

Countywide Integrated Waste Management Plan

PRELIMINARY DRAFT Countywide Siting Element (CSE)

First Amendment

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CHAPTER 1 PURPOSE

The California Integrated Waste Management Act of 1989, as amended, directs cities, counties, and regional agencies to prepare a Countywide or Regionwide Integrated Waste Management Plan. This plan must consist of the Source Reduction Recycling Elements (SRREs), the Household Hazardous Waste Elements (HHWEs), and the Non-Disposal Facility Elements (NDFEs) of each jurisdiction within a county or region, and a Countywide or Regional Integrated Waste Management Plan Summary and Countywide or Regional Siting Element.

The statutory requirement for a Countywide or Regional Siting Element is set forth in the California Public Resources Code (PRC) Section 41700, as follows:

Each county shall prepare a countywide siting element which provides a description of the areas to be used for development of adequate transformation ¹ or disposal capacity concurrent and consistent with the development and implementation of the county and city source reduction and recycling elements adopted pursuant to this part.

The principal purpose of this requirement is to demonstrate that within a county or region, there is a minimum of 15 years of combined permitted disposal capacity through existing or planned disposal facilities or through additional waste management strategies.

The original Solano County Countywide Siting Element was adopted in November 1995. Since its adoption, the Siting Element has subsequently been updated at various times as part of the County's annual reports to the California Integrated Waste Management Board (CIWMB). This document incorporates and further updates the information contained in the original Siting Element and in the County's annual reports to the CIWMB. The updated 2010 Solano County Countywide Siting Element was prepared in accordance with statutory (PRC, Sections 41700-41721.5) and regulatory (California Code of Regulations [CCR] Sections 18755-18756.7) requirements; and consists of the following:

- goals and policies for environmentally safe disposal of solid waste that cannot be reduced, recycled, or composted.
- the amount of city and unincorporated county wastes requiring disposal; the disposal capacity of landfills receiving Solano County wastes, and additional capacity required (if any) to provide a minimum of 15 years of solid waste disposal capacity;
- identification of existing solid waste disposal facilities receiving waste from Solano County and its cities;
- siting criteria for new or expanded solid waste disposal facilities;
- location and description of new or expanded disposal facility sites (if any);

- verification of consistency with City and County General Plans;
- strategies for disposal of excess solid wastes; and

• procedures for implementing the Countywide Siting Element.

1 It should be noted that in both the statute requiring preparation of a Siting Element and the CIWMB Siting Element Guidelines, the term waste disposal includes transformation (the elimination of wastes by incineration processes) as well as landfill disposal. In Solano County, however, there are currently no transformation facilities and the cities and unincorporated area of Solano County have no plans to develop transformation facilities Therefore, this Siting Element discusses only the landfill disposal options the Solano County jurisdictions will utilize.

CHAPTER 2 GOALS & POLICIES

A. INTRODUCTION

The first requirement for the preparation of a Countywide Siting Element is a statement of the Goals and Policies that ensure that sufficient solid waste disposal capacity is available to accommodate the wastes generated within a County and its incorporated cities for a 15-year planning period. The following updated goals and policies provide direction to Solano County and its cities for the development and implementation of Siting Element programs.

The California Integrated Waste Management Act of 1989 (Assembly Bill 939) redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the State. The Act required cities and counties to reduce solid waste disposal 25 percent by January 1, 1995 and 50% by January 1, 2000. That law also established a hierarchy that local jurisdictions must comply with in addressing waste management issues. The new planning hierarchy includes, in order of priority, source reduction; recycling and composting; and environmentally safe landfill disposal and transformation (incineration of solid waste materials).

To carry out waste management in accordance with this hierarchy, the California Integrated Waste management Act requires each local jurisdiction to prepare and implement the following solid waste elements:

- Source Reduction and Recycling Element (SRRE);
- Household Hazardous Waste Element (HHWE); and
- Non-Disposal Facility Element (NDFE)

In addition, each county must prepare a Countywide Integrated Waste Management Plan (CIWMP) consisting of all the SRREs, HHWes, and NDFEs of jurisdictions within the county; a Siting Element; and a Countywide Integrated Waste Management Summary Plan

B. <u>GOALS</u>

- Implement an Integrated Waste Management Plan which maximizes waste diversion through source reduction, recycling and composting, and which provides for the disposal of the residue of wastes which can not be diverted through environmentally safe land disposal practices.
- Provide for landfill disposal capacity for a significant portion of the wastes generated by the County and its cities through implementation of planned expansions of the capacity of the existing Potrero Hills Landfill and continued operations of the Recology Hay Road Landfill.
- For those jurisdictions which, due to historical, contractual, or economic

reasons do not deliver their wastes to landfills within the County, but export their wastes to other counties, ensure these out of county landfills have sufficient capacity to accept Solano County's wastes for the required 15-year planning period.

- Continue to develop and implement appropriate recycling and composting programs at the County's landfills to divert recyclable and reusable materials from landfill disposal.
- Continue to support existing landfill load check and other programs to prevent disposal of such unacceptable wastes including hazardous wastes, liquid wastes, and designated wastes which have not been approved for disposal at County landfills.

