised Impact 14-2 Litter (Non-Disposal Facilities) Revised Impact 14-3 Visible Facilities (Landfill) Revised Impact 14-4 Litter (Landfill)

#### 17.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

Section 15126.2 (c) of the CEQA Guidelines requires that an EIR address any significant irreversible environmental changes which would be involved in the proposed action should it be implemented. Implementation of the CoIWMP would not result in any significant irreversible changes except for land use changes that would be associated with the construction and operation of new landfill capacity and non-disposal facilities. Land use impacts are discussed in Section 4. These changes would be for the duration of the landfill and non-disposal facilities, with restrictions on secondary post-closure uses of the site or sites involved.

# 17.4 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

Section 15126.2 (d) of the CEQA Guidelines requires that an EIR address the growth-inducing impacts of a proposed action. The following discussion summarizes the potential growth-inducing impacts of the proposed 2003 CoIWMP.

The 2003 CoIWMP proposes to provide: 1) a formal agreement among all cities and the County to direct flow of refuse and green waste to a new solid waste facility in Sonoma County; 2) a mandatory access to recycling facilities for residential, commercial, industrial, and institutional waste generators; 3) an expansion of the Central Landfill beyond its current permitted capacity (i.e., beyond the year 2015); and 4) the siting of an integrated RMF to include organic processing (chemical or biological digestion), green waste composting and landfilling.

It is not expected that programs in the 2003 CoIWMP would affect population growth or displace substantial numbers of people or existing housing. The siting of a new landfill and RMF could involve the construction of new roads. However, it is unlikely that new roads to the facility would induce population growth or the need for additional recreational facilities. It is possible that expansion or construction of adequate solid waste disposal facilities could have an indirect effect on population if development construction had previously been limited by lack of solid waste facilities; however, that is not the situation in Sonoma County.

# 17.5 THE MITIGATION MEASURES PROPOSED TO MINIMIZE THE SIGNIFICANT EFFECTS

Mitigation measures are described in Sections 4 through 16 of the SPEIR, and are summarized in Table 2-1.

# 17.6 ALTERNATIVES TO THE PROPOSED PROJECT

Section 18 of this SPEIR discusses 3 alternatives to the project:

- 1. No Project Alternative (see Section 18.2).
- 2. MRF Combined with an Enclosed (Indoor) Green Waste Composting Facility (see Section 18.3).
- 3. No Siting of New Landfill with Export of Waste (see Section 18. 4).

These sections also indicate the degree to which the alternatives would meet the various project objectives. Section 18.5 identifies alternatives which were considered, but rejected as infeasible.

# 17.7 EFFECTS NOT FOUND TO BE SIGNIFICANT

Section 15128 of the CEQA Guidelines requires an EIR to contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and, therefore, were not discussed in detail in the EIR. See Initial Study (Appendix B).

# **17.8 CUMULATIVE IMPACTS**

# **OVERVIEW**

This section assesses potential cumulative impacts of the project pursuant to Section 15130(a) of the CEQA Guidelines. CEQA Guidelines 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, or reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." In addition, Section 21083(b), Public Resources Code, and CEQA Guidelines Section 15130 (b)(1)(A) and (B), emphasize the need to either consider and assess projects with related impacts, or to summarize projections contained in adopted general plans, when discussing cumulative impacts.

For the purposes of this analysis, the study area for which potential cumulative effects are examined is Sonoma County. Potential future conditions have been assessed by reviewing the Sonoma County General Plan. This analysis considers the changes to the environment likely to result from future conditions as envisioned by the Sonoma County General Plan, in combination with the programs and facilities expected to result from implementation of the proposed 2003 CoIWMP. The standards of significance applied are the same as those used in the impact sections for the project. In general, the contribution of 2003 CoIWMP programs and facilities to cumulative impacts is expected to be quite small. Nonetheless, this analysis addresses the likely significance of the totality of those impacts. The EIR prepared for the General Plan is incorporated herein by reference and can be reviewed by the public at the Sonoma County Permit and Resource Management Department, 2550 Ventura Avenue, Santa Rosa, California.

# DISCUSSION OF CUMULATIVE IMPACTS

The following summary of cumulative impacts from the 1996 CoIWMP FPEIR is applicable to the 2003 CoIWMP and is incorporated by reference from the 1996 CoIWMP EIR. Therefore, no changes or revisions to these impacts are proposed in this SPEIR. Estimates provided in this discussion are subject to change after the Sonoma County 2020 General Plan is adopted.

# 1. Land Use

Cumulative impacts to land use are expected to be significant. New development (including new or expanded disposal facilities) will change the character of undeveloped or under-utilized areas. There are no mitigation measures for cumulative loss of agricultural or other resources land, or for change in the character of the land. This is a long term, *significant and unavoidable* impact.

# 2. Geology

Increased exposure of people and structures to groundshaking, fault displacement, slippage, liquefaction and other geologic hazards will occur with any level of increased development. The increased exposure is directly proportional to the increased development. However, as long as identification of potential seismic hazards is made, and appropriate engineering and construction techniques are implemented, the cumulative impacts due to geology and seismicity can be reduced to a level of insignificance. Such measures have been identified for the 2003 CoIWMP and have identified in the General Plan EIR (e.g., standards set in General Plan), or will be applied to development in the County through CEQA and building permit processes.

# 3. Soils & Agricultural Resources

Conversion of productive soils to non-resource uses will occur with development authorized by the Sonoma County General Plan. Conversion of prime valley agricultural soils to urban and rural uses will be most significant at the urban fringe and within the urban service boundaries of the County's cities and unincorporated communities. Conversion of productive soils in upland areas will be less significant due to low development densities applied to such areas and due to physical constraints to development. Development of a new landfill (approximately 300 to 400 acres) and expansion of the Central Landfill could result in the loss of some of these agricultural soils. Because of the statewide importance of the prime agricultural soils, the cumulative impacts to soil resources must be considered *significant and unavoidable*.

# 4. Hydrology and Water Quality

Cumulative new development will result in the following impacts on water quality: 1) turbid water; 2) accidental release of contaminants; 3) waste disposal (municipal, industrial, and agricultural and landfill sites) into surface or groundwater; 4) hazardous wastes; and 5) runoff from urban areas. Impacts on drainage and flooding include: 1) increased rate of runoff from urbanized areas; 2) increased quantity of runoff where aquifers are covered or streams enlarged;

3) increased flooding downstream; and, 4) sedimentation of streambeds which reduces flood capacity. Because surface water quality may decrease due to increased surface runoff from urbanized areas and sedimentation in streams, the cumulative impact to water quality must be considered *significant and unavoidable*.

# 5. Public Safety

Cumulative new development could expose the public to potential health and safety impacts. Although the Sonoma County General Plan EIR does not identify any significant cumulative impact public health and safety impacts similar to the proposed project, there may be health and safety cumulative impacts resulting from the implementation of the 2003 CoIWMP programs above. Therefore, the cumulative impacts to public safety are considered *significant and unavoidable*.

# 6. Transportation

Development will result in an increased demand for transit services and an increase in traffic congestion. The Sonoma County road system has many roads with unacceptable service levels that cannot be fully mitigated. Thus, the cumulative impacts to transportation are considered *significant and unavoidable*.

# 7. Air Quality

Development will lead to a deterioration of air quality, including odors from landfill and nondisposal facilities, proportional to population growth. Pollutants generated, as a result of population growth include hydrocarbons, ozone, particulates and carbon monoxide. Major impacts are transportation related. Due to the fact that the southern portion of the County is in non-attainment for  $PM_{10}$ , ROC, and  $NO_x$ , any increase in vehicle miles traveled would be considered significant. Therefore, the cumulative impacts to air quality would be *significant and unavoidable*, despite the implementation of mitigation measures identified for the CoIWMP and for development within the County.

# 8. Noise

Increased development will generate increased noise levels related to traffic and commercial/industrial uses. Although mitigation measures can be applied at the project level to reduce noise impacts, such impacts may not be reduced to a level of insignificance. Therefore, it is anticipated that cumulative impacts related to noise will be *significant and unavoidable*.

# 9. Vegetation and Wildlife

The cumulative development allowed by the Land Use Element of the County General Plan will cause significant changes to the natural vegetative cover. In addition, fish and wildlife resources will be unavoidably impacted by project development. Development of a new landfill (approximately 300 to 400 acres) and expansion of the Central Landfill could result in the loss of wildlife habitat, create nosie levels unacceptable to many species, and lower water quality values. Thus, the cumulative impacts to biological resources would be considered *significant and unavoidable*.

# 10. Cultural Resources and Paleontology

Impacts to significant cultural or paleontological resources would be mitigated with each project constructed. Significant resources that could be affected by construction activities would be

avoided, or if this is not possible, recovered for scientific value. In addition, potential impacts on archaeological sites from new development are minor when viewed in the county context and the level of protection required on sites subject to discretionary permits. Mitigation measures requiring design review on all designated sites and referrals to the Landmarks Commission on all structures listed in the <u>Historic Building Surveys</u> will provide substation protection for historic sites.<sup>1</sup> Therefore, the cumulative impacts to significant cultural or paleontological resources can mitigated to below a level of significance.

# 11. Visual Resources

A significant cumulative visual impact will occur as the development and buildout of urban areas reduces the rural, open perception of some areas of the County. Development of a new landfill (approximately 300 to 400 acres) and expansion of the Central Landfill could contribute to the countywide change in the aesthetics and scenic quality of the area. Therefore, the cumulative impacts to visual resources are considered *significant and unavoidable*.

#### 12. Population and Housing, Public Services, Recreation & Utilities

Increased demand for housing, public services, recreation, and utilities will result from the projected population growth. Demand for these resources will include the need for additional:

- Water Services
- Wastewater Management Services
- Parks and Recreation Services
- Public Education Services
- Fire and Police Protection Services
- Solid Waste Services

While long-term needs can be met, there may be short term shortages in service. However, as long as these services exist and are able to serve the increased population in a timely manner, the cumulative impacts to these services can be mitigated to a level of insignificance.

#### 13. Energy

The overall proposed project energy demands would result in less-than-significant impacts to the county's energy supplies, because the additional amount of energy used by the 2003 CoIWMP programs (both non-disposal and disposal) is very small compared to the local energy use in the county. Some non-disposal programs may result in a net energy savings. In addition, new projects envisioned by the General Plan would be required to meet State energy conservation standards. Therefore, the cumulative impacts to energy resources are not anticipated to be significant.

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Source: Sonoma County General EIR, 1989

# **18.1 INTRODUCTION**

The following section has been prepared in accordance with Section 15126.6 of the State CEQA Guidelines which requires that an EIR "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project . . . and evaluate the comparative merits of the alternatives." That Section of the Guidelines also directs that the "discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible (Section 15126.6(a)). The alternatives will be compared with the list of Project Objectives in Section 3.2 of this Draft Supplemental Program EIR for the 2003 CoIWMP.

The analysis of the "No Project" Alternative in Section 18.2 describes what would reasonably be expected to occur in the foreseeable future if the proposed project were not approved, based on current plans and consistent with available infrastructure and community services (Section 15126.6 [e][3][C]). Sections 18.3 and 18.4 describe alternatives that the SCWMA determined might be capable of eliminating or reducing significant adverse environmental effects associated with the proposed project. These sections also indicate the degree to which the alternatives would meet the various project objectives.

Section 18.5 describes additional alternatives identified but rejected from consideration in the SPEIR.

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (Section 15126[c]).

Section 18.6 provides a comparison of the alternatives and identification of the environmentally superior alternative.

Table 18.1 provides an evaluation of each alternative compared to the proposed project objectives.

# BACKGROUND

The following alternatives were evaluated in detail in the certified 1996 CoIWMP EIR. These alternatives ultimately were found to be infeasible by the Sonoma County Board of Supervisors when it approved the 1996 CoIWMP in adopted Resolution No. 94-1230.

Alternatives Addressed in the 1996 CoIWMP EIR:

- No Project (no 1996 CoIWMP).
- Materials Recovery Facility Combined with Waste Transformation.
- Municipal Solid Waste Materials Recovery Facility and Transfer Station.

- Maximum Source Reduction and Public Education.
- Municipal Solid Waste Composting and Construction/Demolition Waste Reuse and Recycling.

#### ALTERNATIVES EVALUATED

Additional alternatives have been included in this document for evaluation because they could feasibly attain most of the project objectives, but would avoid or substantially lessen significant environmental effects of the proposed project. The alternatives to the proposed 2003 CoIWMP are: 1) No Project; 2) SRRE – Materials Recovery Facility (MRF) Combined with an Enclosed (Indoor) Green Waste Composting Facility; and 3) Siting Element – No Siting of a New Landfill with Export of Waste.

<u>No Project</u>. The adopted 1996 CoIWMP would not be updated.

<u>SRRE Alternative</u>. This alternative would retain all programs described in the proposed 2003 CoIWMP, with two exceptions. First, this alternative would not include a Resource Management Facility (RMF), but would include a Materials Recovery Facility (MRF) instead. The MRF would differ from the RMF in that it would not include processing the refuse to recover compost or energy. Consequently, the biological or chemical processing would be avoided, and there would be no composting products produced and no associated power plant. The second change would be the requirement that new large green waste composting facilities be in enclosed buildings rather than allowing open air green waste composting.

<u>Siting Element Alternative</u>. This alternative would export municipal solid waste (MSW) to disposal facilities outside Sonoma County, thereby avoiding the need to further expand the Central Landfill or construct a new landfill.

Impacts of alternatives are determined relative to the existing environmental setting and are compared with similar impacts of the proposed 2003 CoIWMP. Since this is a program EIR rather than a projectlevel EIR, no specific projects are evaluated. The analysis of these alternatives and their impacts required rather broad assumptions regarding the implementation of programs. Similar assumptions apply to the programs in each alternative so that the impacts could be compared. With the exception of the No Project Alternative, the alternatives analyzed retain all other programs and policies proposed in the 2003 CoIWMP.

Tal	Table 18.1: Comparison of Project Alternatives to the Project Objectives.						
#	Objective	No Project	MRF w/enclosed source-separated green waste composting facility	No new landfill; export waste			
	Y=Meets Objective N/A=N	ot Applicable N=Does Not Meet Objective					
1	In order to help ensure the sustainability of our communities and to conserve natural resources and landfill capacity, the 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.	N	Y	Y			
2	The County and the Cities will achieve a 50 percent diversion of wastes being disposed of in County landfills by the year 2003 and a 70 percent diversion rate by 2015 based on 1990 rates.	N	Y	Y			
3	Satisfy the AB 939 solid waste planning and diversion mandates in a manner that is consistent with the objectives of the community, as reflected by the deliberations and documents of the AB 939 Local Task Force and SCWMA.	N	N	N			
4	The solid waste management system in Sonoma County will be planned and operated in a manner to protect public health, safety and the environment.	Y	Y	Y			
5	The County will provide alternative disposal options for recyclable items or materials such as, but not limited to, yard debris, recyclable wood waste, whole tires, and appliances and ban the landfill disposal of these items.	Y	Y	N			
6	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.	Y	Y	N/A			
7	The County and the Cities will provide access to residential recycling programs for all households, including single- family, multi-family, and mobile homes, that subscribe to garbage services by the end of the short-term planning period.	N	Y	Y			
8	The County's solid waste disposal facilities will be sited and operated in a manner to minimize energy use, conserve natural and financial resources, and protect prime agricultural lands and other environmentally sensitive or culturally sensitive areas.	Y	Y	N			
9	The County will develop disposal capacity for solid waste not handled by other elements of the management hierarchy for a 50-year horizon. Disposal capacity is addressed in the Siting Element of the CoIWMP.	N	Y	N			

Tat	Table 18.1: Comparison of Project Alternatives to the Project Objectives (continued).						
#	Objective	No Project	MRF w/enclosed source-separated green waste composting facility	No new landfill; export waste			
	Y=Meets Objective N/A=Not Applicable N=Does Not Meet Objective						
10	Use the existing landfill parcel to maximize its useful life and maximize the return on the public infrastructure improvements so far as it is consistent with protection of the environment.	Y	Y	N			
11	Provide landfill capacity at least through the year 2017 as required by state law by expanding the Central Landfill.	Y	Y	N			
12	Direct the flow of all refuse produced in Sonoma County to integrated waste management facilities publicly owned and located within Sonoma County or its incorporated cities in order to provide cost effective waste disposal services to all community residents.	N	Y	Y			
13	Maintain local control over costs and environmental impacts of disposal by siting facilities within Sonoma County.	Y	Y	N			
14	The SCWMA, County and the Cities will encourage and support the use of waste minimization practices for business, government agencies, and the public by distributing information on the availability of waste minimization options.	Y	Y	Y			
15	Complement existing and planned private sector operations for collection/processing of both refuse and recyclables.	Y	Y	Y			
16	Create and maintain employment opportunities for Sonoma County residents and growth opportunities for Sonoma County businesses, industries and entrepreneurs who make productive use of otherwise wasted materials.	Y	Y	N			
17	Make productive use of waste that is not reused or recycled through energy production.	Y	N	Y			
18	The SCWMA, County and the Cities will provide access to composting opportunities through implementation of composting facilities and programs which may be regional or local, public or private.	N	Y	Y			
19	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.	Y	Y	Y			

# 18.2 NO PROJECT ALTERNATIVE

This alternative would retain the Source Reduction and Recycling Element (SRRE), Non-Disposal Facilities Element (NDFE), and Siting Element as adopted in the 1996 CoIWMP.

Under this alternative, the adopted 1996 CoIWMP would remain the planning document for the management of solid waste in Sonoma County. Projects consistent with the 1996 CoIWMP would continue to be implemented, but none of the new programs proposed in the 2003 CoIWMP would be implemented. The following programs would be either excluded from or different than the proposed 2003 CoIWMP.

#### Source Reduction and Recycling Element (SRRE):

There would be no mandatory recycling program. Residential, commercial, industrial and institutional waste generators would not be required to have access to recycling services.

There would be no flow control program that would require Sonoma County generated municipal solid waste to be disposed within its boundaries. Although most Sonoma County waste would probably continue to be disposed within its jurisdiction, incorporated areas would be free to make other disposal arrangements.

There would be no RMF, which is a facility that does preliminary waste sorting of recyclables and processes the remainder of the waste in a closed vessel to recover compost products and energy while reducing the disposable volume. Instead, waste would be handled much as it is today. Sorting of recyclables would still occur, but without compost production, energy recovery, power production or waste reduction. The existing green waste composting program would continue at the Central Disposal site.

#### Non-Disposal Facilities Element (NDFE):

There would be no new transfer station constructed in the Santa Rosa area. Refuse would continue to be transported directly to the landfill from the Santa Rosa area. The Central Disposal Site would not be used as a transfer station after landfill closure.

# Siting Element:

The Central Landfill would not be expanded onto adjacent parcels. The landfill could still be expanded within the existing parcel consistent with the adopted 1996 CoIWMP, but this would not allow acquisition of additional land to expand the landfill.

A new landfill would be sited and constructed, consistent with the adopted 1996 CoIWMP. This landfill would need to be significantly larger than the new landfill proposed in the 2003 CoIWMP. The 2003 CoIWMP includes a RMF, which would reduce the volume of waste requiring disposal to about 25% of the current volume. As stated above, the No Project alternative would not include a RMF.

# **Impacts Analysis and Comparison**

Recent advancements in solid waste technologies, programs, and management practices required to meet AB 939 requirements are not included in the1996 CoIWMP. When compared with the proposed 2003 CoIWMP, the "No Project" alternative includes eliminated, changed, and unchanged impacts.

With the No Project alternative there would not be an RMF or a new transfer station in Santa Rosa. Therefore, the impacts associated with these facilities would not occur. However, the lack of an RMF would generally increase landfill-related impacts compared to the proposed 2003 CoTWMP. This is because the No Project alternative would not have an RMF, and the volume of solid waste to be disposed of would not be reduced as much as it would with the proposed 2003 CoTWMP. Therefore, the No Project alternative would require a larger landfill than the 2003 CoTWMP would, and landfill-related impacts would be increased.

Although some expansion within the existing landfill boundaries would be allowed with the No Project alternative, the primary provision for extra disposal space would be limited to the standard practice of siting a new landfill. This alternative does not include the acquisition of neighboring parcels for expansion and the consolidation of solid waste disposal operations at the existing Central Landfill.

Siting a new landfill is accelerated in this alternative by the lack of advanced technologies that would reduce disposable waste volumes. Reducing the volume of waste for disposal, other than the conventional composting of green waste and separating recyclables, is missing from this alternative.

Meaningful reduction in disposable waste volume is less under this alternative, compared to the proposed project. Introducing state-of-the-art technologies and solid waste management becomes less feasible under the No Project alternative because it would not include flow control. Flow Control is necessary to ensure funding will be available for large capital projects such as the RMF.

Evolving technologies and waste management practices (e.g., the RMF and advanced energy recovery systems) are not considered with the current solid waste policies in Sonoma County. In sum, this alternative is more wasteful than what is proposed in the 2003 CoIWMP.

The "No Project" alternative falls short of achieving critical project objectives proposed in the 2003 CoIWMP. Listed below are summaries of the impact comparisons and the project objectives that this alternative would not achieve.

# Land Use (LU):

Eliminated Impacts: None identified.

# Changed Impacts:

• <u>LU Impact 4-1, Surrounding Land Use Conflicts (Non-Disposal Facilities</u>): Land use conflicts from litter and odor would be reduced because this alternative would not include the construction of a transfer station in the Santa Rosa area and would not convert the existing tipping facility into a transfer station after closure of the Central Landfill, as compared to the proposed 2003 CoIWMP. At the same time, increased land use conflicts from litter and odor would occur because this alternative would not include a RMF that would process Municipal Solid Waste (MSW) inside an enclosed building, as compared to the proposed 2003 CoIWMP.

# Geology (G):

Eliminated Impacts: None identified.

# Changed Impacts:

- <u>G Impact 5-1</u>, <u>Surface Faulting and Ground Shaking (Non-Disposal Facilities)</u>: Exposure of new non-disposal facilities to potential surface faulting and ground shaking would be reduced because this alternative would not include the construction of the transfer station(s) proposed in the Santa Rosa area or at the Central Landfill, as compared to the 2003 CoIWMP.
- <u>G Impact 5-2</u>, Liquefaction (Non-Disposal Facilities): Reduced for the same reasons as G Impact 5-1.
- <u>G Impact 5-3, Surface Faulting and Ground Shaking (Landfill</u>): Increased surface faulting and ground shaking impacts on landfills would occur because of the need to construct and operate additional landfill capacity, as compared to the 2003 CoIWMP.
- <u>G Impact 5-4, Liquefaction (Landfill)</u>: Increased for the same reasons as G Impact 5-3.
- <u>G Impact 5-5, Slope Failures (Landfill)</u>: Increased for the same reasons as G Impact 5-3.
- <u>G Impact 5-6</u>, Subsidence and Settlement (Landfill): Increased for the same reasons as G Impact 5-3.

#### Soils and Agricultural Resources (SA):

Eliminated Impacts: None identified.

<u>Changed Impacts</u>: The following impacts would:

- <u>SA Impact 6-1, Erosion and Siltation (Non-Disposal Facilities)</u>: Erosion and siltation impacts caused by new non-disposal facilities would be reduced because this alternative would not include the construction of the transfer station(s) proposed in the Santa Rosa area or at the Central Landfill, as compared to the 2003 CoIWMP.
- <u>SA Impact 6-2</u>, Agricultural Production (Non-Disposal Facilities): Reduced for the same reason as SA Impact 6-1.
- <u>SA Impact 6-3(a)</u>, <u>Erosion and Siltation (Landfill)</u>: Increased erosion and siltation impacts on landfills would occur because of the need to construct and operate additional landfill capacity, as compared to the 2003 CoIWMP.
- <u>SA Impact 6-3(b)</u>, Conversion of Agricultural Land (Landfill): Increased for the same reason as SA Impact 6-3 (a).

# Hydrology and Water Quality (HWQ):

Eliminated Impacts:

• <u>HWQ Impact 7-12, Groundwater Recharge (Non-Disposal Facilities)</u>: Groundwater recharge impacts from large non-disposal facilities would be eliminated because large composting facilities would not be developed, as compared to the 2003 CoIWMP.

# Changed Impacts:

- <u>HWQ Impact 7-,1 Pollutants in Stormwater Runoff (Non-Disposal Facilities</u>): Reduced pollutants in stormwater runoff impacts from non-disposal facilities would occur because this alternative would not include the construction of the RMF, transfer station in the Santa Rosa area, or a transfer station at the Central Landfill after the landfill is closed, as compared to the proposed 2003 CoIWMP.
- <u>HWQ Impact 7-2, Flooding and Increased Runoff (Non-Disposal Facilities)</u>: Reduced for the same reason as HWQ Impact 7-1.
- <u>HWQ Impact 7-3, Water Quality (Non-Disposal Facilities)</u>: Reduced for the same reason as HWQ Impact 7-1.
- <u>HWQ Impact 7-5, Leachate (Landfill)</u>: HWQ impacts would increase because this alternative would require that more solid waste be disposed at a solid waste facility compared to the proposed RMF which would reduce the volume of the solid waste to be disposed.
- <u>HWQ Impact 7-6, Quality of Stormwater Runoff (Landfill)</u>: Increased stormwater runoff impacts from the construction and operation of additional landfill capacity would occur for the same reasons stated in HWQ Impact 7-5.
- <u>HWQ Impact 7-7</u>, <u>Water Quality from Grading (Landfill)</u>: Increased soil erosion impacts from the construction and operational grading would occur for the same reasons stated in HWQ Impact 7-5.
- <u>HWQ Impact 7-8, Volume and Flow of Surface Waters (Landfill)</u>: Increased volume and flow of surface waters impacts would occur for the same reasons stated in HWQ Impact 7-5.
- <u>HWQ Impact 7-9, Water Supply (Landfill and Non-Disposal Facilities)</u>: Reduced water supply impacts from non-disposal facilities would occur because this alternative would not include the operation of the enclosed digestion system in the RMF, as compared to the proposed 2003 CoIWMP. Water use would not be substantially changed for landfills.

# Public Safety (PS):

# Eliminated Impacts:

• <u>PS Impact 8-8, Hazardous Chemicals (Non-Disposal Facility)</u>: Hazardous chemical impacts would be eliminated because this alternative would not include the RMF digestion process, as compared to the proposed 2003 CoIWMP.

# Changed Impacts:

- <u>PS Impact 8-1, Injury & Illness (Non-Disposal Facilities and Landfill)</u>: Reduced injury and illness from non-disposal facilities and landfill would occur because this alternative would not include the RMF, the transfer station in the Santa Rosa area, or a transfer station at the Central Landfill after the landfill is closed, as compared to the proposed 2003 ColWMP.
- <u>PS Impact 8-4, Exposure of Employees and the General Public to Accidental Injury (Non-Disposal Facilities)</u>:Reduced for the same reason as PS Impact 8-1.

- <u>PS Impact 8-5, Accidental Combustion and Exposure of Toxic Substance (Non-Disposal</u> <u>Facilities</u>): Reduced for the same reason as PS Impact 8-1.
- <u>PS Impact 8-13, Welland Fires (Non-Disposal Facilities and Landfill)</u>: Reduced for the same reason as PS Impact 8-1 for non-disposal facilities; however, an increased impact from Welland fires on landfill is anticipated with the need to develop additional disposal capacity.

# **Transportation (T)**:

# Eliminated Impacts:

- <u>Impact 9-3, Central Disposal Site Rock Extraction Traffic (Landfill)</u>: Operations traffic impacts associated with rock extraction would be eliminated because rock extraction would not occur and, therefore, there would not be any traffic associated with a rock extraction project.
- <u>Impact 9-,5 Rock Extraction Traffic Safety (Landfill)</u>: Traffic safety impacts associated with rock extraction would be eliminated because rock extraction would not occur and, therefore, there would not be any traffic associated with a rock extraction project.

#### Changed Impacts:

- <u>T Impact 9-1, Operations (Non-Disposal Facilities</u>): Reduced operations traffic impacts from this alternative would occur because this alternative would not include the RMF, the transfer station in the Santa Rosa area, or a transfer station at the Central Landfill after the landfill is closed, as compared to the proposed 2003 CoIWMP.
- <u>T Impact 9-2, Operations (Landfill)</u>: Operations traffic impacts would be reduced because this alternative would not include rock extraction at the Central Landfill, as compared to the proposed 2003 CoIWMP.
- <u>T Impact 9-6, New Facilities Safety (Non-Disposal Facilities and Landfill)</u>: Reduced for the same reason as T Impact 9-1.

# Air Quality (AQ):

# Eliminated Impacts:

- <u>AQ Impact 10-5, Rock Extraction PM<sub>10</sub> Emissions (Landfill)</u>: PM<sub>10</sub> emissions from rock extraction would be eliminated because construction of a new landfill or expansion of the Central Landfill would not include rock extraction, as compared to the proposed 2003 CoIWMP.
- <u>AQ Impact 10-6, Rock Extraction Emissions of Criteria Pollutants and TABS (Landfill)</u>: Rock extraction emissions of criteria pollutants and toxic air contaminants (TABS) would be eliminated because construction of a new landfill or expansion of the Central Landfill would not include rock extraction, as compared to the proposed 2003 CoIWMP.

#### Changed Impacts:

• AQ Impact 10-1, Air Emissions (Non-Disposal Facilities): Reduced mobile and stationary

source impacts from non-disposal facilities would occur because this alternative would not include the RMF, the transfer station in the Santa Rosa area, or a transfer station at the Central Landfill after the landfill is closed, as compared to the proposed 2003 CoIWMP.

- <u>AQ Impact 10-2, Construction PM<sub>10</sub> (Non-Disposal Facilities)</u>: Reduced construction and operation PM<sub>10</sub> impacts from non-disposal facilities would occur because this alternative would not include the RMF, the transfer station in the Santa Rosa area, or a transfer station at the Central Landfill after the landfill is closed, as compared to the proposed 2003 CoIWMP.
- <u>AQ Impact 10-4 (a), Construction (Landfill)</u>: Increased construction and operation PM<sub>10</sub> impacts from disposal facilities would occur because this alternative would require additional construction activities to develop capacity to dispose of the solid waste, as compared to the proposed 2003 CoIWMP.
- AQ Impact 10-4 (b), Operation (Landfill): Increased for the same reason as Impact 10-4 (a).

#### Noise (N):

Eliminated Impacts: None identified.

#### Changed Impacts:

- <u>N Impact 11-1, Construction Noise (Non-Disposal Facilities)</u>: Reduced construction noise impacts of non-disposal facilities would occur because this alternative would not include the RMF, the transfer station in the Santa Rosa area, or a transfer station at the Central Landfill after the landfill is closed, as compared to the proposed 2003 CoIWMP.
- <u>N Impact 11-3, Operations Noise (Non-Disposal Facilities)</u>: Reduced for the same reason as N Impact 11-1.
- <u>N Impact 11-5, Traffic Noise (Landfill)</u>: Increased traffic noise impacts along roadways to the Central Landfill would occur because this alternative would require disposing a greater volume of solid waste than the proposed 2003 CoIWMP.
- <u>N Impact 11-6</u>, <u>Operations Noise (Landfill)</u>: Operations noise impacts would be reduced because this alternative would not include rock extraction at the Central Landfill, as compared to the proposed 2003 CoIWMP.

#### Vegetation and Wildlife (VWL):

Eliminated Impacts: None identified.

Changed Impacts:

 <u>VWL Impact 12-1, Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities,</u> <u>Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites (Non-Disposal Facilities)</u>: Exposure of new non-disposal facilities to Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites would be reduced because this alternative would not include the construction of the transfer station(s) proposed in the Santa Rosa area or at the Central Landfill, as compared to the 2003 CoIWMP.  <u>VWL Impact 12-2</u>, Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, <u>Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites (Landfill)</u>: Increased impacts on Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites from landfills would occur because of the need to construct and operate additional landfill capacity, as compared to the 2003 CoIWMP.

#### Cultural Resources and Paleontology (CRP):

Eliminated Impacts: None identified.

Changed Impacts:

- <u>CRP Impact 13-1, Cultural and Paleontological Resources (Non-Disposal Facilities)</u>: Reduced for the same reason as G Impact 5-1. Exposure of new non-disposal facilities to Cultural and Paleontological Resources would be reduced because this alternative would not include the construction of the transfer station(s) proposed in the Santa Rosa area or at the Central Landfill, as compared to the 2003 CoIWMP.
- <u>CRP Impact 13-2</u>, <u>Cultural and Paleontological Resources (Landfill)</u>: Increased impacts on Cultural and Paleontological Resources from landfills would occur because of the need to construct and operate additional landfill capacity, as compared to the 2003 CoIWMP.
- <u>CRP Impact 13-3</u>, Architectural Historical Resources (Non-Disposal Facilities): Reduced for the same reason as CRP Impact 13-1.
- <u>CRP Impact 13-3</u>, <u>Architectural Historical Resources (Landfill)</u>: Increased for the same reason as CRP Impact 13-2.

#### Visual Resources (VR):

Eliminated Impacts: None identified.

Changed Impacts:

- <u>VR Impact 14-1</u>, <u>Visible Facilities (Non-Disposal Facilities</u>): Reduced visible facilities impacts would occur because this alternative would not include the RMF, the transfer station in the Santa Rosa area, or a transfer station at the Central Landfill after the landfill is closed, as compared to the proposed 2003 CoIWMP.
- <u>VR Impact 14-2, Litter (Non-Disposal Facilities)</u>: Reduced for the same reason as VR Impact 14-1.

#### Population & Housing, Public Services, Recreation, & Utilities (PRU):

Eliminated Impacts: None identified.

Changed Impacts:

• PRU Impact 15-1, Fire and Police Services (Non-Disposal Facilities): Impacts on fire and

police services from new non-disposal facilities would be reduced because this alternative would not include the construction of the transfer station(s) proposed in the Santa Rosa area or at the Central Landfill, as compared to the 2003 CoIWMP.

- <u>PRU Impact 15-2, Fire and Police Services (Landfill)</u>: Impacts on fire and police services from landfills would increase because of the need to construct and operate additional landfill capacity, as compared to the 2003 CoIWMP.
- <u>PRU Impact 15-3, Substantial Adverse Physical Impacts Associated with New or Altered</u> <u>Government Facilities (Non-Disposal Facilities)</u>: Reduced for the same reason as PRU Impact 15-1.
- <u>PRU Impact 15-3</u>, Substantial Adverse Physical Impacts Associated with New or Altered Government Facilities (Landfill): Increased for the same reason as PRU Impact 15-2.
- <u>PRU Impact 15-4</u>, Exceed Wastewater Treatment Requirements (Non-Disposal Facilities): Reduced for the same reason as PRU Impact 15-1.
- <u>PRU Impact 15-4</u>, Exceed Wastewater Treatment Requirements (Landfill): Increased for the same reason as PRU Impact 15-2.

#### **Impacts Not Substantially Changed**

Impacts that were not found substantially different from the proposed project are listed below. These impacts have either no changes or would require project-specific analysis and mitigation under individual alternatives. None of the impacts in the sections listed below are considered to be greater than the proposed project and, therefore, would require the same or similar mitigation measures.

Section 4 – Land Use (LU):

LU Impact 4-2, Surrounding Land Use Conflicts (Landfill) LU Impact 4-3, Open Space (Landfill) LU Impact 4-4, Mineral Resources (Landfill)

Section 7 – Hydrology and Water Quality (HWQ):

HWQ Impact 7-4, Household Hazardous Waste (Non-Disposal Facilities)HWQ Impact 7-10, Blasting Spills (Landfill)HWQ Impact 7-11, Ground Vibrations From Blasting (Landfill)

Section 8 – Public Safety (PS):

PS Impact 8-2, Fungi and Bacteria (Non-Disposal Facilities)
PS Impact 8-3, Household Hazardous Wastes (Non-Disposal Facilities and Landfill)
PS Impact 8-6, Vectors (Non-Disposal Facilities and Landfill)
PS Impact 8-7, Public Safety (Landfill)
PS Impact 8-9, Blasting for Landfill Excavation (Landfill)
PS Impact 8-10, State-Designated Contaminated Sites (Non-Disposal Facilities and Landfill)
PS Impact 8-11, Emergency Response Plans (Non-Disposal Facilities and Landfill)
PS Impact 8-12, Hazardous Materials Adjacent to Schools (Non-Disposal Facilities and Landfill)

Section 9 – Transportation (T):

T Impact 9-4, Central Disposal Site Expansion Traffic (Landfill)

<u>Section 10 – Air Quality (AQ)</u>: AQ Impact 10-3, Odors (Non-Disposal Facilities and Landfill)

<u>Section 11 – Noise (N)</u>: N Impact 11-2, Traffic Noise (Non-Disposal Facilities) N Impact 11-4, Construction Noise (Landfill)

<u>Section 14 – Visual Resources (VR)</u>: VR Impact 14-3, Visible Facilities (Landfill) VR Impact 14-4, Litter (Landfill)

Section 16 - Energy

**Project Objectives**: The "No Project" alternative would not be consistent with the following objectives of the proposed project:

**Obj-1**: In order to help ensure the sustainability of our communities and to conserve natural resources and landfill capacity, the 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.

**Obj-2**: The County and the Cities will achieve a 50 percent diversion of wastes being disposed of in County landfills by the year 2003 and a 70 percent diversion rate by 2015 based on 1990 rates.

**Obj-3**: Satisfy the AB 939 solid waste planning and diversion mandates in a manner that is consistent with the objectives of the community, as reflected by the deliberations and documents of the AB 939 Local Task Force and SCWMA.

**Obj-7**: The County and the Cities will provide access to residential recycling programs for all households, including single-family, multi-family, and mobile homes, that subscribe to garbage services by the end of the short-term planning period.

**Obj-9**: The County will develop disposal capacity for solid waste not handled by other elements of the management hierarchy for a 50-year horizon. Disposal capacity is addressed in the Siting Element of the CoIWMP.

**Obj-12**: Direct the flow of all refuse produced in Sonoma County to integrated waste management facilities publicly owned and located within Sonoma County or its incorporated cities in order to provide cost effective waste disposal services to all community residents.

**Obj-18**: The SCWMA, County and the Cities will provide access to composting opportunities through implementation of composting facilities and programs which may be regional or local, public or private.

# 18.3 SRRE – MRF COMBINED WITH AN ENCLOSED (INDOOR) GREEN WASTE COMPOSTING FACILITY

This alternative would construct a Materials Recovery Facility (MRF), rather than the proposed Resource Management Facility (RMF). The alternative is based on the following assumptions:

MRF Assumptions:

- MSW processed indoors to 75% of original volume for disposal in Central Landfill.
- Green waste is delivered separated and is composted indoors at the same location as the MRF.
- Indoor source-separated green waste composting facility will include a filtration system for air emissions.
- No new outdoor, source-separated green waste composting facility.
- Single-stream recycling program continues as proposed.
- Residential and business garbage is processed in the MRF to remove recyclables (i.e., bottles, cans, cardboard, etc.) that can be easily separated with the residues landfilled.
- No energy recovery or power plant.
- None of these facilities would be located at the Central Landfill.