C. POLICIES

- The County and its cities will collaborate with Solano County's landfill operators to ensure that planned landfill expansions and operations will make available sufficient disposal capacity to provide for 15 years of disposal of wastes generated by the County and participating cities.
- The County and affected jurisdictions will work together with landfill operators and solid waste collection entities outside Solano County to ensure that wastes exported to other counties and states can be accommodated for the 15-year planning period, and that the importation of substantial quantities of out-ofcounty wastes to County landfills will not jeopardize Solano County's ability to provide sufficient disposal capacity for the County and affected cities.
- The Solano County Department of Resource Management, serving as the Local Enforcement Agency (LEA) for the California Integrated Waste Management Board, will work together with the County's landfill operators to ensure that landfill disposal within Solano County is carried out in an environmentally safe manner.
- The County and the cities which deliver wastes to landfills within the County will work with the landfill operators to maximize the salvage and diversion of materials received at the landfills, through reuse, recycling, composting, and, through use of materials as alternative daily cover for the landfills.

D. SCHEDULE FOR IMPLEMENTATION OF POLICIES

A full implementation schedule is presented in Chapter IX.

CHAPTER 3 DISPOSAL CAPACITY REQUIREMENTS

A. INTRODUCTION

This chapter analyzes the amount of waste disposal capacity available to Solano County and its jurisdictions. Based on the updated information and data, there is sufficient capacity in landfills receiving wastes from the cities and unincorporated area of Solano County to handle the wastes of these jurisdictions for the 15-year planning period 2010-2025.

B. DISPOSAL CAPACITY ANALYSIS

The California Integrated Waste Management Board's (CIWMB) Planning Guidelines for Preparing a Siting Element (Siting Element Guidelines) (California Code of Regulations [CCR] Title 14 Sections 18755[a] and 18755.3) [b] and [c] require a Siting Element to demonstrate whether a county's jurisdictions can provide a minimum of 15 years of waste disposal capacity. This is perhaps the most important issue which the Siting Element must address; if the county can show that its jurisdictions have a minimum of 15 years of waste disposal capacity, it has met the principal planning requirement of the Siting Element.

The Siting Element Guidelines specify that the starting date for the 15-year planning period is the year in which the Siting Element is prepared (CCR Section 18755.3[b]), and that the planning period starting dates for future updated versions of the Siting Element are to be the years the Siting Element is revised. The starting date for Solano County's original 15-year disposal capacity planning period was January 1, 1995 ending on December 31, 2009. The starting date for the 15-year planning period under this updated Siting Element is January 1, 2010. This 15-year update will end on December 31, 2025.

The Siting Element Guidelines require that the Siting Element show countywide waste disposal capacity on January 1, 1990 (CCR Section 18755.3[a]). The Siting Element must also include documentation of the determination made by the Local Task Force of remaining permitted disposal capacity as of January 1, 1990 (CCR, Sections 18755.3[a][1], and 18777[b]). This date is considered the baseline date for determining the amount of waste which must be diverted to achieve the mandated 25 and 50% waste diversion rates. For Solano County, the amount of waste requiring disposal on January 1, 1990 was 274,475 tons, or 430,926 cubic yards. In 1990, the Local Task Force determined that the three landfills in operation at that time (B&J Drop Box now known as Recology Hay Road Landfill, Potrero Hills Landfill and Rio Vista Landfill) each had 15 years of disposal capacity (see Appendix A).

The 2010 Siting Element update must now show countywide waste disposal capacity as of January 1, 2010 for the next 15 year planning period, a total of 6,591,023 tons or 13,182,046 cubic yards. Tables III. 1 and III.2 indicate that there is sufficient waste

disposal capacity available to Solano County jurisdictions to satisfy the 15-year disposal capacity requirement at the Recology Hay Road Landfill and the Potrero Hills Landfill. These tables show that as of January 2009, Solano County landfills receiving municipal solid waste had, 18,994,000 tons or 33,897,000 cubic yards of waste disposal capacity. During the ensuing 15 years, this capacity will be reduced to, 11,962,194 tons or 22,935,664 cubic yards of waste disposal capacity. No additional capacity is required to meet the 15-year planning requirement.

Table III.1Disposal Requirements for Solano County (Tons) for the15 Year PlanningPeriod 2010-2025

	Disposal (Tons) ¹	Remaining Capacity (Tons) ²
2008	388,313	18,944,000
2009	390,720	18,553,280
2010	393,142	18,160,138
2011	395,579	17,764,559
2012	398,032	17,366,527
2013	400,500	16,966,027
2014	402,983	16,563,044
2015	405,481	16,157,563
2016	407,995	16,749,568
2017	410,525	15,339,043
2018	413,070	14,925,973
2019	415,631	14,510,342
2020	418,208	14,092,134
2021	420,738	13,671,396
2022	423,347	13,248,049
2023	425,972	12,822,077
2024	428,613	12,393,464
2025	431,207	11,962,194
2010 2025 TL (1)	6 501 000	

2010-2025 Total 6,591,023

1. Disposal is the projected total tons of solid waste disposed from all eight jurisdictions in Solano County. The CIWMB 2008 Single-year Countywide Origin Detail was utilized as the base year. Projected disposal was based on the projected annual population increase for Solano County from ABAG Projections 2009 for the period 2010 – 2025. Disposal includes disposal tons from the Cities of Benicia, Vallejo, Rio Vista and portions of the unincorporated area that are currently exported to Keller Canyon for disposal.

2. Remaining Capacity is projected by subtracting the projected disposal from all jurisdictions in Solano County for each year from the remaining capacity at Potrero Hills Landfill and Recolocy Hay Road Landfill.

3. Remaining capacity at Potrero Hills Landfill as on January 1, 2009 (not including the proposed expansion area) and remaining capacity at Recology Hay Road Landfill as of January 30, 2009.

Table III.2Disposal Requirements for Solano County (Cubic Yards) for the 15 YearPlanning Period 2010-20251

	Disposal (Cubic Yards)	Remaining Capacity (Cubic Yards)
2008	776,626	33,897,000
2009	781,440	33,283,570
2010	786,284	32,666,337
2011	791,158	32,045,278
2012	796,064	31,420,368
2013	801,000	30,791,583
2014	805,966	30,158,900
2015	810,962	29,522,295
2016	815,990	28,881,743
2017	821,050	28,237,218
2018	826,140	27,588,698
2019	831,262	26,936,157
2020	836,416	26,279,570
2021	841,476	25,619,011
2022	846,694	24,954,357
2023	851,944	24,285,581
2024	857,226	23,612,659
2025	862,414	22,935,664

2010-2025

Total 13,182,046

1. A conversion factor of two cubic yards per ton was used to calculate volumes of disposal based on Table II/1. The conversion factor to calculate remaining capacity is based on the average fill ratio as reported by Recology Hay Road Landfill and Potrero Hills Landfill; a factor of 1.57 cubic yards per ton was used.

2. Remaining capacity at Potrero Hills Landfill as of January 1, 1990 (not including the proposed expansion area)and remaining capacity at Recology Hay Road Landfill as of January 30, 2009.

CHAPTER 4 EXISTING SOLID WASTE DISPOSAL FACILITIES

A. INTRODUCTION

This chapter describes the permitted solid waste disposal facilities which currently receive municipal solid waste from Solano County jurisdictions. It includes a general description identifying the waste disposal facilities handling Solano County waste, fact sheets providing descriptive information on each waste disposal site, and maps showing the location of each waste disposal facility. This chapter also describes an existing non-traditional disposal facility that were previously exempted from permit requirements that do not receive municipal solid waste.

B. EXISTING PERMITTED DISPOSAL FACILILTIES

Currently, there are two permitted disposal facilities in Solano County, Recology Hay Road Landfill and Potrero Hills Landfill and one disposal facility outside the County's borders, Keller Canyon Landfill, which receive municipal solid waste generated from Solano County jurisdictions. The Rio Vista Landfill closed in 1993.

Recology Hay Road Landfill, Solano County

In the northern unincorporated area of Solano County, east of Vacaville, Recology Hay Road Landfill (RHRL) (formerly B&J Drop Box Sanitary Landfill) disposes of municipal solid waste from Dixon, Vacaville, the surrounding unincorporated area of the County and unincorporated areas in Vallejo. RHRL has an estimated remaining capacity as of January 30, 2009 of 30,822,000 cubic yards and has a projected site life of 59.2 years. A summary of the facility is provided in Table IV.1.

Potrero Hills Landfill, Solano County

In the central part of the County, south of Highway 12 and east of Fairfield, the Potrero Hills Landfill (PHLF) accepts municipal solid wastes from Fairfield, Suisun City, Rio Vista, Travis Air Force Base, and the surrounding unincorporated area of Solano County. PHLF has as of January 1, 2009 a remaining capacity of 3,075,000 cubic yards with a projected site life of less than 5 years. A summary of the facility is provided in Table IV.2. PHLF is processing an amendment to its permit to expand the landfill capacity to a capacity as of January 1, 2009 of 61,500,000 cubic yards with a projected site life of 41 years if approved. (See Chapter V.)

Keller Canyon Landfill, Contra Costa County

Keller Canyon Landfill, located in unincorporated Contra Costa County south of the City of Pittsburg.

The South Napa Waste Management Authority, operates a transfer station in American Canyon which processes waste from the City of Vallejo and the surrounding unincorporated Solano County area. Solano waste from the transfer facility is disposed at the Keller Canyon Landfill.

Solid waste from Benicia is taken to the STAR transfer station in Pacheco, Contra Costa County, and from there it is also hauled to the Keller Canyon Landfill for disposal.

Keller Canyon Landfill opened in 1992 with a current design capacity of 75 million cubic yards, and a projected site life of 59 years as of December 21, 2008 (Allied Waste Services 2009).