#### **<u>RMF Assumptions</u>**:

- MSW processed indoors to 25% of original volume for disposal in Central Landfill.
- Compost green waste outdoors, similar to the existing operations.
- No co-location of RMF and outdoor source-separated green waste composting facility.
- Co-locate energy recovery and power plant.
- None of these facilities would be located at the Central Landfill.

Although this alternative could be located at the Central Landfill, the space available at the site may be insufficient to accommodate these facilities. Other locations may be available at sites designated for MSW facilities, industrial, or commercial land uses in Sonoma County's General Plan (Source: 1996 CoIWMP EIR, p. 18-6,7).

This alternative would accept residential/commercial/industrial mixed wastes from the cities and unincorporated areas of Sonoma County. It would retain all other programs and policies of the proposed SRRE (e.g., mandatory recycling access, flow control, and new transfer station) and Siting Element (e.g., expansion of the Central Landfill and siting a new landfill).

#### **Impacts Analysis and Comparison**

Some reduction in disposable waste volume is achieved with this alternative. In addition, the enclosed operation includes the composting of green waste inside a building. When compared with the proposed 2003 CoIWMP, this alternative includes eliminated, changed, and unchanged impacts.

This alterative would eliminate storm water runoff and odor impacts on surrounding land uses because the green waste composting facility would be enclosed. Also, chemical impacts would be eliminated because there would be no chemical digestion of solid waste from the proposed RMF.

This alternative would exhibit changed impacts resulting from the reduced demand for water supplies and by reducing public exposure to fungi and bacteria. In addition, the potential of accidental combustion of toxic chemicals, the creation of PM<sub>10</sub>, odors, and operational noise would be less. By

contrast, landfill related impacts would increase with this alternative. There would be increased impacts to roadside litter, open space, mineral resources, leachate production, soil erosion, volume and flow of surface waters, blasting and blasting spills/ground vibrations, traffic impacts, noise, and conflicts with surrounding land uses are expected to occur. Although the impacts of the green waste composting operation would be reduced, other impacts are increased with the need for additional landfill capacity to handle the residue generated from the MRF.

All other impacts remain unchanged from the 1996 CoIWMP EIR.

Listed below are summaries of the impact comparisons and the project objectives that this alternative would not achieve.

# Land Use (LU):

Eliminated Impacts: None identified.

Changed Impacts:

- <u>LU Impact 4-1, Surrounding Land Use Conflicts Odor (Non-Disposal Facilities)</u>: Odor impacts would be reduced because the enclosed green waste composting facility would include air filters, as compared to the open-air outdoor green waste composting facility.
- <u>LU Impact 4-1, Surrounding Land Use Conflicts Litter (Non-Disposal Facilities)</u>: Increased roadside litter impacts would occur from hauling the 75% disposal waste volumes, as compared to the 25% disposal volumes with the proposed RMF.
- <u>LU Impact 4-2, Surrounding Land Use Conflicts (Landfill)</u>: Increased conflicts with surrounding land uses would occur because the 75% disposal waste volumes would require the construction of additional landfill capacity, as compared to the 25% disposal volumes with the proposed RMF.
- <u>LU Impacts 4-3, Open Space (Landfill)</u>: Increased for the same reason as LU Impact 4-2.
- <u>LU Impact 4-4, Mineral Resources (Landfill)</u>: Increased for the same reason as LU Impact 4-2.

# Hydrology and Water Quality (HWQ):

Eliminated Impacts: None identified.

Changed Impacts:

- <u>HWQ Impact 7-1</u>, <u>Pollutants in Stormwater Runoff (Non-Disposal Facilities)</u>: Impacts from pollutants in stormwater runoff impacts would be reduced because the enclosed green waste composting operation would not be exposed to rainfall, as compared to the outdoor, source-separated green waste composting facility proposed with the RMF.
- <u>HWQ Impact 7-9</u>, <u>Water Supply (Landfill and Non-Disposal Facilities)</u>: Reduced demand for water supplies would occur because no biological or chemical digestion process or energy recovery is included in the MRF, as compared to the digestion process and energy recovery system with the proposed RMF. In addition, reduced water supplies for the enclosed green
waste composting operation would occur because evaporation would be decreased, as compared to the outdoor, source-separated green waste composting facility.

- <u>HWO Impact 7-5, Leachate (Landfill)</u>: Increased leachate production from more organic waste would occur because the MRF would only reduce processed MSW for disposal to 75% of its original volume, as compared to the 25% disposal volumes with the proposed RMF.
- <u>HWQ Impact 7-6, Quality of Stormwater Runoff (Landfill)</u>: Increased stormwater runoff water quality impacts would occur because the 75% disposal waste volumes would require the construction of additional landfill capacity, as compared to the 25% disposal volumes with the proposed RMF.
- <u>HWQ Impact 7-7, Water Quality from Grading (Landfill</u>): Increased for same reason as HWQ Impact 7-6.
- <u>HWQ Impact 7-8, Volume and Flow of Surface Waters (Landfill)</u>: Increased for same reason as HWQ Impact 7-6.
- <u>HWQ Impact 7-10, Blasting Spills (Landfill)</u>: Increased for same reason as HWQ Impact 7-6.
- <u>HWQ Impact 7-11, Ground Vibrations From Blasting (Landfill)</u>: Increased for same reason as HWQ Impact 7-6.

### Public Safety (PS):

Eliminated Impacts:

• <u>PS Impact 8-8, Hazardous Chemicals (Non-Disposal Facility)</u>: Chemical impacts would be eliminated because a digestion process would not be included, as compared to the proposed RMF.

### Changed Impacts:

- <u>PS Impact 8-2, Fungi and Bacteria (Non-Disposal Facilities)</u>: Impacts from the growth of pathogens would be reduced because the enclosed green waste composting facility would reduce the potential for exposure of the public to airborne pathogens, as compared to the outdoor, source-separated green waste composting facility with the proposed project.
- <u>PS Impacts 8-5, Accidental Combustion and Exposure of Toxic Substances (Non-Disposal Facilities and Landfill)</u>: Impacts from combustion and exposure of toxic substances to area residents would be reduced because the enclosed green waste composting facility would have an indoor fire sprinkler and air filtering system, as compared to the outdoor, source-separated green waste composting facility with the proposed project.

### **Transportation**(**T**):

Eliminated Impacts: None identified.

### Changed Impacts:

• T Impact 9-2, Operations (Landfill): Future traffic impacts would increase from transporting

the 75% disposable waste volumes from the MRF as compared to the estimated 25% disposable waste volume with the proposed RMF.

• <u>T Impact 9-4</u>, <u>Central Disposal Site Expansion Traffic (Landfill)</u>: Future traffic impacts would increase to haul the 75% disposable waste volume from the MRF compared to the estimated 25% disposable waste volume with the proposed RMF.

# Air Quality (AQ):

Eliminated Impacts: None identified.

# Changed Impacts:

• <u>AQ Impact 10-3, Odors (Non-Disposal Facilities and Landfill)</u>: Odor impacts would be reduced because the enclosed green waste composting facility would include air filters, as compared to the open-air outdoor green waste composting facility.

### Noise (N):

Eliminated Impacts: None identified.

### Changed Impacts:

- <u>N Impact 11-3</u>, <u>Operations Noise (Non-Disposal Facilities)</u>: Reduced long-term operational noise would occur because green waste composting activities would be conducted within an enclosed facility, as compared to the outdoor, source-separated green waste composting facility.
- <u>N Impact 11-5, Traffic Noise (Landfill)</u>: Increased traffic noise impacts would occur from transporting the 75% disposal waste volumes, as compared to the 25% disposal volumes with the proposed project.
- <u>N Impact 11-6, Operations Noise (Landfill)</u>: Increased for the same reasons as N Impact 11-5.

### Visual Resources (VR):

Eliminated Impacts: None identified.

Changed Impacts:

- <u>VR 14-2, Litter (Non-Disposal Facilities</u>): Increased roadside litter impacts would occur from hauling the 75% disposal waste volumes, as compared to the 25% disposal volumes with the proposed RMF.
- <u>VR 14-4, Litter (Landfill)</u>: Increased for same reasons as VR 14-2, Litter (Non-Disposal Facilities).

### **Impacts Not Substantially Changed**

Impacts that were not found substantially different from the proposed project are listed below. These impacts have either no changes or would require project-specific analysis and mitigation under individual

alternatives. None of the impacts in the sections listed below are considered to be greater than the proposed project and, therefore, would require the same mitigation measures.

Section 5 — Geology

Section 6 — Soils and Agricultural Resources

Section 7 - Hydrology and Water Quality (HWQ):

HWQ Impact 7-2(a), Flooding (Non-Disposal Facilities)

HWQ Impact 7-2(b), Increased Runoff (Non-Disposal Facilities)

HWQ Impact 7-3, Water Quality (Non-Disposal Facilities)

HWQ Impact 7-4, Household Hazardous Waste (Non-Disposal Facilities)

HWQ Impact 7-12, Groundwater Recharge (Non-Disposal Facilities)

<u>Section 8 – Public Safety (PS):</u>

PS Impact 8-1, Injury and Illness (Non-Disposal Facilities and Landfill)

PS Impact 8-3, Household Hazardous Wastes (Non-Disposal Facilities and Landfill)

PS Impact 8-4, Exposure of Employees and the General Public to Accidental Injury (Non-Disposal Facilities and Landfill)

PS Impact 8-6, Vectors (Non-Disposal Facilities and Landfill)

PS Impact 8-7, Public Safety (Landfill)

PS Impact 8-9, Blasting for Landfill Excavation (Landfill)

PS Impact 8-10, State-Designated Contaminated Sites (Non-Disposal Facilities and Landfill)

PS Impact 8-11, Emergency Response Plans (Non-Disposal Facilities and Landfill)

PS Impact 8-12, Hazardous Materials Adjacent to Schools (Non-Disposal Facilities and Landfill)

PS Impact 8-13, Welland Fires (Non-Disposal Facilities and Landfill)

Section 9 – Transportation (T):

T Impact 9-1, Operations (Non-Disposal Facilities)

T Impact 9-3, Central Disposal Site Rock Extraction (Landfill)

T Impact 9-5, Rock Extraction Traffic Safety (Landfill)

T Impact 9-6, New Facilities Safety (Non-Disposal Facilities and Landfill)

Section 10 – Air Quality (AQ):

AO Impact 10-1, Air Emissions (Non-Disposal Facilities)

AQ Impact 10-2, Construction PM<sub>10</sub> (Non-Disposal Facilities)

AQ Impact 10-4 (a), Construction (Landfill)

AO Impact 10-4 (b), Operation (Landfill)

AO Impact 10-5, Rock Extraction PM<sub>10</sub> Emissions (Landfill)

AQ Impact 10-6, Rock Extraction Emissions of Criteria Pollutants and TABS (Landfill)

<u>Section 11 – Noise (N):</u>

N Impact 11-1, Construction Noise (Non-Disposal Facilities)

N Impact 11-2, Traffic Noise (Non-Disposal Facilities)

N Impact 11-4, Construction Noise (Landfill)

Section 12 - Vegetation and Wildlife

Section 13 - Cultural Resources and Paleontology

Section 14 – Visual Resources:

VR 14-1, Visible Facilities (Non-Disposal Facilities) VR 14-3, Visible Facilities (Landfill)

Section 15 -- Population & Housing, Public Services, Recreation, & Utilities

Section 16 - Energy

**Project Objectives:** This alternative would not be consistent with the following objectives of the proposed project:

**Obj-3**: Satisfy the AB 939 solid waste planning and diversion mandates in a manner that is consistent with the objectives of the community, as reflected by the deliberations and documents of the AB 939 Local Task Force and SCWMA.

Obj-17: Make productive use of waste that is not reused or recycled through energy production.

### 18.4 SITING ELEMENT - NO SITING OF NEW LANDFILL WITH EXPORT OF WASTE

This alternative would not site a new landfill in Sonoma County and would export all of the MSW out of Sonoma County. The alternative includes the following assumptions:

**Disposal Facilities Assumptions:** 

- No further expansion of Central Landfill.
- Closure of Central Landfill with full export of MSW.
- No new landfill in Sonoma County.

### Non-Disposal Facilities Assumptions:

- Expansion of existing in-county transfer station(s) to accommodate truck and/or rail transfer.
- Development of new transfer station(s) in Sonoma County.
- No MRF/RMF in Sonoma County.
- Siting new source-separated green waste composting facility in Sonoma County would proceed as proposed.

Full export of Sonoma County's MSW would eliminate the need to use and expand the Central Landfill or to site a new landfill as proposed in the 2003 CoIWMP. It would require additional non-disposal facilities to accommodate truck and/or rail transfer of solid waste to out-of-county disposal site(s). Full export is often done by jurisdictions with inadequate area for landfills. Out-of-county disposal could result in loss of control over disposal and transportation costs and would reduce the County's flexibility in dealing with waste disposal issues in the future. Although this alternative assumes that no MRF or RMF would be constructed in Sonoma County, development of these facilities in the county could occur in the future and subsequently reduce the demand for transfer stations. Since a RMF may not be constructed for some time, this alternative assumes that no RMF would be constructed, but that development of other new and expanded non-disposal facilities would proceed as proposed in the 2003 CoIWMP. Potential options outside of Sonoma County for future solid waste disposal have been addressed in the <u>Sonoma County Solid Waste Management Alternatives Analysis Project Final Report</u> ("Alternatives Analysis") prepared December 29, 2000, by SCS Engineers. Partial export of MSW would require the continued operation of the existing Central Landfill and nondisposal facilities. In-county disposal of non-exported waste and the processing of both non-exported and exported volumes would be necessary. Expansion of the existing landfill and the need to site a new landfill in Sonoma County would not be eliminated with the partial export of MSW. New transfer station(s) may be required to accommodate exported and non-exported wastes. The life span of the Central Landfill and/or new landfill would increase in proportion to the percent of MSW exported. Impacts associated with developing and operating these facilities would remain substantially the same because they would be used for the in-county disposal of non-exported waste and the processing of both non-exported and exported volumes. Partial export would not provide a substantial reduction in impacts produced by the proposed project; therefore, this alternative addresses the full export of MSW out-ofcounty because it would reduce or eliminate some of the impacts associated with the proposed project.

According to the Alternatives Analysis, export of MSW would require the County or the SCWMA to consider candidate sites and negotiate disposal capacity at one or more existing or proposed private or publicly owned Class III landfill sites located outside of Sonoma County. At a minimum, it is assumed that the landfill operations would employ environmental protection standards embodied in Subtitle D and CCR Title 27 regulations (or the equivalent of CCR Title 27 for out-of-state facilities). As stated above, this alternative would likely require expansion of existing in-county transfer stations (to accommodate truck and/or rail transfer) and/or future siting, permitting, and development of new transfer stations/MRF or RMF sites in Sonoma County. Incorporated areas in Sonoma County could use SCWMA MRF/RMF/transfer station(s) or pursue their own disposal options.

Potential air quality, litter, noise, and traffic impacts could result from the transport of solid waste from facilities in Sonoma County to out-of-county landfills. Implementation of this alternative may require delivery and pre-processing of solid waste at existing and/or future MRF/RMF/transfer station(s) in Sonoma County, including the identification of potential long-term out-of-county disposal sites.

The counties that would likely be impacted from export of MSW include Alameda, Contra Costa, Marin and Solano. Surrounding counties have, or have arranged for, adequate disposal capacity for the next 30 to 40 years. Examples of jurisdictions that export their solid waste include both Napa and San Francisco Counties. Napa County trucks its MSW to the Keller Canyon Landfill in Contra Costa County; San Francisco City/County trucks nearly all of its waste to the Altamont Landfill in Alameda County. Altamont Landfill obtained approval in 2000 for an expansion, which will extend the life of the facility to approximately 2029.

Although this alternative would eliminate the need to expand the existing Sonoma County Central Landfill or site a new landfill in Sonoma County, it would not achieve several 2003 CoIWMP project objectives as described at the end of Section 18.4.

# **Impact Analysis and Comparison**

Landfill impacts under this alternative are transferred from Sonoma County to another county. This alternative could involve the development of more non-disposal facilities (e.g., transfer stations) to prepare and export solid waste to other counties in the Bay Area. Expansion and siting of landfills in Sonoma County could be replaced by disposal arrangements with neighboring counties. Because composting of green waste is not landfill-dependent, it could continue to operate within the County.

This alternative would eliminate open space and mineral resource impacts caused by landfills in Sonoma County, including conflicts with surrounding land uses. In addition, it would eliminate leachate, storm water runoff, soil erosion, volume and flow of surface waters, blasting and blasting spills/ground vibrations, public safety, traffic, air quality and visual impacts from landfill development and operation.

In Sonoma County, this alternative would have impacts different from the proposed project due to increased surrounding land use conflicts from additional transfer stations. Compared to the proposed project, it would have increased visual, litter, storm water runoff, flooding, soil erosion, injury and illness, accidents, combustion and exposure of toxics, vectors, traffic, air quality, and odor impacts caused by these added facilities.

All other impacts remain unchanged from the 1996 CoTWMP EIR.

Dependency on out-of-county transport infrastructure, haul routes, landfill capacity and disposal management that would be provided and maintained by other jurisdictions is increased with this alternative.

This alternative falls short of achieving critical project objectives proposed in the 2003 CoIWMP. Listed below are summaries of the impact comparisons and the project objectives that this alternative would not achieve.

### Land Use (LU):

### Eliminated Impacts:

- <u>LU Impact 4-2, Surrounding Land Use Conflicts (Landfill)</u>: Surrounding land use conflict impacts would be eliminated because there would be no need to expand the existing landfill or site a new landfill in Sonoma County, as compared to the proposed 2003 CoIWMP.
- <u>LU Impact 4-3, Open Space (Landfill)</u>: Eliminated for the same reasons as LU Impact 4-2.
- <u>LU Impact 4-4, Mineral Resources (Landfill)</u>: Eliminated for the same reasons as LU Impact 4-2.

### Changed Impacts:

• <u>LU Impact 4-1, Surrounding Land Use Conflicts (Non-Disposal Facilities)</u>: Increased surrounding land use conflicts would occur because expansion of existing transfer station(s) and development of additional new transfer station(s) would be required, as compared to the proposed 2003 CoIWMP.