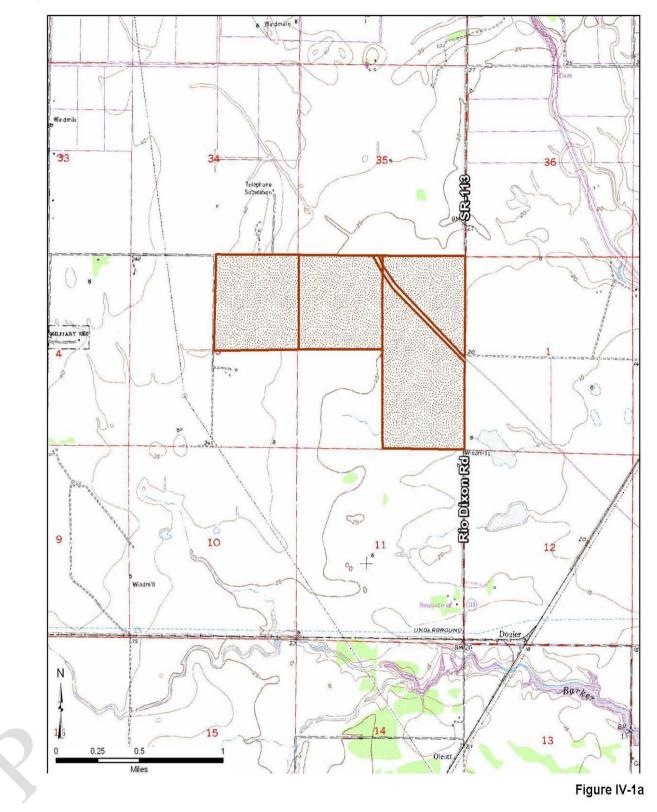
C. CHARACTERIZATION OF EXISTING PERMITTED DISPOSAL SITES

The Siting Element Guidelines require specific descriptive information for each permitted solid waste disposal facility located Countywide (CCR Sections 18755.5[a] and [b]). Tables IV.1 and IV.2 provide this information; Figures IV-la through IV-lc and Figure IV-2 indicate the location of these facilities. For a description of planned new or expanded waste disposal facilities, see Chapter VI.

TABLE 4.1 RECOLOGY HAY ROAD FACT SHEET

1.	FACILITY INFORMATION	
	a. Facility Name	Recology Hay Road
	b. Facility Owner and Operator	Recology Hay Road, Inc. 6426 Hay Road, Vacaville, CA 95687
2.	PERMIT INFORMATION	
	a. Solid Waste Identification System Number	SWIS #: 48-AA-0002
	b. Solid Waste Facilities Permit Number	SWFP #: 48-AA-0002; Conditional Use Permit #: U-91-28
	c. Permit Expiration Date c-1. Permit Review Date	None June 23, 2013
	d. Date of Last Permit Review	June 23, 2008
	e. Estimate of Remaining Site Life	As of January 30, 2009:
		30,822,000 yds ³ or 16,714,000 tons
		The remaining site life based on the current maximum permitted rate of disposal is 59.2 years.
3.	MAXIMUM PERMITTED RATE OF DISPOSAL	
	a. Daily Tons	1,200 tons per day; maximum daily peak tonnage limit of 2,400 tons per day.
	b. Daily Cubic Yards	2,200 yds ³ per day. Maximum daily peak limit of 4,400 yds ³ per day
	c. Yearly Tons	1,200 tons x 361 (days open per year) = 433,200 tons
	d. Yearly Cubic Yards	2,200 yds ³ x 361 = 794,200 cubic yards
4.	AVERAGE RATE OF DAILY WASTE RECEIPT (Figures are for 2009)	
	a. Tons	136,066/361 = 377 tons per day
	b. Cubic Yards	$226,777 \text{ yds}^3/361 = 628 \text{ yds}^3 \text{per day}$
5.	PERMITTED WASTE TYPES	
	a. Permitted types of waste	Municipal solid waste, construction and demolition debris, soil, municipal waste water treatment solids, agricultural wastes, asbestos-containing wastes, dead animals, and treated wood waste.
		waste.

	b. Other permitted uses	Jepson Prairie Organics operates a compost facility at the site. A transformation facility is proposed which will include a digester to process wet organic material. Methane gas produced by the digester will be utilized in a gas to electricity plant.
6.	FUTURE LAND USE	
	a. Expected land use for areas to be closed or phased out within the 15- year planning period (1995-2009)	Non-irrigated open space, lake and wildlife habitat.