### Geology (G):

<u>Eliminated Impacts</u>: The following impacts were eliminated for the same reason as LU Impact 4-2:

- G Impact 5-3, Surface Faulting and Ground Shaking (Landfill)
- G Impact 5-4, Liquefaction (Landfill)
- G Impact 5-5, Slope Failures (Landfill)
- G Impact 5-6, Subsidence and Settlement (Landfill)

Changed Impacts: The following impacts are increased for the same reason as LU Impact 4-1:

- G Impact 5-1, Surface Faulting and Ground Shaking (Non-Disposal Facilities)
- G Impact 5-2, Liquefaction (Non-Disposal Facilities)

### Soils and Agricultural Resources (SA):

<u>Eliminated Impacts</u>: The following impacts were eliminated for the same reason as LU Impact 4-2:

- SA Impact 6-3(a), Erosion and Siltation (Landfill)
- SA Impact 6-3(b), Conversion of Agricultural Land (Landfill)

Changed Impacts: The following impacts are increased for the same reason as LU Impact 4-1:

- SA Impact 6-1, Erosion and Siltation (Non-Disposal Facilities)
- SA Impact 6-2, Agricultural Production (Non-Disposal Facilities)

### Hydrology and Water Quality (HWQ):

<u>Eliminated Impacts</u>: The following impacts were eliminated for the same reason as LU Impact 4-2:

- HWQ Impact 7-5, Leachate (Landfill)
- HWQ Impact 7-6, Quality of Stormwater Runoff (Landfill)
- HWQ Impact 7-7, Water Quality from Grading (Landfill)
- HWQ Impact 7-8, Volume and Flow of Surface Waters (Landfill)
- HWQ Impact 7-9, Water Supply (Landfill)
- HWQ Impact 7-10, Blasting Spills (Landfill)
- HWQ Impact 7-11, Ground Vibrations From Blasting (Landfill)

Changed Impacts: The following impacts are increased for the same reason as LU Impact 4-1:

- HWQ Impact 7-1, Pollutants in Stormwater Runoff (Non-Disposal Facilities)
- HWQ Impact 7-2, Flooding and Increased Runoff (Non-Disposal Facilities)
- HWQ Impact 7-3, Water Quality (Non-Disposal Facilities)
- HWQ Impact 7-4, Household Hazardous Waste (Non-Disposal Facilities)
- HWQ Impact 7-9, Water Supply (Non-Disposal Facilities)
- HWQ Impact 7-12, Groundwater Recharge (Non-Disposal Facilities)

### Public Safety (PS):

Eliminated Impacts: The following impacts are eliminated for the same reason as LU Impact 4-2:

- PS Impact 8-7, Public Safety (Landfill)
- PS Impact 8-9, Blasting for Landfill Excavation (Landfill)
- PS Impact 8-10, State-Designated Contaminated Sites (Landfill)
- PS Impact 8-11, Emergency Response Plans (Landfill)
- PS Impact 8-12, Hazardous Materials Adjacent to Schools (Landfill)
- PS Impact 8-13, Welland Fires (Landfill)

Changed Impacts: The following impacts are increased for the same reason as LU Impact 4-1.

- PS Impact 8-1, Injury & Illness (Non-Disposal Facilities and Landfill)
- PS Impact 8-2, Fungi and Bacteria (Non-Disposal Facilities)
- PS Impact 8-3, Household Hazardous Wastes (Non-Disposal Facilities and Landfill)

- PS Impact 8-4, Exposure of Employees and the General Public to Accidental Injury (Non-Disposal Facilities and Landfill)
- PS Impact 8-5, Accidental Combustion and Exposure of Toxic Substance (Non-Disposal Facilities and Landfill)
- PS Impact 8-6, Vectors (Non-Disposal Facilities and Landfill)
- PS Impact 8-8, Chemical or Biological Digestion (Non-Disposal Facility)
- PS Impact 8-10, State-Designated Contaminated Sites (Non-Disposal Facilities)
- PS Impact 8-11, Emergency Response Plans (Non-Disposal Facilities)
- PS Impact 8-12, Hazardous Materials Adjacent to Schools (Non-Disposal Facilities)
- PS Impact 8-13, Welland Fires (Non-Disposal Facilities)

# Transportation (T):

<u>Eliminated Impacts</u>: The following impacts would be eliminated for the same reason as LU Impact 4-2:

- T Impact 9-2, Operations (Landfill)
- T Impact 9-3, Central Disposal Site Rock Extraction Traffic (Landfill)
- T Impact 9-4, Central Disposal Site Expansion Traffic (Landfill)
- T Impact 9-5, Rock Extraction Traffic Safety (Landfill)
- T Impact 9-6, New Facilities Safety (Landfill)

<u>Changed Impacts</u>: The following impacts would be increased for the same reason as LU Impact 4-1:

- T Impact 9-1, Operations (Non-Disposal Facilities)
- T Impact 9-6, New Facilities Safety (Non-Disposal Facilities)

# Air Quality (AQ):

<u>Eliminated Impacts</u>: The following impacts would be eliminated for the same reason as LU Impact 4-2:

- AQ Impact 10-4 (a), Construction (Landfill)
- AQ Impact 10-4 (b), Operation (Landfill)
- AQ Impact 10-5, Rock Extraction PM<sub>10</sub> Emissions (Landfill)
- AQ Impact 10-6, Rock Extraction Emissions of Criteria Pollutants and TABS (Landfill)

<u>Changed Impacts</u>: The following impacts would be increased for the same reason as LU Impact 4-1:

- AQ Impact 10-1, Air Emissions (Non-Disposal Facilities)
- AQ Impact 10-2, Construction PM<sub>10</sub> (Non-Disposal Facilities)
- AQ Impact 10-3, Odors (Non-Disposal Facilities and Landfill)

No Change to Impacts: None identified.

### Noise (N):

Eliminated Impacts: The following impacts are eliminated for same reasons as LU Impact 4-2:

• T Impact 11-4, Construction Noise (Landfill)

- T Impact 11-5, Traffic Noise (Landfill)
- T Impact 11-6, Operations Noise (Landfill

Changed Impacts: The following impacts are increased for same reasons as LU Impact 4-1:

- T Impact 11-1, Construction Noise (Non-Disposal Facilities)
- T Impact 11-2, Traffic Noise (Non-Disposal Facilities)
- T Impact 11-3, Operations Noise (Non-Disposal Facilities)

### Vegetation and Wildlife (VWL):

Eliminated Impacts: The following impacts are eliminated for same reasons as LU Impact 4-2:

• VWL Impact 12-2, Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites (Landfill)

Changed Impacts: The following impacts are increased for same reasons as LU Impact 4-1:

• VWL Impact 12-1, Wetlands, Sensitive Wildlife Species, Sensitive Natural Communities, Migratory Wildlife Corridors, and Natural Wildlife Nursery Sites (Non-Disposal Facilities)

### Cultural Resources and Paleontology (CRP):

Eliminated Impacts: The following impacts are eliminated for same reasons as LU Impact 4-2:

- CRP Impact 13-2, Cultural and Paleontological Resources (Landfill)
- CRP Impact 13-3, Architectural Historical Resources (Landfill)

Changed Impacts: The following impacts are increased for same reasons as LU Impact 4-1:

- CRP Impact 13-1, Cultural and Paleontological Resources (Non-Disposal Facilities)
- CRP Impact 13-3, Architectural Historical Resources (Non-Disposal Facilities)

### Visual Resources (VR):

Eliminated Impacts: The following impacts are eliminated for same reasons as LU Impact 4-2:

- VR Impact 14-3, Visible Facilities (Landfill)
- VR Impact 14-4, Litter (Landfill)

Changed Impacts: The following impacts are increased for same reasons as LU Impact 4-1:

- VR Impact 14-1, Visible Facilities (Non-Disposal Facilities)
- VR Impact 14-2, Litter (Non-Disposal Facilities)

### Population & Housing, Public Services, Recreation, & Utilities (PRU)

Eliminated Impacts: The following impacts are eliminated for same reasons as LU Impact 4-2:

- PRU Impact 15-2 Fire and Police Services (Landfill)
- PRU Impact 15-3 Substantial Adverse Physical Impacts Associated with New or Altered Government Facilities (Landfill)

• PRU Impact 15-4 Exceed Wastewater Treatment Requirements (Landfill)

Changed Impacts: The following impacts are increased for same reasons as LU Impact 4-1:

- PRU Impact 15-1 Fire and Police Services (Non-Disposal Facilities)
- PRU Impact 15-3 Substantial Adverse Physical Impacts Associated with New or Altered Government Facilities (Non-Disposal Facilities)
- PRU Impact 15-4 Exceed Wastewater Treatment Requirements (Non-Disposal Facilities)

### Impacts Not Substantially Changed

Impacts that were not found substantially different from the proposed project are listed below. These impacts have either no changes or would require project-specific analysis and mitigation under individual alternatives. None of the impacts in the sections listed below are considered to be greater than the proposed project and, therefore, would require the same mitigation measures.

Section 16 - Energy

**Project Objectives**: This alternative would not be consistent with the following objectives of the proposed project:

**Obj-3**: Satisfy the AB 939 solid waste planning and diversion mandates in a manner that is consistent with the objectives of the community, as reflected by the deliberations and documents of the AB 939 Local Task Force and SCWMA.

**Obj-5**: The County will provide alternative disposal options for recyclable items or materials such as, but not limited to, yard debris, recyclable wood waste, whole tires, and appliances and ban the landfill disposal of these items.

**Obj-8**: The County's solid waste disposal facilities will be sited and operated in a manner to minimize energy use, conserve natural and financial resources, and protect prime agricultural lands and other environmentally sensitive or culturally sensitive areas.

**Obj-9**: The County will develop disposal capacity for solid waste not handled by other elements of the management hierarchy for a 50-year horizon. Disposal capacity is addressed in the Siting Element of the CoIWMP.

**Obj-10**: Use the existing landfill parcel to maximize its useful life and maximize the return on the public infrastructure improvements so far as it is consistent with protection of the environment.

**Obj-11**: Provide landfill capacity at least through the year 2017 as required by state law by expanding the Central Landfill.

**Obj-13**: Maintain local control over costs and environmental impacts of disposal by siting facilities within Sonoma County.

**Obj-16**: Create and maintain employment opportunities for Sonoma County residents and growth opportunities for Sonoma County businesses, industries and entrepreneurs who make productive use of otherwise wasted materials.

# **18.5 ALTERNATIVES IDENTIFIED BUT REJECTED**

The CEQA Guidelines (Section 15126[c]) requires that this SPEIR should identify any alternatives that were considered by the lead agency (SCWMA), but were rejected as infeasible during the scoping process. A brief explanation of the reasons underlying the SCWMA's determinations are discussed below. The following is a list of rejected alternatives, including a brief description of the alternative and the reasons that each was not considered feasible for the purposes of this SPEIR.

- Maximum Source Reduction and Public Education. This alternative was rejected as infeasible because it would not achieve the 50-year planning horizon for waste diversion and the need for additional disposal capacity and would not effectively avoid significant impacts of the proposed project. The jurisdictions in Sonoma County have implemented a wide variety of source reduction and public education programs identified in the 1996 CoIWMP. These programs include collection rate modifications, technical assistance, on-site composting, revised procurement guidelines to promote source reduction and recycling lessons in the school curriculum, and participation in the Countywide Eco-Desk Hotline. This alternative would apply additional economic incentives and legal mandates to achieve substantially greater source reduction than that forecast in the 1996 CoIWMP. This alternative assumes that existing solid waste diversion programs such as residential curbside programs, drop-off and buyback centers, and wood waste recycling would continue. Although this alterative meets some of the project objectives, it would be less effective in reducing significant impacts as compared to the proposed projects and the alternatives analyzed.
- **Bale Fill.** This alternative was rejected because it extends landfill capacity less effectively than the MRF. A bale fill is a specific type of ultra-compaction, where a powerful baler compacts the refuse into large bales that are then transported to the disposal site and stacked into the landfill and covered. The use of this technique increases landfill airspace, although at significant additional cost and levels of energy consumption. Although this alternative meets some of the project objectives, it would be less effective in reducing significant impacts as compared to the proposed project and alternatives analyzed.
- Materials Recovery Facility (MRF) Combined With Waste Transformation. This alternative would combine the establishment of a mixed waste MRF with a waste transformation facility, which is also known as "Waste to Energy (WTE)." The MRF would separate and process solid waste; the remaining combustible solid waste would be burned in the WTE facility. Although WTE facilities reduce the volume of solid waste disposed and recover energy, these types of facilities can have greater air quality and water quality (related to ash disposal) impacts, and the one time use of solid waste (as opposed to recycling or composting) is generally in conflict with the communities' objectives. This alternative was found infeasible and not considered further in the certified 1996 CoIWMP EIR pursuant to the adopted Sonoma County Board of Supervisors Resolution No. 94-1230. Although this alternative meets some of the project objectives, it would be less effective in reducing significant impacts, and may increase impacts associated with air emissions and ash disposal, as compared to the proposed project and alternatives analyzed.
- No Source-Separated Green Waste Composting. This alternative would not separate green waste from municipal waste. Instead, the combined wastes would be processed in a RMF which would recover energy and reduce disposal waste volumes. This alternative was rejected as infeasible because it would increase the demand for additional landfill capacity and would be inconsistent with AB 939 requirements. In addition, this alternative would require expansion of

the proposed RMF to handle green waste. Processing green waste through the RMF, rather than by composting it separately, could result in a less marketable product, thereby reducing the production of compost products that can be used as soil amendments in agriculture and landscaping.

Although this alternative exhibits some environmental merit, it does not rise to the same level of potential to eliminate significant environmental impacts, as do the alternatives analyzed. In addition, it may also not exhibit decisive reasons for rejection on purely environmental grounds, as do other rejected alternatives in this section; rather, it more clearly demonstrates an inability to meet critical project objectives, as specified below. When viewed in the aggregate, such as not significantly reducing some environmental impacts together with the lack of achieving these project objectives, it is considered to be less feasible as compared to the alternatives analyzed; and is, therefore, rejected from further consideration.

This alternative could not feasibly attain the following objectives of the proposed project:

**Obj-1** In order to help ensure the sustainability of our communities and to conserve natural resources and landfill capacity, the 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.

**Obj-3** Satisfy the AB 939 solid waste planning and diversion mandates in a manner that is consistent with the objectives of the community, as reflected by the deliberations and documents of the AB 939 Local Task Force and SCWMA.

**Obj-5** The County will provide alternative disposal options for recyclable items or materials such as, but not limited to, yard debris, recyclable wood waste, whole tires, and appliances and ban the landfill disposal of these items.

**Obj-6** 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.

**Obj-15** Complement existing and planned private sector operations for collection/processing of both refuse and recyclables.

**Obj-16** Create and maintain employment opportunities for Sonoma County residents and growth opportunities for Sonoma County businesses, industries and entrepreneurs who make productive use of otherwise wasted materials.

**Obj-18** The SCWMA, County and the Cities will provide access to composting opportunities through implementation of composting facilities and programs which may be regional or local, public or private.

• No Expansion of the Central Disposal Site. This alternative would not expand the Central Landfill. Instead, a landfill siting study would begin and a new landfill would be developed at another site. All other components of the proposed 2003 CoIWMP would be implemented.

Alternative landfill sites were evaluated in the 1998 Final EIR for the Central Disposal Site Improvement Program (CDSIP). The alternative analysis was based on a previous siting study that identified four feasible alternative landfill locations. These four sites and the existing Central Landfill site are the only locations in the County that have been demonstrated to be feasible by site-specific geologic investigations. Although all of the sites meet some of the project objectives and could accommodate landfills that would be much larger than the proposed expansion at the Central Landfill, the alternatives analysis in the 1998 CDSIP EIR concluded that none of the alternative sites would be economically efficient. Reduced use of the existing infrastructure at the County's Central Disposal Site was the basis for this conclusion. In addition, impacts associated with developing and operating a landfill would simply be transferred from the existing site to a new site, resulting in no net environmental benefit. Therefore, siting a new landfill before the existing Central Landfill site is expanded and closed would not significantly reduce impacts or be economically efficient. Accordingly, this alternative was rejected as infeasible.

# 18.6 COMPARISON OF ALTERNATIVES AND IDENTIFICATION OF THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The 2003 CoIWMP, as mitigated, would have the lowest overall environmental impact. The first alternative (No Project) would increase the need for additional landfill capacity and would not reduce disposable solid waste volumes, nor produce energy associated with the proposed RMF. Alternative No. 2 (MRF combined with enclosed composting facility) would provide some reduction in disposable solid waste volumes, but not to the same degree as the proposed project. In addition, energy production would be missing as compared to the proposed RMF. Lastly, the third alternative (No Siting of New Landfill with Export of Waste) would eliminate the need for further landfill expansion, or siting in Sonoma County, but would shift the associated environmental impacts outside Sonoma County. Moreover, addition transfer stations would be required to accommodate the export of the County's solid waste.

Therefore, based on the analysis and comparison of the above alternatives, the 2003 CoIWMP, with the mitigation measures as proposed in this SPEIR, is the environmentally superior alternative.

# **SECTION 19**

Bob Gaiser	Sonoma County General Plan Staff
Douglas Bolan	United States Department of Labor (Mine Safety Health Administration)
Barbara Cook	California Department of Toxic Substances Control
Sue O'Leary	California Integrated Waste Management Board
Joey Briglio	Santa Rosa Community Development Department
Bob Swift	Local Enforcing Agency (LEA) Sonoma County

# Lead Agency

### Sonoma County Department of Transportation and Public Works

Ken Wells - Integrated Waste Manager Donna Caldwell - Waste Management Specialist II

#### Sonoma County Permit and Resource Management Department

Tim Mayer - Environmental Review Manager Paula Stamp - Planner III Steve Dee, Senior Environmental Specialist Carol Thomas - Clerk Typist III

### Consultants

### Geo Logic Associates

Ralph Murphy - Principal Engineering Geologist Kent McMillan - Supervising Geologist Mark Vincent - Senior Geologist

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# SECTION 21

Bay Area Air Quality Management District CEQA Guidelines. 1996; revised 1999. Bay Area Air Quality Management District.

<u>Central Disposal Site Improvement Program – Final Environmental Impact Report</u>. December 8, 1998. Sonoma County Department of Transportation and Public Works.

<u>Central Disposal Site Rock Extraction Project – Final Environmental Impact Report</u>. July, 1998. Sonoma County Department of Transportation and Public Works.

Countywide Integrated Waste Management Plan - Final Environmental Impact Report. 1996

<u>Emergency Response and Evacuation Plan for Central Disposal Site</u>. June, 2002. Sonoma County Department of Transportation and Public Works.

<u>Illness and Injury Prevention Plan SB198</u>. Revised July, 1999. Sonoma County Department of Transportation and Public Works.

Load Checking Program for Central Disposal Site. August, 1999. Sonoma County Department of Transportation and Public Works.

Sonoma County Countywide Integrated Waste Management Plan (CoIWMP) Preliminary Draft. March 13, 2003.

Sonoma County General Plan (as amended) 1989.

Sonoma County General Plan EIR, 1989.

Sonoma County Solid Waste Management Alternatives and Analysis Project – Final Report. December 29, 2000. SCS Engineers.

Siting and Classification Study Proposed West Area Expansion – Central Disposal Site Sonoma County California. March, 2003.

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AB 939 – Assembly Bill 939; the California Integrated Waste Management Act of 1989.

Agency – See SCWMA.

Agricultural wastes – Solid wastes of plant and animal origin, which result from the production and processing of farm or agricultural products, including manures, orchard and vineyard prunings, and crop residues, which are removed from the site of generation for solid waste management.

**CEQA** – California Environmental Quality Act of 1970; requires environmental reviews to be conducted on development and planning documents that will create development.

City – The government agency associated with a particular city within Sonoma County.

**CIWMB** – Countywide Integrated Waste Management Board; State agency that oversees and regulates solid waste management.

**CoIWMP** – Countywide Integrated Waste Management Plan, as defined in Section 41750 of the Public Resources Code initiated by AB 939.

**Compost** – The product resulting from the controlled biological decomposition of organic wastes that are source separated from the municipal solid waste stream, or which are separated at a centralized facility. Compost includes vegetable, yard, and wood wastes which are not hazardous waste.