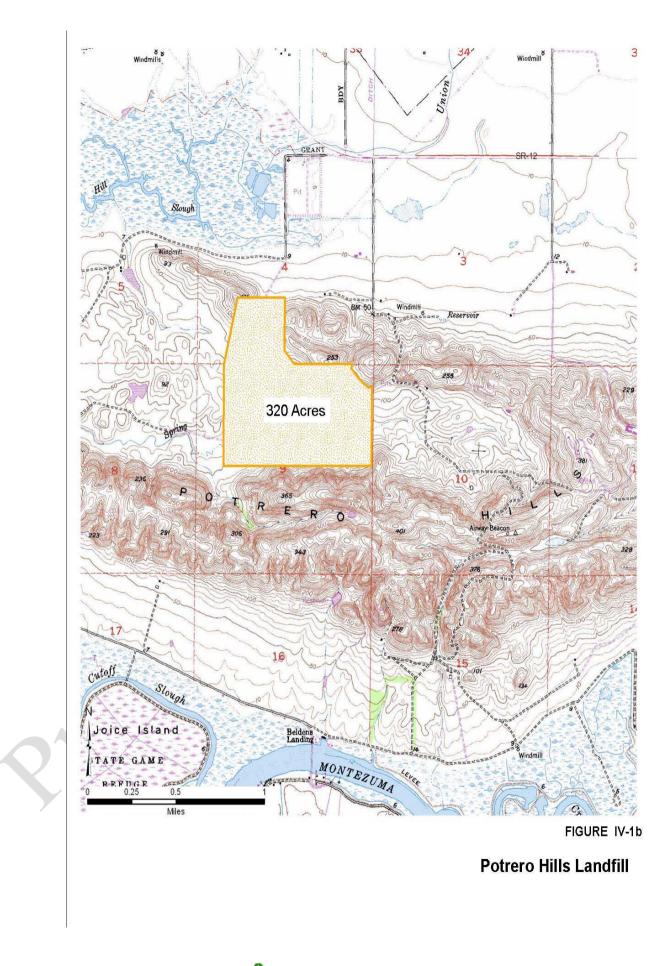


Recology Hay Road Landfill

TABLE 4.2 POTRERO HILLS LANDFILL FACT SHEET

1.	FACILITY INFORMATION	
1.	a. Facility Name	Potrero Hills Landfill
	b. Facility Owner and Operator	Potrero Hills Landfill, Inc.
		3675 Potrero Hills Land, Suisun, CA 94585
2.	PERMIT INFORMATION	
	a. Solid Waste Identification	SWIS #: 48-AA-0075
	System Number	
	b. Solid Waste Facilities Permit	SWFP #: 48-AA-0075
	Number	Conditional Use Permit #: U-88-33
	c. Permit Expiration Date	None
	c-1. Permit Review Date	
	e. Date of Last Permit Review	SWFP was issued December 27, 2006
	f. Estimate of Remaining Site Life	As of January 1, 2009:
		3,075,000 yds ³ , or 2,230,000 tons
		The remaining site life is projected at less
		than 5 years; less than 3 years at current
		maximum permitted rate of disposal.
3.	MAXIMUM PERMITTED RATE	
	OF DISPOSAL	
	a. Daily Tons	3,400 tons/day (7 day average)
	b. Daily Cubic Yards	4650 yds ³ /day (7 day average)
	c. Yearly Tons	3,400 tons x 363 (days open per year) =
		1,234,200 tons/year
	d. Yearly Cubic Yards	$4,650 \text{ yds}^3 \text{ x}_363 \text{ (days opera per year)} =$
		1,687,950 yds ³ /year
4.	AVERAGE RATE OF DAILY	
	WASTE RECEIPT (Figures are for	
	2008)	
	a. Tons	2,645 tons/day (7 day average)
	b. Cubic Yards	3,650 yds ³ /day (based on 1,450 lbs/yd ³)
		density)
5.	PERMITTED WASTE TYPES	
	a. Permitted Types of Waste	Non-hazardous municipal solid waste
		including: garbage, rubbish, tires, street
~		refuse, dead animals, C&D materials,
		municipal waste water treatment solids,
		agricultural wastes. Asbestos wastes as
		approved.
	b. Other Permitted Uses	Biosolids facility accepting biosolids material

		primarily from municipal waste water treatment plants for drying and processing into fuel pellets or similar for reuse and recycling/diversion purposes.
6.	FUTURE LAND USE	
	A. Expected land use for areas to be	Open space as well as a Resource Recovery
	closed or phased out within the 15-	Zone (composting, processing of recyclable
	year planning period (2010-2025)	materials, landfill gas-to-energy)



D. EXISTING NON-TRADITIONAL DISPOSAL FACILITY

There is one existing non-traditional disposal site within Solano County that was previously exempted from the requirements of a Solid Waste Facility Permit: Tonnesen Pet Cemetery. This facility was considered a non-traditional facility and did not accept municipal solid waste.

Tonnesen Pet Cemetery was established and operational prior to the adoption of the original 1995 Countywide Siting Element. At that time, this site was subject to Local Enforcement Agency (LEA) Advisory No. 12 from CalRecycle, formerly known as the California Integrated Waste Management Board (CIWMB) and was not subject to a solid waste facility permit. Under this Advisory, the CIWMB directed Solano County's Local Enforcement Agency (LEA) not to accept an application for a solid waste facility permit while the CIWMB evaluated the permitting of non-traditional facilities. Thus, this site was excluded from the 1995 Countywide Siting Element since it was not a "permitted" solid waste facility accepting municipal solid waste, nor was it a new or an expanded facility.

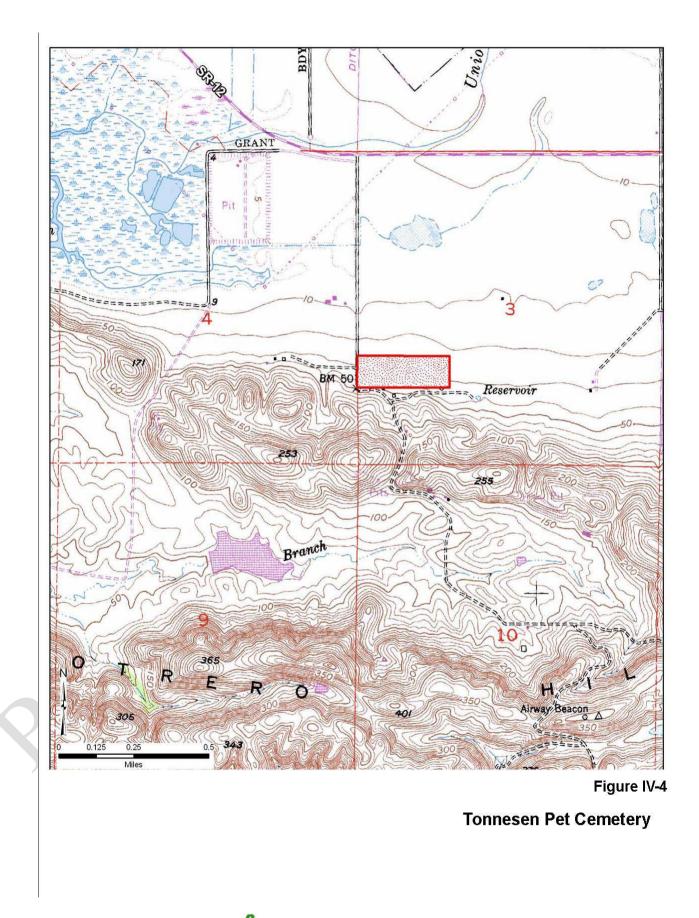
In 2004, the CIWMB rescinded LEA Advisory No. 12. In April 2009, the California Regional Water Quality Control Board updated the Waste Discharge Requirements for Tonnessen Pet Cemetery under Order No. R2-2009-0034 classifying this facility as an animal waste disposal facility best classified under current Title 27 regulations as a nonmunicipal solid waste, Class III Nonhazardous Solid Waste Disposal Facility. As a result, Tonnessen Pet Cemetery is now subject to a solid waste facility permit.

Tonnesen Pet Cemetery

The Tonnesen Pet Cemetery was established in 1980. The facility accepts the remains and ashes of small pets for burial in common graves. The site is a non-traditional facility and was exempt from a Solid Waste Permit under LEA Advisory No. 12. In 2004 the LEA Advisory was rescinded. The LEA has reviewed the facility and determined that a solid waste permit is now required. The site is currently subject to a waste discharge permit from the San Francisco Regional Water Quality Control Board. A summary of the facility is provided in Table IV.4 and the location is shown in Figures IV-2 and IV-4.

TABLE 4.3 TONNESSEN PET CEMETERY FACT SHEET

1.	FACILITY INFORMATION	
	a. Facility Name	Tonnesen Pet Cemetery
	*	
	b. Facility Owner and Operator	Gary Tonnesen 3700 Scally Road, Suisun, CA 94585
-		
2.	PERMIT INFORMATION	
	a. Solid Waste Information System Number	SWIS #: 48-AA-0078
	a. Solid Waste Facilities Permit	SWFP#: Application Pending
	Number	Conditional Use Permit #: U-82-42
	b. Permit Expiration Date	Application Pending
	0. Fernin Expiration Date	Application Fending
	c. Date of Last Permit Review	None
	d. Estimate of Remaining Site Life	120 years
3.	MAXIMUM PERMITTED RATE OF DISPOSAL	
	a. Daily Tons	N/A
	b. Daily Cubic Yards	.95 cubic yards per day average
	c. Yearly Tons	N/A
	d. Yearly Cubic Yards	348 cubic yards per year
4.	AVERAGE RATE OF DAILY WASTE RECEIPT	
	a. Tons	N/A
	b. Cubic Yards	.95 cubic yards per day average
5.	PERMITTED WASTE TYPES	Durial of amall note in a survey survey
	a. Permitted Types of Waste	Burial of small pets in a common grave.
6.	FUTURE LAND USE	
	a. Expected land use for areas to be closed or phased out within the 15- year planning period (2010-2025)	Non-irrigated open space and grazing land.



CHAPTER 5 SITING CRITERIA

A. INTRODUCTION

This chapter identifies criteria for siting new or expanded waste disposal facilities in Solano County.

It also describes the process to be instituted to confirm that waste disposal facility siting criteria are included as part of the countywide solid waste disposal facility siting process.

B. SITING CRITERIA

The Siting Element Guidelines require an identification of criteria to be used for siting new or expanded solid waste disposal facilities. The siting criteria must be grouped according to major categories specified in the Siting Element Guidelines (CCR Section 18756). The major categories include environmental considerations, environmental impacts, legal considerations, and any additional criteria the County and its cities may wish to impose. The following are the solid waste disposal facility siting criteria for Solano County. References for code or regulatory citations are provided for those siting criteria which are based on federal or state regulatory requirements.