**Composting** – A method of waste treatment which produces a product meeting the definition of compost.

**Composting facility** – A permitted solid waste facility at which composting is conducted and which produces a product meeting the definition of compost.

**Conversion technology** – Method of processing solid waste in a manner that recovers energy from the organic portion of the waste and produces a relatively inert waste for final disposal. May include anaerobic digestion or biorefining. Operations typically include grinding, mixing solid waste with water in a closed container, extraction of a clean fuel in the form of methane and/or ethanol, and disposal of the residual waste.

**County** – The government agency associated with Sonoma County.

county – The geographical area designated as Sonoma County.

**Disposal** – The management of solid waste through landfilling or transformation at permitted solid waste facilities.

**Disposal capacity** – The capacity, expressed in either weight in tons or its volumetric equivalent in cubic yards, which is either currently available at a permitted solid waste landfill or will be needed for the disposal of solid waste generated within the jurisdiction over a specified period of time.

**Drop-off recycling center** – A facility which accepts delivery or transfer of ownership of source separated materials for the purpose of recycling or composting, without paying a fee. Donation of materials to collection organizations, such as charitable groups, is included in this definition.

**DTPW** – Department of Transportation and Public Works; refers to the Sonoma County Department of Transportation and Public Works.

**Flow control** – A formal agreement between jurisdictions that would direct waste to a specific facility thereby guaranteeing a revenue source for necessary financing.

**Food waste** – All animal and vegetable solid wastes generated by food facilities, as defined in California Health and Safety Code section 27521, or from residences, that result from the storage, preparation, cooking, or handling of food.

**HHW** – Household hazardous waste; wastes resulting from products purchased by the general public for household use which, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may pose a substantial known or potential hazard to human health or the environment when improperly treated, disposed, or otherwise managed.

**HHWE** – Household Hazardous Waste Element; an element of the CoIWMP that addresses the management of HHW.

IWMP – Integrated Waste Management Plan. Same document as the CoIWMP.

JPA – Joint Powers Agreement; contract that sets forth the bylaws for a legal California government agency.

LCRS – Leachate collection and recovery system.

Leachate – Any liquid that has run-off of or percolated through garbage.

**LFG** – Landfill gas; a bi-product of decomposition of wastes buried in a landfill that is required by Federal law to be collected and processed in such a manner that it is not released into the air.

**MRF** – Materials recovery facility; a facility where solid wastes or recyclable materials are sorted or separated, by hand or by use of machinery, for the purposes of recycling or composting.

**MSW** – Municipal solid waste; all solid wastes generated by residential, commercial, and industrial sources, and all solid waste generated at construction and demolition sites, at food-processing facilities, and at treatment works for water and waste water, which are collected and transported under the authorization of a jurisdiction or are self-hauled. Municipal solid waste does not include agricultural crop residues, animal manures, mining waste and fuel extraction waste, forestry wastes, and ash from industrial boilers, furnaces and incinerators.

**NDFE** – Non-Disposal Facility Element; identifies new and expanded diversion facilities that will assist Sonoma County Waste Management Agency's member jurisdictions in achieving their AB 939 goals and objectives.

**Organic waste** – Solid wastes originated from living organisms and their metabolic waste products, and from petroleum, which contain naturally produced organic compounds, and which are biologically decomposable by microbial and fungal action into the constituent compounds of water, carbon dioxide, and other simpler organic compounds.

**RMF** – Resource Management Facility; a solid waste facility that handles materials such as municipal solid waste, biosolids, food waste, manures, waste straw, sawdust, lees, pomace and dairy wash water that has not been recycled or diverted by other programs. Operations may include preliminary waste sorting and processing, organic waste composting and on-site energy generation.

SCWMA – Sonoma County Waste Management Agency; a regional government agency responsible for recycling education, household hazardous waste and composting in Sonoma County.

Siting element – Element of the CoIWMP that addresses solid waste facility siting.

Sludge – Residual solids and semi-solids resulting from the treatment of water, waste water, and/or other liquids. Sludge includes sewage sludge and sludge derived from industrial processes, but does not include effluent discharged from such treatment processes.

**Solid waste** – All putrescible and nonputrescible solid and nonputrescible solid and semisolid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid or semisolid wastes, and other discarded solid and semisolid wastes. Solid waste does not include hazardous waste, radioactive wastes, or medical wastes.

**Sonoma County** – The geographical area designated as Sonoma County; also, the government associated with Sonoma County.

**Source Reduction** – Any action which causes a net reduction in the generation of solid waste. Source reduction includes, but is not limited to, reducing the use of nonrecyclable materials, replacing disposable materials and products with reusable materials and products, reducing packaging, reducing the amount of yard wastes generated, establishing garbage rate structures with incentives to reduce the amount of wastes that generators produce, and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic and other materials. Source reduction does not include steps taken after the material becomes solid waste or actions which would impact air or water resources in lieu of land, including, but not limited to, transformation.

**PRMD** – County of Sonoma Permit and Resource Management Department.

**Recycle or recycling** – The process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace. Recycling does not include transformation.

**Re-use** – The use, in the same form as it was produced, of a material which might otherwise be discarded.

**SRRE** – Source Reduction and Recycling Element; an element of the CoIWMP that addresses diversion activities and capacity of existing disposal facilities.

SWGS – Solid Waste Generation Study; the study undertaken by Sonoma County in 1992 to characterize its solid waste stream.

**Transformation** — Incineration, pyrolysis, distillation, gasification, or biological conversion other than composting. Transformation does not include composting or biomass conversion.

**Transformation Facility** – A facility whose principal function is to convert, combust, or otherwise process solid waste by incineration, pyrolysis, destructive distillation, or gasification, or to chemically or biologically process solid wastes, for the purpose of volume reduction, synthetic fuel production, or energy recovery. Transformation facility does not include a composting facility.

Waste prevention – See Source Reduction.

**Wood waste** – Solid waste consisting of wood pieces or particles which are generated from the manufacturing or production of wood products, harvesting, processing or storage of raw wood materials, or construction and demolition activities.

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ntil	COUNTY OF SONOMA	DEPARTMENT
AGRELITUR IGUSTIV ICENATOR ALIFORNIA	2550 Ventura Avenue, Santa Rosa, CA 95403-28 (707) 565-1900 FAX (707) 565-8358	

### NOTICE OF PREPARATION OF DRAFT SUPPLEMENTAL PROGRAM ENVIRONMENTAL IMPACT REPORT & NOTICE OF SCOPING MEETING

Project Title: Sonoma County Integrated Waste Management Plan Update

The Sonoma County Waste Management Agency will be the lead agency and will prepare a Supplemental Program Environmental Impact Report (SPEIR) for the above project. 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 project. Your agency will need to use the SEIR prepared by our agency when considering your permit or other approval for the project.

An Initial Study and the probable environmental effects are contained in the attached materials. 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.

The Sonoma County Waste Management Agency will review this project at 10:00 am on November 28, 2001 in the Estuary Conference Room at the Laguna Subregional Wastewater Treatment Plant located at 4300 Llano Road, Santa Rosa.

At this meeting, the Agency will discuss the scope of the SPEIR. Everyone is welcome to attend the meeting and to comment on the issues that should be addressed in the SPEIR. If you wish to bring environmental issues to the attention of the Agency but cannot attend this meeting, please send written comments to: Paula Stamp, Permit and Resource Management Department, 2550 Ventura Avenue, Santa Rosa, CA 95403. Comments may also be faxed to 565-8358, Attention: Paula Stamp. Any written comments received prior to the time of the meeting will be submitted to the Agency.

The 1996 Final PEIR, County Integrated Waste Management Plan, and 1996 County Integrated Waste Management Plan are available for review at the reference desk at all public libraries in the county, and also at the Self Help counter at PRMD (address above), and at the Sonoma County Department of Transportation and Public Works, (575 Administration Drive, Room 117A, Santa Rosa).

Please send your response to Paula Stamp at the address above. We will need the name of a contact person in your agency.

Date: 111501

Signature \_\_\_\_\_\_\_ Title: Senior Environmental Specialist ų,

Title: Senior Environmental Specialis Telephone: (707) 565-8350 

# INITIAL STUDY COUNTY INTEGRATED WASTE MANAGEMENT PLAN UPDATE

# **INTRODUCTION**

The Sonoma County Waste Management Agency intends to update the County Integrated Waste Management Plan to include the programs identified below. This Initial Study identifies impacts and issues of the CoIWMP Update which will be addressed in a Supplemental Program Environmental Impact Report (SPEIR).

In 1994 the County of Sonoma ("County") and the incorporated cities and town within the County adopted the first Countywide Integrated Waste Management Plan which was approved by the California Integrated Waste Management Board (CIWMB) in 1996 (1996 CoIWMP). The CoIWMP is the principal planning document for solid waste management in Sonoma County as required by the Integrated Waste Management Act of 1989 (AB 939). It identifies goals and objectives for the County and the incorporated cities in the County with respect to solid waste reduction, recycling, diversion, and disposal. Concurrent with the preparation of the CoIWMP, all the cities in Sonoma County and the County entered into a Joint Powers Agreement which formed the Sonoma County Waste Management Agency (hereafter the "Agency") to deal with household hazardous waste, yard and wood waste and public education. In 1996, the Joint Powers Agreement was amended to establish the Agency as the public planning agency for solid waste management in Sonoma County.

In 1999 the County began an alternatives analysis to identify a long term integrated waste management strategy with the goal of assuring adequate future capacity for solid waste disposal. In December 2000 a final report was prepared (see *Solid Waste Management Alternatives Analysis Final Report 2000*, hereafter "Alternatives Analysis"), which recommended the following four key components for the solid waste strategy in the planning period 2015 to 2050:

1. Formal agreement among all cities and the County to direct flow of refuse and green waste to a new integrated resource management facility.

2. Mandatory source separation of recyclables from waste for residential, commercial, industrial, and institutional waste generators.

3. Expansion of Central Landfill beyond its current permitted capacity (i.e., beyond the year 2015).

4. Siting of an integrated resource management facility to include organics processing (anaerobic digestion or biorefining), green waste composting and landfilling.

The Agency proposes to revise the CoIWMP (1) to include the main recommendations of the Alternatives Analysis 2000; (2) to implement further changes pursuant to the recommendations of the Agency, specifically: a) siting of a new transfer station in the Santa Rosa area and b) additional construction and

demolition debris recycling efforts; and (3) to generally update the 1996 CoIWMP. After revision, the Agency, the County, and the cities and town would implement the CoIWMP.

The 1996 CoIWMP is a compilation of solid waste planning documents including: (1) Source Reduction and Recycling Elements (SRRE), (2) Household Hazardous Waste Elements (HHWE), and (3) Non-disposal Facility Elements (NDFE) for each jurisdiction, (4) a Siting Element, and (5) a Summary Plan describing all the elements.

# SUMMARY OF REVISIONS/ADDITIONS TO COUNTY INTEGRATED WASTE MANAGEMENT PLAN

### Source Reduction and Recycling Element

- 1. Mandatory Recycling
- 2. Flow Control Policy
- 3. Resource Management Facility
- 4. Composting Facility in Location other than Central Disposal Site
- 5. New Transfer Station in the Santa Rosa Area
- 6. Conversion of Central Disposal Site to a Transfer Station
- 7. Construction/Demolition Debris Recycling Facility(ies)

Household Hazardous Waste Element

Minor revisions/updates will be made to the HHWE

Non-Disposal Facility Element

Revisions/updates will be made to the NDFE to reflect changes in programs in the SRRE

### Siting Element

- 1. Revision to Central Disposal Site Expansion
- 2. Revision to New Landfill Siting including

Landfilling Residue from the Resource Management Facility Landfill Management with the Bioreactor Technology

Following is a description of the elements, with a discussion of the changes that must be made to incorporate the proposed programs and policies.

# SUMMARY OF SOURCE REDUCTION AND RECYCLING ELEMENT REVISIONS

The Source Reduction and Recycling Element (SRRE) details the goals, policies, programs and activities that will be used in Sonoma County to comply with the waste management hierarchy and diversion goals established by AB 939. The 1990 Solid Waste Generation Study describes the quantity, source, category and type of solid waste generated and diverted, providing baseline data for the SRRE. The Disposal Facility Capacity Component contains information about capacity of existing solid waste landfills.

The SRRE also includes Source Reduction, Recycling, Composting and Special Waste Components. Source reduction efforts, which are generally educational, are intended to prevent waste generation. Recycling is the reuse of material after it has been discarded. Composting programs manage yard debris and other organic materials to produce beneficial soil amendments. Special waste programs target hard-to-manage materials, including asphalt, concrete, tires, white goods (appliances), brown goods (furniture, electronics) and wood waste. The SRRE also includes a discussion of education and public information, funding and marketing for source reduction, recycling, composting and special waste. There is also an Integration Component describing how the programs will achieve the AB 939 diversion mandates of 25% by 1995 and 50% by 2000.

Minor revisions/updates will be made to the 1996 SRRE as necessary to reflect new information, subsequent legislation and a request submitted to the CIWMB to extend the 2000 50% deadline to 2003.

The following new programs will be included in the SRRE:

### Mandatory Recycling

The SRRE currently provides for voluntary curbside recycling. The proposed revision would require that all residential, commercial, industrial and institutional waste generators have access to recycling services and that recyclables be separated at the source to keep them out of the waste stream. This may include municipal regulations prohibiting recyclables to be mixed with disposed waste. Emphasis is placed on recycling any material that can be easily and economically recycled such as yard waste, wood, newspapers, cardboard, magazines, office paper, glass containers, tin cans, aluminum cans and scrap metals. A penalty and education program could also be included to emphasize the prohibition of placement of recyclables in disposed waste.

# Flow Control

Although no formal policy was described in the 1996 CoIWMP to require disposal of waste in Sonoma County facilities, it assumed that there is in-County disposal of all solid waste generated in Sonoma County. The proposed flow control policy would assure that this waste is available for processing in Sonoma County so that investment in the construction of large new facilities such as the resource management facility described below is assured a reliable source of materials for processing.

The municipalities and the county would adopt a county-wide flow control policy, creating a formal agreement to direct all refuse and green waste to a new resource management facility. Similar language would also be adopted into waste service contracts between the county's private waste haulers and the

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various jurisdictions. The County and cities would adopt common terms and stipulations for all new, renewed or extended refuse service franchises/contracts. Such terms and stipulations would direct the flow of disposed waste to one or more disposal sites as cooperatively designated by the County and jurisdictions.

### Resource Management Facility

A major new component of the solid waste management system planned for Sonoma County is a resource management facility (RMF). This facility would include several waste processing steps, all conducted inside a building, including preliminary waste sorting, the primary organic waste processing operation, and potentially, an on-site energy generating element using the fuel created by the organic waste processing operation.

The facility would process solid waste that is not recycled or diverted in other county programs, ranging from approximately 1,300 tons per day in 2010 to approximately 1,600 tons per day (annual average) in 2050. Typical materials for processing include mixed Municipal Solid Waste (MSW) from garbage collection, as well as biosolids, food waste, manure from horse and other farms, waste straw and sawdust from animal bedding, lees and pomace from wineries and wash water from milk barns and creameries. Approximately 25% of this tonnage would remain as residue for disposal following processing. This facility would be open to commercial haulers only.

The preliminary waste sorting step would be intended to remove non-organic, hazardous materials and/or valuable recyclables. This step may include human labor and/or mechanical equipment to physically remove these items from the waste stream before it is processed further.

The major function of the resource management facility is to process the solid waste in a manner that recovers energy from the organic portion of the waste and produces a relatively inert waste for final disposal. There are various conversion technologies available to accomplish this objective, including anaerobic digestion and biorefining. Although the specific technology will be selected at a future date, they would all share several elements including an initial grinding step to reduce the various waste items to a relatively homogeneous size, mixing of the solid waste with water in a closed container followed by either chemical or biological digestion, extraction of a clean fuel in the form of methane and/or ethanol, and disposal of the residual waste, which has a greatly reduced volume and is relatively inert compared to the input waste. The residual solid waste would be transported to a landfill for disposal. It is expected that residual wastewater that is not recycled would be treated and disposed of similarly to leachate treatment and disposal at the Central Disposal Site.

After processing the organic fraction of the waste, the clean fuel can be used on-site to produce electricity or transported off-site to be used as vehicle fuel or as a clean, renewable source of energy for other activities. If an on-site energy plant is built, it may be similar to the existing power plant at the Central Disposal Site.

The RMF, regardless of technology selected, will require about 5 acres for the building and related traffic circulation with a building a minimum of 40,000 to 50,000 square feet in size, as well as electric, water and wastewater service. The RMF could be co-located with a landfill, or could be at a separate location.

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# Composting

The 1996 SRRE currently identifies a compost production program for yard debris possibly including grape pomace, sawdust and manure. A pilot project for composting other source-separated organics such as food waste, paper waste and other compostable organics, and possibly sewage sludge is also identified.

The updated SRRE includes additional composting facilities, a large site serving the entire county, e.g., 30 acres or more, with possibly several smaller additional sites. The existing yard waste composting program may be expanded to include biosolids, food waste, manure from horse and other small farms, waste straw and sawdust from animal bedding, lees and pomace from wineries and wash water from milk barns and creameries. The green waste composting facility would be similar to the compost facility currently operating at the Central Disposal Site, in that green waste (grass clippings, leaves, prunings, etc.) would be separated from the solid waste stream and composted to make a useable landscaping product. The exact process or physical characteristics of the facility may be different from the existing facility.

The composting facility(ies) could be enclosed but are more likely to have a covered area with open sides. The large facility will include approximately 10-15 acres with an additional 20 acres for curing and storage, and the smaller facilities may be under ten acres and located at multiple sites. It is expected that the composting facility(ies) will have features for water quality control such as roofing or a collection system to treat runoff.

# New Transfer Station

The CoIWMP will be revised to add a new transfer station site. It would be located in the Santa Rosa area, either inside or outside the city limits. This would reduce the number of MSW collection trucks traveling to the Central Disposal Site and to the Healdsburg transfer station, because it would serve to combine the loads into larger transfer trailers prior to hauling to the landfill or RMF. This facility will be open to the public. For purposes of evaluation it is assumed that it will be built and operated in a manner similar to the other County transfer stations.

### Conversion of Central Disposal Site to a Transfer Station/Recycling and Reuse Center

Prior to the closure of the Central Landfill, the public tipping area at the Central Disposal Site will be modified to continue to accept MSW after the landfill disposal capacity is exhausted. The transfer station will operate in the same manner as the existing transfer stations, with diversion for recycling and reuse available to private users prior to dumping. Refuse would be accepted from both the general public and commercial haulers. Refuse would be hauled to a different landfill, or the resource management facility for processing and then landfilled. This use of the Central Disposal Site would be a revision to the CoIWMP. The electricity generation from landfill gas facility and the household hazardous waste collection facility would continue to operate at this site.

# Construction & Demolition Debris Box Recycling Facilities

The 1996 CoIWMP describes the recycling of asphalt and concrete by requiring the cities and the County to recycle construction and demolition debris and to purchase asphalt mix with recycled content. A disposal ban on recyclable construction and demolition debris is also described, as well as the floor-sorting of construction debris at the transfer stations.

In the proposed revision, a separate facility or multiple sites are proposed to sort and recycle construction and demolition debris. The facility would take debris boxes from construction and demolition sites and sort them prior to recycling and disposal of the materials. Materials which cannot be recycled would be composed or disposed of in the landfill. Each facility would occupy five to ten acres for storage and sorting and would be located on a separate site. It would most likely be operated by a private company.

# SUMMARY OF HOUSEHOLD HAZARDOUS WASTE ELEMENT REVISIONS

The Household Hazardous Waste Element ("HHWE") identifies the quantities of household hazardous waste generated and specifies the means to safely collect, recycle, treat and dispose of hazardous waste generated by households. Collection services include special one-day events, drop-off sites and mobile collection. Exchange, reuse and recycling alternatives for waste oil, paint, batteries and other household hazardous waste are described. Load checking programs at solid waste facilities are also addressed.

While there are no new programs being proposed, minor revisions/updates will be made to the HHWE as necessary to reflect new information and regulations.

# SUMMARY OF NON-DISPOSAL FACILITY ELEMENT REVISIONS

The Non-Disposal Facility Element ("NDFE") is a summary document of the non-disposal facilities used to process the materials collected by the programs described in the SRRE. Facilities which recover materials for reuse or recycling are identified. Existing and proposed transfer stations are identified, and any proposed modifications to transfer stations. Disposal and transformation (incineration) facilities are not included. Other facilities such as composting operations and drop-off recycling facilities are included.

Minor revisions will be made to the NDFE as necessary. In addition, new facilities proposed to be added to the NDFE are the Santa Rosa transfer station, the conversion of the Central Disposal Site to a transfer station, the integrated resource management facility, construction and demolition debris recycling facilities and composting facilities located at a site other than the Central Disposal Site.

# SUMMARY OF SITING ELEMENT REVISIONS

The 1996 Siting Element provides an integrated strategy to ensure long-term disposal capacity in the county. CIWMB regulations require the County to demonstrate its ability to provide 15 years of combined permitted

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disposal capacity from the year of submission of the revised CoIWMP to the CIWMB. In addition, the 1996 Siting Element describes six options for expansion of the landfill at the Central Disposal Site. The goals, objectives and policies of the Siting Element, combined with the siting criteria described below, guide the development of additional disposal capacity, through the expansion of existing and/or the construction of new solid waste disposal facilities.

Siting criteria are required by state law and include 1) exclusionary criteria, which are those factors which would exclude the site or portion of the site from further consideration for a landfill, and 2) comparative criteria, which would be used to evaluate sites not in the exclusionary areas that are potentially suitable. Exclusionary criteria include ten obvious types of unsuitability such as location in FEMA designated floodplains, location within 200 feet of a Holocene fault or within an Alquist-Priolo fault zone, etc. Comparative criteria evaluate across a wide spectrum of a) environmental considerations including water, air quality impacts, vegetation and wildlife impacts, etc., b) engineering criteria such as soils and geology, floods, precipitation and erosion potential, c) socioeconomic factors including transportation systems, land use, etc., d) administrative, such as distance from airports, capacity and proximity to agricultural land and groundwater supplies for drinking, and e) economic factors including cost of the land, transportation, operating and development costs. No changes to the Siting Criteria adopted in the 1996 ColWMP are proposed.

Minor updates will be made to the Siting Element as needed. In addition, the Siting Element will be revised as shown below to meet the disposal capacity needs with 1) creation of additional landfill capacity at the Central Disposal Site (see Landfill Expansion, below), 2) construction of new facilities for materials recovery, organic processing, composting and reduction of the volume of waste which will require landfill disposal (see Summary of Source Reduction and Recycling Element Revisions above), and 3) siting and permitting of a new landfill which will provide additional disposal capacity, and which will be able to accept both mixed solid waste and waste that has been processed to produce energy (see New Landfill Siting below). The programs described below exceed the minimum required 15 years combined permitted disposal capacity.

### Waste Generation Projections

Population and waste generation projections will be updated to reflect current conditions. The model considers the rate of population growth, the per capita waste generation rate, and the waste diversion rate. The projected total amount of waste requiring disposal depends less on the assumed rate of population growth than on the assumed diversion rate. The County General Plan and the California Department of Finance population projections are used. A one percent growth rate was assumed beyond 2011 through the end of the project planning period (2050) to account for urban growth limits and other future measures that may impact the quantity of wastes generated in the county.

Total waste requiring disposal is expected to increase at a smaller rate than the population increases. The per capita waste generation rate is expected to remain the same, while the diversion rate is expected to continue to increase. The net result will be a 16 percent increase in total tonnage by 2050 over 1998 compared to a 32 to 36 percent increase in population for the same period.
#### Landfill Expansion

The 1996 CoIWMP Siting Element recommends expanding the Central Landfill. A specific project was not identified, but the Element describes six expansion scenarios taken from a 1992 Capacity Study (EBA, 1992). These scenarios include various combinations of expansions into the East Canyon, West Canyon, and filling to a higher elevation in the Central Canyon. None of the scenarios considered expanding the landfill outside the boundaries of the existing County-owned parcel. The scenarios describe potential disposal capacity ranging from the year 2010 to 2028.

In 1998 the County approved a project to expand the Central Landfill into the East and West canyons. That expansion would create capacity for solid waste disposal through approximately 2014. In the same year the County approved a rock extraction project at the Central Landfill that would create a small amount of additional capacity. With these two projects, the landfill will have enough capacity to last through approximately 2015. (See also Other Projects at the Central Disposal Site below.)

The proposed revision to the CoIWMP adds a seventh scenario for further expansion of the Central Landfill. This scenario would be primarily on the existing landfill parcel, but would also require the purchase of additional land from parcels adjacent to the landfill. (See Figure 1.) Under this scenario, it is likely that additional rock extraction would be used to create additional landfill space between the Central and West Canyons. An analysis of site conditions to determine the feasibility of expanding the landfill into this area is now in process.

While the expansion proposed in the CoIWMP revision would be generally consistent with the expansions considered in the existing Siting Element, there would be two substantial differences. First, the expansion may not be restricted to the existing County-owned parcel, while the expansion envisioned in the existing Siting Element would be totally within the existing parcel. The second departure will be the use of a rock extraction project (quarry) as an integral part of the landfill expansion plan.

The proposed landfill expansion could involve relocation of existing facilities to other parts of the landfill parcel. The landfill infrastructure includes numerous systems designed to protect and monitor water and air quality. These systems would be maintained and expanded as necessary to comply with site permits and environmental regulations. New waste cells would include leachate collection and recovery systems (LCRS) and landfill gas (LFG) emissions control systems. The existing landfill gas-to-energy operations would be continued and expanded as necessary. Operational changes would be incorporated as needed to comply with new regulations or to take advantage of improved landfill technologies (for example, use of new alternative daily cover materials).

### New Landfill Siting

The 1996 CoIWMP Siting Element considers the siting of a new landfill to meet disposal capacity needs in the long term (beyond the year 2009). The 1996 CoIWMP addressed the siting of a new landfill, but it did not address the concept of the landfill containing residue from the resource management facility.



**Central Disposal Site** 

The proposed revisions to the siting of a new landfill would extend available capacity to satisfy the needs of all Sonoma County residents and businesses for approximately 35 years beyond the existing capacity, i.e., until 2050, and address a landfill containing both mixed solid waste and residue from the resource management facility. Following construction of the resource management facility, it is expected that most or all MSW will be sorted and processed at the facility before it is disposed of in regular landfill cells. Some unprocessed MSW could also be disposed of in the landfill. The landfill capacity needed to accommodate the same amount of MSW would then be less than that needed without the resource management facility, and could potentially reduce the volume needed for landfilling by 75%.

As described in the 1996 CoIWMP, the new municipal (Class III) landfill would be sited, designed, constructed, operated and closed under guidelines of the CoIWMP Siting Element, California Environmental Quality Act, county land use policy and regulatory requirements of CCR Title 27, and the federal Resource Conservation and Recovery Act, Subtitle D. Refuse cells would be excavated and constructed with engineered base liners and LCRS prior to waste placement. Ancillary features to be constructed could include storm water detention basins, leachate treatment or recirculation facilities, an entrance facility and scale house, office building, maintenance building and a LFG extraction system and blower/flare station. Depending on waste availability and economics, an LFG-to-energy facility may be constructed for electrical power generation, or conversion of LFG to vehicle fuel/pipeline gas.

Daily site operations would include soil excavation and waste placement. Excavated soils would be used for road construction, liner placement and daily, intermediate and final cover. Development of the landfill would be phased so that only portions of the site would be disturbed at any one time.

The landfill could accept both mixed solid waste and "inert" waste. Mixed solid waste would be unsorted waste that is collected directly from residential, commercial and/or institutional sources. Inert waste is the residue from the energy production process at the resource management facility.

Site operations at the new landfill may involve future landfill management strategies, including "bioreactor" technology. This is achieved through controlled additions of liquid and leachate recirculation in lined cells. Liquid recirculation enhances biodegradation and waste decomposition processes. By accelerating waste decomposition, filled cells settle more rapidly and can create additional airspace. Long-term water quality and LFG monitoring and maintenance liabilities can also be reduced.

As with the new landfill described in the 1996 CoIWMP, when landfill operations reach permitted final elevations, the site will be formally closed in accordance with state and federal regulatory standards. Closure activities include final grading, placement of final cover and drainage systems, revegetation of site surfaces and decommissioning of ancillary structures. Monitoring programs would be implemented throughout the post-closure period.

# Other Projects at the Central Disposal Site

Sonoma County Department of Transportation and Public Works, Integrated Waste Division is now also preparing a separate Supplemental Environmental Impact Report for construction of a replacement administration building at the Central Disposal Site and two pipelines, one to convey landfill gas to the

Sonoma County Transit facility in southwest Santa Rosa and the other to convey excess leachate to the Laguna Wastewater Treatment Facility. With this project, the landfill will have enough capacity to last through approximately 2016. The project is consistent with the 1996 CoIWMP and is not the subject of this Initial Study.

#### **Environmental Review Process**

The Sonoma County Waste Management Agency is the Lead Agency for CEQA review. The Agency adopted the State CEQA Guidelines as its CEQA implementation ordinance.

A Program EIR was prepared and certified for the 1996 CoIWMP. Environmental review for the revision to the CoIWMP will be done by preparing a Supplement to the Program EIR, simply called the SPEIR in this Initial Study.

The environmental baseline will be the objectives and policies of the existing CoIWMP for all objectives and policies that are carried forward without revision. For any objectives and policies that are revised or new, the environmental baseline will be the existing physical environment. Where applicable, mitigation measures from the 1996 CoIWMP EIR would be carried forward.

In 1998 the County certified an EIR for the Central Disposal Site Improvement Program. This EIR includes information about the Central Landfill that was not available when the 1996 CoIWMP PEIR was prepared. Where relevant, this new information will be used in the analysis of impacts of the expansion of the Central Disposal Site.

### **Potentially Significant Impacts**

The proposed project may have significant or potentially significant impacts related to: Visual resources, loss of agricultural land, air quality and odors, loss of wetlands and riparian vegetation, loss of sensitive species habitat, disturbance of raptor nests, damage to archaeological or paleontological resources, geologic hazards, soil erosion, ground and surface water quality, water availability, noise levels at residences, public health and safety, traffic congestion, safety and road damage. The following checklist, taken from Appendix G of the State CEQA Guidelines, was used to identify potentially significant impacts that will be addressed in the SPEIR.

			Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1.		AESTHETICS Would the project:				
	a)	Have a substantial adverse effect on a scenic vista?				
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		Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact	_
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?					
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?					
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?					

a) <u>Affect a scenic vista</u>: Expansion of the Central Disposal Site or siting of a new landfill would most likely result in a significant visual impact. The magnitude of impacts is related to the location and relative topography of the site, and to the availability of or the ability to create buffers to screen the facility. There may also be visual impacts from construction of the resource management facility, composting and other proposed facilities. The 1996 PEIR addressed visual impacts from construction of new facilities. Further analysis of scenic vistas will be done when site-specific projects are proposed.

b) <u>Damage scenic resources</u>: Any effect on scenic resources resulting from the proposed programs and facilities is expected to be less than significant. Further analysis of scenic resources will be done when site-specific projects are proposed.

c) Degrade visual character: Expansion of the Central Disposal Site or siting of a new landfill, resource management facility and other proposed facilities could produce litter in the area of the facility. The 1996 PEIR addressed impacts from litter from new and expanded solid waste non-disposal facilities as well as from new and expanded solid waste disposal facilities. The SPEIR will also address changed conditions regarding the impacts of litter on neighborhoods.

d) <u>Create light or glare</u>: Expansion of the Central Disposal Site or siting of a new landfill, resource management facility and other proposed facilities could produce light and possibly glare in an area where none is now experienced, and may affect views. The 1996 PEIR did not adequately address potential impacts from light and glare. Accordingly these impacts will be fully analyzed in the SPEIR and when site-specific projects are proposed.

# 2. AGRICULTURE RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model

Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact

 $\Box$ 

to use in assessing impacts on agriculture and farmland. Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

a) <u>Convert farmland</u>: Sonoma County has strong policies which restrict reduction in the extent of agricultural lands. Use of agricultural lands for any proposed facility might be inconsistent with adopted plans and policies. The loss of agricultural land from the construction of solid waste facilities was analyzed in the 1996 PEIR. No further analysis is needed.

b, c) Zoning or a Williamson Act contract or other farmland conversion: The SPEIR will address the potential for farmlands or lands under a Williamson Act contract to be used for expansion of the landfill at the Central Disposal Site or siting of new facilities.

#### 3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-

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	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
Expose sensitive receptors to substantial pollutant concentrations?				
Create objectionable odors affecting a substantial number of people?				

a, b, c) Non-conformance with an air quality plan, air quality standards or cumulative increase in air pollution: Both the air quality basins in Sonoma County are now in non-attainment of state standards for PM10 (particulate matter less than 10 microns) and of federal and state standards for ozone. The Bay Area Air Quality Management District (BAAQMD) has adopted an Attainment Plan to attain federal ozone standards and a Clean Air Plan to attain state ozone standards. The SPEIR will address the potential that CoIWMP components would not conform to the plans.

Expansion of the Central Disposal Site or siting of a new landfill and resource management facility that forecasts emissions greater than allowed would be considered a significant impact for ozone precursors. Standards for other criteria pollutants could also be exceeded by engine emissions from trucks and equipment used in landfill construction, rock extraction, landfill operations, and dust creation during each of these activities. The 1996 PEIR addressed the potential for new facilities to create significant air pollution. Because there have been changes in ambient air quality in Sonoma County, the SPEIR will address the potential that implementation of the CoIWMP would cause air standards to be exceeded, or would contribute to a cumulative increase in ozone precursors or PM10.

The resource management facility may utilize biorefining technology, and as a result may produce significant air emissions of sulfur dioxide and lead. The SPEIR will address the potential impact.

d) Expose sensitive receptors: Since the preparation of the 1996 PEIR, the Air Resources Board has designated diesel emissions as a toxic air contaminant. The SPEIR will address the potential for CoIWMP components to expose people to significant concentrations of diesel emissions or other pollutants. The SPEIR will address the siting of facilities in relation to the location of sensitive receptors and prevailing winds.

e) <u>Creation of objectionable odors</u>: Creation of odors is a frequent impact of solid waste facilities and composting. The 1996 PEIR addressed the impact of odors from composting. The SPEIR will address odors from new facilities and changed conditions identified in the 1998 Central Disposal Site Improvement Program EIR.

d)

ė)

Potentially	Potentially	Less Than	No
Impact	Unless Mitigated	Impact	Impact

### 4. BIOLOGICAL RESOURCES Would the project:

- a) 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?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- c) 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?
- d) 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?
- e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat conservation plan?

a) Substantial effect on special status species: One of the exclusionary criteria for siting of a new landfill is the presence of designated critical habitat. Exclusionary criteria identify constraints that make the siting of a landfill so difficult that further analysis or evaluation would be unproductive. Comparative criteria are used



Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
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to rank sites that are not located in exclusionary areas, and that are suitable based on physical attributes. Sites with known occurrences of endangered species or significant impact on their habitat including wetlands would be ranked as less desirable for siting of a new landfill based on comparative criteria.

The 1996 PEIR adequately addressed program-level impacts on special status species resulting from construction of new and expanded non-disposal facilities, expansion of the landfill at the Central Disposal Site and siting of a new landfill and other facilities. For this SPEIR, potential impacts on listed species at the Central Disposal Site will be determined based on information from the 1998 Central Disposal Site Improvement Program EIR. When other site-specific projects are proposed, appropriate wildlife and plant surveys will be done to determine whether listed species or their critical habitat are present.

b) Substantial effect on riparian habitat or other sensitive natural community: The 1996 PEIR generally addressed impacts on riparian areas resulting from construction of new and expanded non-disposal facilities, expansion of the landfill at the Central Disposal Site and siting of a new landfill and other facilities. The SPEIR will address potential impacts to riparian areas at the Central Disposal site based on information in the 1998 Central Disposal Site Improvement Program EIR. When new site-specific projects are proposed, appropriate wildlife and plant surveys will be done to determine whether there will be effects on riparian habitat or other sensitive natural communities.

c) Substantial effect on federally protected wetlands: The 1996 PEIR generally addressed impacts on wetlands resulting from construction of new and expanded non-disposal facilities, expansion of the landfill at the Central Disposal Site and siting of a new landfill. The SPEIR will address potential impacts to wetlands based on information in the 1998 Central Disposal Site Improvement Program EIR. Removal of wetlands for the proposed expansion of the landfill at the Central Disposal Site has already been mitigated by the creation of a permanent replacement wetland site adjacent to the existing landfill.

d) Interfere with wildlife corridors: The 1996 PEIR addressed the impacts of facilities on wildlife and their habitat. This SPEIR will analyze changed conditions and potential effects of the proposed facilities on wildlife corridors.

e) <u>Conflict with local policies or ordinances protecting biological resources</u>: The 1996 PEIR addressed the impacts of facilities on wildlife and their habitat. This SPEIR will analyze changed conditions relating to new local policies protecting trees and riparian areas.

f) <u>Conflict with habitat conservation plans</u>: The 1996 PEIR addressed the impacts of facilities on wildlife and their habitat. This SPEIR will analyze changed conditions relating to new habitat conservation plans.

			Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.	CU	JLTURAL RESOURCES Would the project:				
	a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	-			
	b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
	c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
	d)	Disturb any human remains, including those interred outside of formal cemeteries?				

a, b) Affect archaeological or other historic resources: A cultural resources survey of the Central Disposal Site was conducted for the 1998 Central Disposal Site Improvement Program EIR. No cultural resources were identified on the site and no further surveys are needed. Siting of new facilities could involve significant impacts to archaeological resources or historic buildings. The 1996 PEIR addressed impacts on cultural resources based on known occurrences and surveys done for previous projects. The SPEIR will address impacts on cultural resources based on thresholds established by 1998 revisions to CEQA Guidelines. When site-specific projects are proposed, appropriate cultural resources surveys will be done to determine whether resources are present and how the projects would affect them.

c) Destroy paleontological resources or unique geologic features: The 1996 PEIR addressed impacts on paleontological resources based on known occurrences and surveys done for previous projects. The SPEIR will address impacts on cultural resources based on new information in the 1998 Central Disposal Site Improvement Program EIR. When site-specific projects are proposed, appropriate paleontological resources would affect them.

d) Disturb human remains: See 5 a and b.