MAJOR CATEGORY OF SITING CRITERIA	
Environmental Considerations	New or expanded solid waste disposal facility sites shall be sited in an appropriate geologic setting. Sites which are to be developed to receive hazardous or designated wastes (Class I and Class II landfills) shall be set back more than 200 feet from known Holocene faults. Non-hazardous waste landfills (Class III landfills) shall not be located on a known Holocene fault. (CCR Title 23, Chapter 15, Sections 2531 [d], 2532[d] and 2533[d].)
	New Class I landfills shall be located outside a 100- year floodplain. New or expanded Class II or Class III landfills may be located within a 100-year floodplain but must be designed and operated to prevent inundation or washout due to a 100-year flood. (CCR Title 23 Chapter 15, Sections 2531[c], 2532[c] and 2533[c].)
	All new or expanded landfills shall be constructed and operated so as to ensure that wastes will be a minimum of five feet above the highest anticipated elevation of underlying groundwater, or provide an

	acceptable. engineered alternative. (CCR Title 23 Chapter 15, Section 2530[c].)
	New or expanded landfills shall not be located in wetlands.
	New or expanded landfills shall not be located so as to alter major drainages.
Environmental Impacts	The development of new or expanded landfills shall not disrupt or adversely affect known prehistoric or historic archaeological sites or properties deemed of historic, religious, or cultural significance.
	Potential disposal facility sites where operations will not be easily visible shall be considered more favorably than sites where operations are easily visible from off site, or where site operations cause an impairment of scenic resources.
	New or expanded landfills shall not be sited in areas where there would be a substantial loss in native vegetation, or where there would be direct mortality, permanent habitat loss, or lowered reproductive success for special-status plants or animals.
Socio-Economic Considerations	Solid waste disposal facilities shall be located only in areas designated or authorized for solid waste facilities in an applicable city or county general plan. (Public Resources Code [PRC], Section 41702[b].)
	The land uses authorized in the applicable city or county general plan for lands adjacent to or near the area reserved for development of a new or expanded solid waste disposal facility shall be compatible with the establishment of the solid waste facility. (PRC Section 41702[c].)
	Landfills shall only be located in areas of sufficient size and potential future disposal capacity to provide a minimum 15 years of combined permitted disposal capacity.
	Preference shall be given to sites where the design and operation of the proposed new or expanded solid waste disposal facility can promote useful post-closure activities.

	Preference shall be given to proposed disposal sites with adequate supply of low permeability soils available for use as liner and cover material.
	New or expanded solid waste disposal sites shall be located further than 10,000 feet from airport runways used by turbojet aircraft and further than 5,000 feet from airport runways used solely by piston-type aircraft. (40 CPR, Part 258, Subpart B, Section 258.10.)
Legal Considerations	New or expanded disposal facilities shall be required at all times to be in compliance with applicable federal, state, and local statutes, permits, minimum operating standards, and monitoring requirements. This includes, but is not limited to, the requirements
Legal Considerations, cont.	of the California Integrated Waste Management Board, Regional Water Quality Control Boards, regional air pollution control districts, applicable local jurisdictions, and all utilities, service districts, or agencies which have jurisdiction over the installation of disposal site improvements.

C. PROCEDURES TO CONFIRM USAGE OF SITING CRITERIA

As required by CCR, Title 14, Section 18756(b), the process by which Solano County can confirm that the criteria for siting a new or expanded solid waste disposal facility is included as part of its solid waste disposal facility siting process is as follows. The solid waste facility siting process in Solano County is one in which the private sector is the driving force and the public sector has primarily an oversight role. The public sector determines whether a proposed solid waste disposal site ought to be permitted and the terms and conditions of local agency approval of the proposed solid waste disposal facility. The private sector initiates the siting process by selecting a site which it wishes to develop as a solid waste disposal facility and then by requesting a local land use permit for the waste disposal facility site. An agency of the public sector, usually a local planning commission, then prepares a CEQA environmental document to identify whether the proposed siting of a solid waste disposal facility would generate significant environmental impacts and whether there are measures which could be taken to mitigate any significant impacts. On the basis of this environmental review, the local planning commission decides whether to approve the proposed facility and the terms and conditions of site approval.

Where the solid waste disposal facility siting criteria discussed in this chapter enter into the process in Solano County for selecting sites for development as waste disposal facilities is at the environmental review stage of site approval. The siting criteria are considered to be significance criteria for determining whether a proposed solid waste disposal facility will significantly impact upon the project environment. For example one solid waste facility siting criterion is that new or expanded landfills shall not be sited where there would be loss or lowered reproductive success for special-status plants or animals resulting from project development. If the environmental review for a proposed solid waste facility showed that with project/development such a loss would occur, the environmental document would note this as a significant adverse impact and require either the implementation of mitigation measures to reduce the impact to a less-than significant level or a finding that this would be an unavoidable adverse impact.

To confirm that the siting criteria for solid waste disposal facility sites are implemented through the environmental review process, the County will require that a proposed solid waste disposal facility site be found in conformance with the Countywide Siting Element siting criteria and that a failure of a proposed solid waste disposal facility site to comply with the Countywide Siting Element siting criteria will constitute a significant adverse impact.

D. <u>SITING ELEMENT APPROVAL</u>

California law requires the Countywide Siting Element to be approved by the county and a majority of the cities within the county which contain a majority of the population of the incorporated area of the county (PRC Section 41721). The Siting Element Guidelines further require the Siting Element to include a resolution from each jurisdiction approving or disapproving the Siting Element, and a record of any jurisdiction failing to act on the Siting Element (CCR Section 18756[c]). These documents will be provided in the final version of this Countywide Siting Element.