# 6. GEOLOGY AND SOILS Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
- i) Rupture of a known earthquake fault, as delineated

		Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
	on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
ii)	Strong seismic ground shaking?				
iii)	Seismic-related ground failure, including liquefaction?				
iv)	Landslides?				
b)	Result in substantial soil erosion or the loss of topsoil?				
c)	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?	•			
d)	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?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				

a) i) Adverse effects from rupture of a known earthquake fault: The 1996 PEIR addressed potential impacts to new and expanded solid waste disposal and non-disposal facilities from earthquakes. An earthquake fault has been identified in the area of the West Canyon at the Central Disposal Site. The SPEIR will address the age of the fault and potential impacts to the proposed expansion in that area. Presence of Holocene faults or Alquist-Priolo fault zones would be a fatal flaw for siting of a new landfill under the 1996 CoIWMP's exclusionary criteria. No further analysis of the impacts of earthquake faults on other programs included in the CoIWMP Update is required until site-specific projects are proposed.

a) ii, iii, iv) Adverse effects from ground shaking, liquefaction or landslides: The 1996 PEIR addressed potential impacts from seismic hazards. No further analysis is required until site-specific projects are

Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
	in against		

proposed. Potential impacts from geologic hazards were not analyzed in the 1996 PEIR. The SPEIR will address potential impacts from geologic hazards resulting from programs in the CoIWMP Update.

b) <u>Result in substantial erosion</u>: Expansion of the Central Disposal Site or siting of a new landfill, resource management facility and other proposed facilities could result in substantial soil erosion or loss of topsoil. The 1996 PEIR addressed the need for erosion control measures to be applied during construction and operation of new or expanded facilities. The SPEIR will address changed conditions identified in the Central Disposal Site Improvement Program EIR for erosion impacts.

c) Potential on- and off-site landslide, subsidence or collapse: See a) ii, iii, iv above.

d) <u>Create substantial risks from locating facilities on expansive soils</u>: The 1996 PEIR addressed seismic impacts and soil erosion during construction and operation of new or expanded facilities. The SPEIR will analyze impacts of expansive soils on programs in the CoIWMP Update.

e) Suitability of soils for septic tanks or alternative wastewater systems: Siting a new landfill, resource management facility and other proposed facilities outside urban service boundaries would be expected to include the construction of a septic system for wastewater disposal. The SPEIR will address the need for adequate soils which would support the use of septic tanks or alternative wastewater disposal systems.

# 7. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) 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?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to



		Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
	Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	•			
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				•
f)	For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				•
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	•			

a) Transport, use or disposal of hazardous materials: Although there are many safeguards incorporated into design of solid waste facilities, there is always the potential for health hazards from disposal of hazardous materials at the facilities.

Biorefining, one of the organics processing methods which is being considered for the RMF, uses quantities of sulfuric acid and lime to facilitate the digestion process. Transportation and use of these chemicals could result in spills. The SPEIR will address the transportation, use and disposal of chemicals at the RMF. When a site-specific project is proposed, environmental impacts of these hazards would be investigated more fully.

If motor oil recycling is included in the mandatory recycling program, this could involve accidental spills during transportation of the motor oil containers. The containers currently in use are designed to minimize the likelihood that spills would occur. The SPEIR will address potential impacts from accidental spills of motor oil as a result of this program.

b) Create a hazard through accidental release of hazardous materials: Expansion of the Central Disposal Site and construction of a new landfill would generate landfill gas which can explode in combination with air and

Potentially	Potentially	Less Than	No
Significant	Significant	Significant	Impact
Impact	Unless	impact	
	Mitigated		

an ignition source in confined spaces. The 1996 PEIR addressed potential impacts from landfill gas exploding.

Expansion of the Central Disposal Site could involve quarrying rock in a portion of the site. This is expected to include periodic blasting during the rock extraction process to dislodge the rock. The SPEIR will address the need for rigorous safety standards during blasting to ensure the explosions do not cause harm to people or property.

The 1996 PEIR addresses accidental combustion in operations. The SPEIR will address impacts from blasting, construction spills, operation of the resource management facility and other proposed facilities.

c) <u>Hazards near schools</u>: Depending on the locations selected for new facilities, hazardous materials could be handled within a quarter-mile of a school. The SPEIR will address the potential for impacts of hazardous materials handling on schools.

d) <u>State-designated site containing hazardous materials contamination</u>: Siting of new facilities could affect state-designated sites containing hazardous materials contamination. The SPEIR will address potential impacts from the release of hazardous materials at state-designated contaminated sites.

e, f) <u>Safety hazards near airports or private airstrips</u>: Siting criteria for the landfill would not allow it to be sited within 10,000 feet of a runway used by jet aircraft, or 5,000 feet of a runway used by propeller-driven aircraft because landfills tend to attract birds which could be hazardous to air traffic. Expansion of the landfill at the Central Disposal Site would not create a safety hazard near an airport or private airstrip. When other site-specific projects are proposed, safety hazards near airports or private airstrips would be addressed.

g) Impair implementation of emergency response plans: The SPEIR will address the potential that new or expanded facilities will impair implementation of emergency response plans for the area.

h) Risk of loss or death from wildland fires: New facilities could be proposed in areas that are subject to a high danger from wildland fires. The SPEIR will address the potential for wildland fires to affect proposed facilities. A site specific analysis would be conducted at the time sites are chosen to determine whether they are subject to such danger, and any new facility constructed in Sonoma County would be required to comply with Sonoma County fire safe standards.

### 8. HYDROLOGY AND WATER QUALITY Would the project:

a) Violate any water quality standards or waste discharge requirements?

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- b) 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
- c) Substantially alter the existing drainage pattern of the site or area, including through 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?
- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- Otherwise substantially degrade water quality? f)
- g) Place housing within a 100-year hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
- Expose people or structures to a significant risk of loss, i) injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- i) Inundation by seiche, tsunami, or mudflow?

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Potentially

Less Than

Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
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a) Violation of water quality standards or waste discharge requirements: Expansion of the Central Disposal Site or construction of a new landfill, composting facilities or transfer station could result in increased amounts of leachate being produced. The 1996 PEIR addressed leachate production from solid waste disposal facilities. The SPEIR will address potential contamination of groundwater or surface water from leachate.

b) Substantially deplete groundwater supplies or affect groundwater recharge: Anaerobic digestion, one of the organics processing alternatives being considered for the RMF, would require approximately 20,000 to 30,000 gallons of water per day to be used to produce methane from the organic portion of municipal solid waste. Some of this water may be recycled. Biorefining, an alternative organics processing facility which is also being considered, would use approximately 240 gallons of water per day as it relies more heavily on chemical input to complete the digestion process. The SPEIR will address the water use needs of the RMF.

Siting criteria for new landfills rank sites outside of groundwater recharge areas as more desirable. This reduces the likelihood that a new landfill would affect groundwater recharge. However, withdrawals from groundwater by development of a new water well may be necessary to provide water supply for proposed facilities such as composting operations located outside urban service areas. The SPEIR will address the effects of the proposed project on groundwater availability.

c, d) Substantially alter the drainage pattern of an area causing erosion or flooding on- or off-site: Expansion of the Central Disposal Site or construction of a new landfill, resource management facility and other proposed facilities could change the flow of a stream channel, affect surface runoff, and change infiltration rates and drainage patterns which could cause erosion. Stormwater runoff in excess of the capacity of stormwater drainage systems could be generated by the construction of these facilities. The PEIR addressed effects of projects on drainage patterns. Further analysis will be conducted when site-specific projects are proposed.

e, f) <u>Create excessive runoff or cause polluted runoff, or otherwise degrade water quality</u>: The PEIR addressed soil erosion and runoff. The SPEIR will address new information about the need for soil erosion control, and stormwater facilities that are adequate to handle runoff and control polluted runoff. The SPEIR will address the need to ensure that aquifers are not contaminated by the landfill when the landfill at the Central Disposal Site is expanded and when new facilities are built.

g, h) <u>Place housing or other structures within a flood hazard area</u>: Expansion of the Central Disposal Site or construction of a new landfill and resource management facility would avoid floodplains and would not be expected to affect the flow of floodwaters. Location of a new landfill within the FEMA designated 100 year floodplain would be prohibited by the exclusionary criteria. The SPEIR will address potential flooding of structures at new facilities.

Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact

i) Expose people or structures to flooding from failure of a dam or levee: It is not expected that any proposed facilities would be located within areas exposed to potential flooding from failure of a dam or levee. The SPEIR will address potential flooding of new facilities.

j) <u>Inundation by seiche, tsunami or mudflow</u>: It is not expected that any proposed facilities would be located within areas exposed to seiche or tsunami. The exclusionary criteria eliminate the Coastal Zone for siting of new landfills. The SPEIR will address potential flooding of new facilities.

### 9. LAND USE AND PLANNING Would the project:

a) Physically divide an established community?  $\square$  $\square$ b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? c) Conflict with any applicable habitat conservation plan or natural community conservation plan?  $\square$ 

a) <u>Physically divide or disrupt a community</u>: It is not expected that any facility recommended by the plan would be located in a way that would physically divide or disrupt an established community. Compatibility with existing land uses is one of the comparative site selection criteria for new facilities. The PEIR addressed compatibility with surrounding land uses. No further analysis is required until site-specific projects are proposed.

b) <u>Conflict with applicable plans or policies</u>: Consistency of the facilities proposed in the CoIWMP update with County general plan and the general plans of each of the incorporated cities and town will be addressed in the SPEIR.

c) <u>Conflict with habitat conservation plans</u>: See 4f above.

# 10. MINERAL RESOURCES Would the project:

a) Result in the loss of availability of a known mineral

Potentially Less Than Potentially No Significant Impact Significant Unless Significant Impact Impact Mitigated resource that would be of value to the region and the residents of the state?  $\Box$  $\Box$ b) 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? 

a, b) Loss of availability of regionally valuable or locally important mineral resources: Location of the new landfill and resource management facility may affect availability of mineral resources. Quarying of rock in association with expansion of the Central Disposal Site would be a beneficial use of a known mineral resource which is of value to the region and residents of the state. The SPEIR will address mineral resources at the Central Disposal Site. An analysis would be done at the time site-specific projects are considered to determine whether mineral resources would be affected.

- 11. **NOISE** Would the project result in:
  - a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
  - b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?
  - c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
  - d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
  - e) For a project 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, would the project expose people residing or working in the project area to excessive noise levels?



Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant impact	No Impact

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

a) Exposure of people to noise levels in excess of standards: Many solid waste facilities generate noise, thus the introduction of a new landfill, resource management facility or other reuse/recycling facilities could increase local noise levels. The Sonoma County General Plan has policies which establish standards for noise levels at sensitive receptors. The SPEIR will address noise levels produced, and houses or other land uses that would be affected by the noise.

Workers in solid waste facilities may be exposed to severe noise levels. The PEIR addressed the need for noise control equipment and facilities in accordance with federal and state standards. No further analysis is needed.

b) Exposure of people to excessive groundborne vibration: Quarrying of rock in association with the West Canyon expansion or construction of a new landfill could cause ground vibrations. The SPEIR will address vibrations.

c, d) <u>A substantial permanent or temporary increase in noise levels</u>: The construction and operation of a new landfill, resource management facility or other reuse/recycling facilities could increase local noise levels. The PEIR addressed potential noise level increases from construction, operation and traffic from solid waste disposal and non-disposal facilities. The SPEIR will address new information regarding the potential for these facilities to increase the ambient noise.

e, f) Expose people in the vicinity of an airport or private airstrip to excessive noise levels: Exclusionary siting criteria for a new landfill would not allow it to be sited within 10,000 feet of a runway used by jet aircraft, or 5,000 feet of a runway used by propeller-driven aircraft because landfills tend to attract birds which could be hazardous to air traffic. Expansion of the landfill at the Central Disposal Site would not create excessive noise levels near an airport or private airstrip. When other site-specific projects are proposed, impacts on airports and private airstrips would be addressed.

# 12. **POPULATION AND HOUSING** Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				

a) <u>Population growth, directly or indirectly</u>: The siting of a new landfill and resource management facility could involve the construction of new roads. However, it is unlikely that new roads to the facility would induce population growth. It is possible that construction of adequate solid waste disposal facilities could have an indirect effect on population if house construction had previously been limited by lack of solid waste facilities, however that is not the situation in Sonoma County.

b, c) <u>Displacement of housing or people</u>: Zoning and siting criteria would prohibit construction of new facilities that would require the displacement of substantial numbers of houses necessitating the construction of replacement housing elsewhere.

#### 13. **PUBLIC SERVICES**

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?		
Police protection?		
Schools?		
Parks?		
Other public facilities?		

a) <u>Physical impacts associated with increased need for fire, police, schools, parks or other public facilities</u>: Siting of new facilities would require the provision of fire protection and police protection to the new site. This could involve significant environmental impacts and affect existing uses if the fire and police do not

Potentially Significant Impact	Potentially Significant Unless	Less Than Significant Impact	No Impact
Impact	Mitigated	Impact	

have adequate facilities, equipment and staffing to provide expanded services. The PEIR addressed impacts on fire and police services. Further analysis will be done when site-specific projects are proposed. It is not expected that any facility or program implemented by the plan would cause an increased need for schools, parks, or other public facilities.

### 14. **RECREATION**

a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		

a, b) Increase in park use or the need for new recreational facilities: The project would have no effect on recreation.

## 15. **TRANSPORTATION/TRAFFIC** Would the project:

a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections?		
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?		
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? $\Box$		
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?		
e)	Result in inadequate emergency access?		

Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
· · · · · · · · · · · · · · · · · · ·			
		<b>F-1</b>	

g) Conflict with adopted policies, plans, or programs supporting

f) Result in inadequate parking capacity?

alternative transportation (e.g., bus turnouts, bicycle racks)?

a) <u>Cause a substantial increase in traffic</u>: Expansion of the Central Disposal Site would increase the amount of truck traffic over the longer time frame that the landfill would be open. Construction and operation of the expansion at the Central Disposal Site, construction and operation of a new landfill, resource management facility and other facilities would result in increased traffic from trucks hauling rock, garbage, recycling services and delivery of chemicals if the biorefining option is used. The PEIR adequately addressed traffic impacts from new and expanded solid waste disposal and non-disposal facilities. Further analysis will be conducted when site-specific projects are proposed.

b) Exceed a congestion management agency level-of-service standard: Depending on the location of the new facilities, truck traffic and automobile traffic associated with the facilities could contribute to exceedance of a level of service standard on designated roads such as state highways. The PEIR addressed traffic impacts. Further analysis will be conducted when site-specific projects are proposed.

c) <u>Change air traffic patterns</u>: None of the facilities would affect air traffic patterns.

d) Increase hazards due to a design feature or incompatible uses: The rock quarry at the Central Disposal Site expansion area would generate a large number of truck traffic trips and could also create on-site transportation hazards related to trucks driving around the deep excavation to pick up loads of rock. Further analysis will be conducted when site-specific projects are proposed.

e, f) <u>Result in inadequate emergency access or parking capacity</u>: Expansion of the Central Disposal Site and the construction of the new landfill and other proposed facilities could affect existing parking or create a need for new parking for employees and customers dropping off recyclables. Analysis of emergency access and parking capacity will be conducted when site-specific projects are proposed.

g) <u>Conflict with alternative transportation policies, plans or programs</u>: None of the facilities would affect alternative transportation programs.

# 16. UTILITIES AND SERVICE SYSTEMS Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

		Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
b)	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?	on			
c)	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?				
d)	Have sufficient water supplies available to serve the project from exentitlements and resources, or are new or expanded entitlements needed?	isting			
e)	Result in a determination by the wastewater treatment provider which serve the project that it has adequate capacity to serve the project's p demand in addition to the provider's existing commitments?	ch serves projected	or may		
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	1			

a) <u>Compliance with wastewater treatment requirements</u>: The existing landfill at the Central Disposal Site relies on the Laguna Subregional Wastewater Treatment Plant for disposal of excess leachate, and meets the water quality requirements of that plant. The SPEIR will address the potential that future landfill expansion, a new landfill, or other facilities would not meet wastewater treatment requirements or that wastewater treatment needs would exceed available plant capacity.

b) Require water supply or wastewater treatment system construction: See 6e. Expansion of the landfill at the Central Disposal Site and construction of a new landfill may require that leachate be conveyed to a wastewater treatment facility. The SPEIR will address impacts of leachate on wastewater systems.

The new landfill and other proposed facilities would most likely be located in rural areas without access to city sewer and water. A facility would thus require the construction of a new well and septic system to provide water and wastewater disposal for operation. The SPEIR will address the need for water and wastewater treatment at any new facility, and the potential that the existing well and septic system at the Central Disposal Site would not be adequate to serve the proposed expansion.

Potentially	Potentially	Less Than	No
Significant	Significant	Significant	Impact
Impact	Unless	Impact	
-	Mitigated		

c) Adequacy of stormwater systems to serve the project: See 8e. The expansion of the Central Disposal Site and the construction of a new landfill and other proposed facilities would include storm drainage facilities which would be designed to accommodate storm runoff. The SPEIR will address the potential for off-site impacts from this runoff.

d) Adequacy of water supplies to serve the project: See 8b.

e) Adequacy of wastewater systems to serve the project: See 16b.

f) Landfill capacity: The programs identified in the CoIWMP Update will provide landfill capacity to meet the needs of Sonoma County residents.

g) <u>Comply with solid waste regulations</u>: The 1996 PEIR addressed compliance with solid waste regulations. The SPEIR will address the need for the proposed expansion of the Central Disposal Site, the construction of a new landfill and other proposed facilities to comply with updated federal, state and local statutes and regulations related to solid waste.

# **RESPONSES TO NOTICE OF PREPARATION (NOP) / INITIAL STUDY**

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# **Comments on the 2003 CoIWMP Notice of Preparation**

1. Comment Letters:

State Clearinghouse: Transmittal document including list of reviewing agencies. Coastal Commission; Department of Conservation; Office of Historic Preservation; Department of Parks and Recreation; Department of Fish and Game Region 3; Native American Heritage Commission; State Lands Commission; Caltrans Region 4; California Highway Patrol; Air Resources Board, Division of Industrial Projects; California Integrated Waste Management Board; Department of Toxic Substances Control; Water Qaulity Control Board Regions 1 and 2.

**Department of Toxic Substances Control:** Additional review of the project will be required to fully assess any potential hazardous waste related impacts. Will comment on the draft EIR.

**Caltrans District 4:** Issues identified include; traffic/transportation with emphasis on State facilities; construction and operation impacts on water quality at State facilities; encroachment permits for work on traffic control measures within the State right-of-way.

2. Comments made at the scoping meeting:

Kathy Tresch: Received the notice five days before the meeting. Will send written comments before January 1. (I still have not received a letter)

Linda Morehouse (Town of Windsor): Had a question about the geographic area for mailing to property owners. It was explained that the list of property owners includes all the parcels surrounding the landfill, all those in Happy Acres and along the haul route to Stony Point Quarry, as well as property owners further afield who requested notices of previous environmental documents at the landfill.

**Disk Ashford (City of Sonoma):** Questioned why the project description says very little about the household hazardous waste facility being built at Central. Ken Wells explained that it was covered in the previous EIR.

# Comments

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# **Department of Toxic Substances Control**

Edwin F. Lowry, Director 1001 "I" Street, 25<sup>th</sup> Floor P.O. Box 806 Sacramento, California 95812-0806



Gray Davis Governor

Winston H. Hickox Agency Secretary California Environmental Protection Agency

December 3, 2001

Paula Stamp Sonoma County Integrated Waste Management Plan Update 2550 Ventura Avenue Santa Rosa, California 95403

# Re: Sonoma County Integrated Waste Management Plan Update

The Department of Toxic Substances Control (DTSC) is in receipt of the environmental document identified above. Based on a preliminary review of this document, we have determined that additional review by our regional office will be required to fully assess any potential hazardous waste related impacts from the proposed project. The regional office and contact person listed below will be responsible for the review of this document in DTSC's role as a Responsible Agency under the California Environmental Quality Act (CEQA) and for providing any necessary comments to your office:

Barbara Cook Site Mitigation Branch 700 Heinz Avenue, Suite 200 Berkeley, California 94710

If you have any questions concerning DTSC's involvement in the review of this environmental document, please contact the regional office contact person identified above.

2

Sincerely,

Guenther W. Moskat, Chief Planning and Environmental Analysis Section

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.disc.ca.gov.

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DEPARTMENT OF TRANSPORTATION
P O BOX 23660
OAKLAND, CA 94623-0660
(510) 286-4444
TDD (510) 286-4454



SON-GEN SON000119



December 13, 2001

Ms. Paula Stamp Sonoma County 2550 Ventura Ave. Santa Rosa, CA 95403

Dear Ms. Stamp:

#### SONOMA COUNTY INTEGRATED WASTE MANAGEMENT PLAN

Thank you for including the California Department of Transportation (Department) in the environmental review process for the above-referenced project. We have reviewed the Notice of Preparation, dated November 15, 2001, and offer the following comments:

- 1. Please discuss traffic/transportation issues as a potentially significant impact in the Draft Supplemental Program Environmental Impact Report (SPEIR), with specific emphasis on potential traffic impacts on State facilities. The Department will make specific comments when the site is selected for the central waste management facility.
- 2. Please identify in the SPEIR any water quality impacts on State facilities. The discussion should include impacts both during the construction of the facility and the Best Management Practices (BMP) to be implemented after construction. The BMPs may include detention basins, grassy swales, and velocity dissipation devices to intercept drainage and remove storm water runoff.
- 3. Any work or traffic control measures proposed within the State right of way (ROW) will require an encroachment permit. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans, clearly indicating State ROW, need to be submitted to the following address:

Sean Nozzari, District Office Chief Office of Permits California DOT, District 4 P.O. Box 23660 Oakland, CA 94623-0660 Ms. Paula Stamp December 13, 2001 Page 2

If you have any questions regarding this letter, please call David Cohen of my staff at (510) 622-5488.

Sincerely,

RANDELL H. IWASAKI Acting District Director

By

JEAN C. R. FINNEY District Branch Chief IGR/CEQA



Gray Davis GOVERNOR STATE OF CALIFORNIA

GOVERNOR'S OFFICE of PLANNING AND RESEARCH

State Clearinghouse



Steven A. Nissen DIRECTOR

**Notice of Preparation** 

November 19, 2001

To: Reviewing Agencies

Re: Sonoma County Integrated Waste Management Plan Update SCH# 1992113072

Attached for your review and comment is the Notice of Preparation (NOP) for the Sonoma County Integrated Waste Management Plan Update draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Paula Stamp Sonoma County Integrated Waste Management Plan Update 2550 Ventura Avenue Santa Rosa, CA 95403

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Katie Shulte Joung Project Analyst, State Clearinghouse

Attachments cc: Lead Agency



# Document Details Report State Clearinghouse Data Base

SCH# Project Title Lead Agency	1992113072 Sonoma County Integrated Waster Sonoma County	Management Plan Update	
Туре	NOP Notice of Preparation		
Description	Sonoma County Waste Managem Integrated Waste Management PI	ent Agency will prepare an upda an to inlcude new programs and	te to the 1996 Countywide facilities.
Lead Agenc	cy Contact		
Name	Paula Stamp		
Agency Phone	Sonoma County Integrated Waste 707-565-8350	∍ Management Plan Update <i>Fax</i>	
Address	2550 Ventura Avenue		
City	Santa Rosa	State CA -Z	ip 95403
Project Loca	ation		
County	Sonoma		
City			
Region			
Parcel No.			
Township	Range	Section	Base
Proximity to Highways Airports Railways Waterways Schools Land Use	Zoning/General Plan Designation	: Countywide	
Project Issues	Aesthetic/Visual; Agricultural Land Geologic/Seismic; Minerals; Noise Erosion/Compaction/Grading; Sol Supply; Wetland/Riparian; Wildlife	d; Air Quality; Archaeologic-Histo e; Public Services; Septic System lid Waste; Toxic/Hazardous; Traf e; Landuse; Cumulative Effects	ric; Drainage/Absorption; n; Sewer Capacity; Soil fic/Circulation; Water Quality; Water
Reviewing Agencies	Resources Agency; California Co. Preservation; Department of Park American Heritage Commission; S Patrol; Air Resources Board, Majo Department of Toxic Substances Water Quality Control Board, Reg	astal Commission; Department o s and Recreation; Department of State Lands Commission; Caltrar or Industrial Projects; Integrated V Control; Regional Water Quality yion 2	f Conservation; Office of Historic Fish and Game, Region 3; Native ns, District 4; California Highway Waste Management Board; Control Board, Region 1; Regional
Date Received	11/19/2001 Start of Review	v 11/19/2001 End of Rev	<b>/iew</b> 12/18/2001


# **Scoping Meeting**

### SCOPING MEETING ON COIWMP SUPPLEMENTAL PROGRAM EIR

Wednesday, November 28, 2001 10:00 a.m.

### Draft 1, 12/3/01

Present: (including Sally McGough (?), new County Counsel-person); complete list available if interested

Mr. Wells explained to the public and the SCWMA Board that the key groups in this process are the SCWMA as the lead agency under CEQA for the certification of the environmental documents. There is also a Local Task Force, which is the group of people who represent the broad spectrum of stakeholders in the solid waste field who will be the sounding board and recommended to the Agency the update of the Plan itself. Each of the cities in the county have a role to play in implementing their elements in the Plan.

To avoid any confusion, there were two notices of preparation sent out, one for this meeting and the other will be from the County of Sonoma for the construction of a pipeline to connect the landfill with the treatment plant to convey leachate, and one to connect the landfill with the transit facility to provide natural gas; a third element of this project is to relocate the administration building at Central. This is not part of the discussion today nor under the purview of this Agency.

Mr. Wells turned the meeting over to Paula Stamp, staff person for PRMD who is assisting the Agency in preparing the Supplemental Program EIR.

Ms. Stamp introduced Chris Seppeler, also a Senior Environmental Specialist at PRMD. She gave a brief history of her background. She will point out things in the initial study and discuss the process. Comments heard today will be used to write the EIR, which should take about five months. The Scoping Meeting is equivalent to a referral process done with Negative Declarations.

The initial study for the update was sent to approximately 350 interested parties of the public. It describes the programs in the CoIWMP that are changing and the environmental impacts. It is an outline of what the EIR will be about, so it is necessary to let her know now of any concerns to be included.

The EIR will be updated to reflect changes in the law and/or knowledge acquired since the Central Disposal Site Improvement Program, and to add new facilities described by Mr. Wells. The present EIR still stands and will be in place for the new CoIWMP, but there will be a supplement added. There will also be further environmental review for the new facilities built.

The study addresses a Resource Management Facility, new composting facilities away from the landfill site, a new transfer station in the Santa Rosa area, conversion of the Central site to a

transfer station when Central is closed, C&D debris, flow control, mandatory recycling, rock quarry at Central would be landfill space, extension beyond existing boundaries, and new ways of managing material at the landfill.

Following this meeting, the draft will be written for Agency and public review next spring. It will be circulated for 45 days for hearing and comments, which will be responded to and presented in the fall of 2002.

Regarding discussion of impacts, Mr. Ashford (Sonoma) stated that HHW doesn't get much treatment in the document; Mr. Wells stated that the existing EIR covers this and it isn't necessary to repeat it.

Ms. Morehouse (Windsor) inquired about the mailing list; Ms. Stamp stated the notices went to property owners near Central, including Stony Point Road, Agency interests, and interested government permitees.

(Public comments from Pam Davis of West Sonoma County Disposal were muffled.)

Mr. Wells discussed deadlines for written comments with Ms. Stamp; she stated it was 30 days from the Notice, or by the end of the year in this case.

(there was an additional comment at the conclusion of the Agency meeting, not on Scoping Meeting tape):

Ms. Kathy Tresch, 1170 Walker Road, Petaluma, stated she would like to see more administrative (muffled); of all the landfill meetings she has attended, there is not good record-keeping in the transcript. It would be helpful to know what was actually said. She is concerned that environmental impacts are occurring without certification of the EIR. There is noise and visual impacts, which are in her interests...years, concerned that amount of ... impacts that expansion ... if you come back with a lawsuit later, no one knows what she's said... (plea for better transcript?)

Recorder note: this section very hard to understand in spite of repeated attempts at slower speed; she was too far away from microphone. vp (very end of tape #1, side B)

If you wish to be mailed tices of further proceedings M Drafer: his on address hane

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Y.



Gray Davis Governor STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse



August 7, 2003

Steve Dee or Tim Mayer Sonoma County Integrated Waste Management Plan Update 2550 Ventura Avenue Santa Rosa, CA 95403-2829

Subject: Sonoma County 2003 Countywide Integrated Waste Management Plan (ColWMP) SCH#: 1992113072

Dear Steve Dee or Tim Mayer:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 6, 2003, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts Director, State Clearinghouse

Enclosures cc: Resources Agency

# Document Details Report State Clearinghouse Data Base

1

SCH# Project Title Lead Agency	1992113072 Sonoma County 2003 Countywide Integrated Waste Management Plan (ColWMP) Sonoma County	
Туре	EIR Draft EIR	
Description	The adopted 1996 ColWMP has been updated as the draft 2003 ColWMP in accordance with AB 939. The draft 2003 ColWMP proposes to provide: 1) a formal agreement among all cities and the County to direct flow of refuse and green waste to solid waste facilities in Sonoma County; 2) mandatory access to recycling facilities for residential, commercial, industrial, and institutional waste generators; 3) an expansion of the Central Landfill beyond its current permitted capacity (i.e., beyond the year 2015); and 4) the siting of an integrated RMF to include organics processing (chemical or biological digestion), green waste composting and landfilling.	
Lead Agenc	y Contact	
Name	Steve Dee or Tim Mayer	
Agency	Sonoma County Integrated Waste Management Plan Update	
Phone	707-565-8350 or Fax	
email	707-565-8351	
Citv	2550 Ventura Avenue	
,	Santa Rosa State CA Zip 95403-2829	
Project Loc	ation	
County	Sonoma	
City		
Region		
Cross Streets	Countywide	
Parcel No. Township	Countywide Range Section Base	
Proximity to		
Highways		
Railways		
Waterways	Russian River	
Schools		
Land Use	Zoning/General Plan Designation: Countywide	
Project Issues	Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Landuse; Cumulative Effects	
Reviewing Agencies	Resources Agency; Air Resources Board, Major Industrial Projects; Department of Conservation; Department of Fish and Game, Region 3; Caltrans, District 4; Department of Parks and Recreation; Department of Forestry and Fire Protection; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 1; Regional Water Quality Control Board, Region 2; Integrated Waste	
Date Received	06/23/2003 Start of Review 06/23/2003 End of Review 08/06/2003	

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July 30, 2003

SON-General SON000119 SCH 1992113072

Mr. Steve Dee County of Sonoma Permit and Resource Management Department 2550 Ventura Avenue Santa Rosa, CA 95403

Dear Mr. Dee:

2003 Countywide Integrated Waste Management Plan – Draft Supplemental Program Environmental Impact Report (SEIR)

Thank you for continuing to include the California Department of Transportation (Department) in the environmental review process for the proposed plan. Based upon the information provided in the SEIR we have the following comments to offer:

- 1. Mitigation Measures 9-2 and 9-3 indicate that traffic analyses will be completed once specific sites are identified for the proposed quarry project and new solid waste disposal site. Please forward any future traffic analyses for our review when they become available, so that we can ensure any significant transportation impacts to State facilities are fully mitigated. We recommend the County consult the Department to determine an appropriate scope of work for these future traffic analyses, prior to preparing the analyses.
- 2. Please be advised that any work or traffic control within the State right-of-way (ROW) will require an encroachment permit from the Department. To apply for an encroachment permit, submit a completed encroachment permit application, environmental documentation, and five (5) sets of plans (in metric units) which clearly indicate State ROW to the following address:

Mr. Sean Nozzari, District Office Chief Office of Permits California Department of Transportation, District 04 P. O. Box 23660 Oakland, Ca 94623-0660

"Caltrans improves mobility across California"

Mr. Steve Dee/ County of Sonoma July 30, 2003 Page 2

Should you require further information or have any questions regarding this letter, please call Maija Cottle of my staff at (510) 286-5737.

Sincerely,

Δ

TIMOTHY C. SABLE District Branch Chief IGR/CEQA

c: Philip Crimmins (State Clearinghouse)

# 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).

#### Sonoma County Waste Management Agency

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 nondisposal 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.

Sonoma County Waste Management Agency

# 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

Sonoma County Waste Management Agency

- 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.

(1) 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 nondisposal 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 construction 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.

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- 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.

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2003 CoIWMP Final SPEIR Errata Sheet		
Page No.	Change	
2-2	Section 2.2, second sentence was changed to include: " Hydrology and Water Quality (Section 7), Transportation (Section 9), Vegetation and Wildlife (Section 12), and Visual Resources (Section 14)."	
T2-4	Mitigation Measure 5-2 (b), "liquifaction" was changed to "liquefaction."	
T2-6	Mitigation Measure 5-5 was changed to read: " design features and".	
T2-10	Revised HWQ Impact 7-2 was changed to read: " contribute to flooding downstream."	
T2-14	New HWQ Impact 7-9 was changed to read: " an expanded or".	
T2-17	Revised PS Impact 8-2, the following was deleted: "2003".	
T2-17	Mitigation Measure 8-2(a) was changed to include: " public".	
T2-21	Revised Impact 8-7 was changed to include: " and".	
T2-22	New Mitigation Measure 8-10, second sentence, was changed to read: "shall".	
T2-22	New PS Impact 8-11 was changed to include " and Evacuation".	
T2-22	Mitigation Measure 8-11, first sentence, was changed to read: "Update the existing or".	
T2-25	New Mitigation Measure 9-4(a), first sentence, was changed to read: " consider restricting"; " and/or the Stony Point Road/West Railroad intersections"; and " traffic hours."	
T2-25	New Mitigation Measure 9-4(a), fourth sentence, was changed to read: " these intersections."	
T2-26	New T Impact 9-5 was changed to read: " hazards on haul routes".	
T2-26	New Mitigation Measure 9-6(b) was changed to read: " and corrections shall be made as necessary to accommodate" and the following was deleted: "exacerbates those problems".	
T2-27	Revised Mitigation Measure 10-1(b) 3 (a), "used" was changed to "use".	
T2-28	Additional Mitigation Measure 10-1(d), "trat" was changed to "treat".	
T2-28	Revised Mitigation Measure, first sentence, "(a)" was deleted.	
T2-28	Revised Mitigation Measure 10-2 (a) 3, "erodable" was changed to "erodible".	
T2-29	Additional Mitigation Measure 10-3 (f) was added to read: "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."	

2003 CoIWMP Final SPEIR Errata Sheet		
Page No.	Change	
T2-29	Revised AQ Impact 10-4 (a), first sentence, was changed to read: "The construction of a new landfill or expansion of the Central Landfill could cause significant emissions of criteria pollutants"; the following was deleted in the second sentence: "toxic air contaminants"; and the second sentence was changed to read: " TACs".	
T2-29	Revised Mitigation Measure 10-4 (a) was changed to read: "Same as Mitigation Measures 10-1 (a), (b), and (c) and 10-2."	
T2-30	New Mitigation Measure 10-5, first sentence, "(a)" was deleted.	
T2-31	Revised Mitigation Measure 11-2(b), "reclyclables" was changed to "recyclables".	
T2-32	Revised Mitigation Measure 11-6 was changed to add "(a)" before first mitigation measure.	
T2-33	Additional Mitigation Measure 12-1(a) was changed to include: " and landfill".	
T2-34	VWL Impact 12-2, the numbered list was changed to an alpha list.	
T2-34	Revised Mitigation Measure 12-2, beginning with the first sentence, deleted: "Same as Mitigation Measure 12 (a) through (c). In addition, the following mitigation measure is added:"	
T2-34	Revised Mitigation Measure 12-2, the following was added: "(b) Same as Mitigation Measure 12-1 (a).	
	(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."	
T2-35	Revised Mitigation Measure 13-1(b), "lay-out" was changed to "layout".	

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Page No.	Change	
T2-35	Revised Mitigation Measure 13-1(c), "lay-out" was changed to "layout".	
T2-36	Mitigation Measure 13-1 (continued), the following was deleted: "( <i>Mitigation Measure 13-1 continued</i> )."	
T2-38	Revised Mitigation Measure 14-1(a) was changed to include: " adopted 1989" and " (as amended),".	
T2-38	Revised Mitigation Measure 14-1(c), " sheltering a potential site" was deleted.	
T2-38	Revised Mitigation Measure 14-1(d) was changed to include: " from site borders"; " topographical"; and " existing".	
T2-39	Mitigation Measure 14-2(a), " thorough grounds maintenance" was replaced by " litter abatement".	
T2-39	Mitigation Measure 14-2(b), was changed to include: " non-disposal".	
T2-39	Mitigation Measure 14-2(d), was changed to include: " non-disposal".	
T2-39	Mitigation Measure 14-2(e), was changed to include: " Non-".	
T2-41	Revised Mitigation Measure 14-4, the following was deleted: " <i>Mitigation Measure 14-4</i> ."	
T2-41	Revised Mitigation Measure 14-4(b), " fill" was changed to: " landfill".	
T2-41	Revised Mitigation Measure 14-4(d) was changed to: "Litter shall be controlled with a litter abatement program on nearby roads which provide access to new or expanded disposal facilities."	
T2-41	Additional Mitigation Measure 14-4(f) was changed to read: " its".	
5-4	Mitigation Measure 5-5 was changed to add: " and grading procedures".	
8-3	Revised Mitigation Measure 8-2(b) was changed to read " new or" and " facility(ies)".	
9-4	Mitigation Measure 9-4(a) was changed to read: " these intersections."	
12-2	Revised Mitigation Measure 12-1(a) was changed to include: " and landfill".	
12-3	Impact 12-2, the bullet list was changed to an alpha list.	
12-3	Revised Mitigation Measure 12-2 (b) was replaced with Mitigation Measure 12-1 (a).	
14-1	Revised Mitigation Measure 14-1(a) was changed to include: " adopted 1989" and " (as amended),".	

2003 CoIWMP Final SPEIR Errata Sheet		
Page No.	Change	
14-2	Revised Mitigation Measure 14-1(c), " sheltering a potential site" was deleted.	
14-2	Revised Mitigation Measure 14-1(d) was changed to include: " from site borders"; " topographical"; and " existing".	
14-2	Revised Mitigation Measure 14-2(a), " thorough grounds maintenance" was replaced by " litter abatement".	
14-2	Revised Mitigation Measure 14-2(b), was changed to include: " non-disposal".	
14-2	Revised Mitigation Measure 14-2(d), was changed to include: " non-disposal".	
14-3	Revised Mitigation Measure 14-2(e), was changed to include: " Non-"	
14-5	Revised Mitigation Measure 14-4(b), " fill" was changed to: " landfill".	
14-5	Revised Mitigation Measure 14-4(c) was changed to: " along on-site roads shall be routinely collected and removed."	
14-5	Revised Mitigation Measure 14-4(d) was changed to: "Litter shall be controlled with a litter abatement program on nearby roads which provide access to new or expanded disposal facilities."	