Prelim CSE Draft

CHAPTER 6 LOCATION & DESCRIPTION OF PROPOSED NEW & EXPANDED FACILITIES

A. INTRODUCTION

The Siting Element Guidelines require a Siting Element to include a description of each proposed new solid waste disposal facility and of each proposed expansion of an existing solid waste disposal facility. The information required for these discussions includes the type of facility, location, size, volumetric capacity of the facility, life expectancy, expansion options, and post-closure uses. Also required is one or more maps indicating the location of each proposed new or expanded solid waste disposal facility and adjacent and contiguous parcels The chapter also discusses how any proposed new or expanded solid waste disposal facilities will affect Solano County's ability to achieve and maintain 15 years of permitted disposal capacity and whether the development of new or expanded landfill sites is consistent with achievement of the mandated 25 and 50% waste diversion goals.

B. PROPOSED FACILITIES

The Potrero Hills Landfill (PHLF) has proposed to expand onto a 260 acre parcel next to the eastern boundary of the existing landfill site. PHLF purchased this property with the objective of extending landfilling activities onto this property when their existing facility neared full capacity. This proposed expansion was included in the 1995 Solano County Countywide Siting Element as a proposed expanded facility. in March 2003, PHLF submitted an application for a Use Permit and Marsh Development Permit to expand the facility and an Environmental Impact report was prepared for the project. As part of the project review, the proposed landfill expansion was analyzed under the siting criteria as outlined in Chapter V of this document to determine whether the proposed landfill expansion conformed to the Solano County Countywide Siting Element. On June 9, 2009, the Board of Supervisors certified the EIR, found the proposed landfill expansion consistent with the Solano County Countywide Siting Element and approved the Use Permit and Marsh Development Permit for the project. The Marsh Development Permit approval was appealed to the Bay Conservation and Development Commission (BCDC). The Marsh Development Permit is now under review by BCDC. Information on the expansion is summarized below in Table VI-I and the location of the proposed PHLF expansion site is Shown in Figure VI-1.

C. <u>RELATIONSHIP TO AB 939 REQUIREMENTS</u>

DISPOSAL CAPACITY FOR 15-YEAR PLANNING PERIOD

As indicated in Chapter II, there is sufficient remaining capacity in disposal sites receiving Solano County waste to satisfy the County and its cities' waste disposal needs for the 15-year planning period, 2010 - 2025. The extent of remaining waste disposal capacity after 2025, however, would depend on the rate of landfilling at disposal sites receiving the wastes of Solano County's jurisdictions. At current and projected maximum rates of in County disposal, the Hay Road Landfill alone has sufficient capacity to accept all locally generated waste for the 15 year planning period and beyond. Expansion of the Potrero Hills Landfill would further expand the County's disposal capacity beyond the 15 year capacity requirement.

MANDATED WASTE DIVERSION

Potrero Hills Diversion Facilities

Expansion of the PHLF would be consistent with the 25 and 50% waste diversion requirement. The PHLF currently salvages and recycles asphalt, concrete, newspaper, and ferrous metals, and an expansion of landfill salvaging and recycling at County landfills is identified as a selected program for implementation in the SRREs of every Solano County jurisdiction (Summary Plan, Table 4-2). In addition, PHLF has developed a large-scale composting operation which can process up to 12,500 cubic yards per day of yard, wood, and stable wastes. These waste diversion activities would continue at the existing PHLF site and, as appropriate, would be included in the development of the landfill expansion site. All of these activities would divert wastes from landfill disposal and would contribute to the achievement of waste diversion goals. PHLF is proposing to establish a construction and demolition facility. The facility would receive up to 500 tons per day and divert 90% of the materials it receives.

Recology Hay Road Landfill

Existing and proposed addition of diversion facilities at the RHRL are consistent with the 25 and 50% diversion requirements. The RHRL currently salvages and recycles brush and wood, cement and other inerts, white goods, and tires. In addition, the Jepson Prairie Composting Facility is a large-scale composting operation receiving yard waste and wood waste to be co-composted with sewage sludge. The process will include chipping material and composting in windrows and an aerated static pile during winter months. The facility is permitted to receive up to 600 tons per day. The participating jurisdictions include the Cities of Dixon, Vacaville, and the surrounding unincorporated County.

TABLE 6.1 POTRERO HILLS LANDFILL EXPANSION FACT SHEET

ТҮРЕ	The proposed expansion would be a lateral expansion of the existing Potrero Hills Landfill (PHLF) onto a 260-acre parcel adjacent to the eastern boundary of the existing site. The landfill would have the same Class III Waste Management Unit classification as the existing PHLF.
LOCATION	The proposed expansion site is located immediately east of and adjacent to the existing permitted area of the PHLF.
SIZE	The proposed landfill expansion site is 260 acres; expanding the landfill site from 320 acres to 580 acres. The landfill footprint would expand from 190 acres to 340 acres; (the area where landfill operations will occur.) The remaining acreage will be used for access and perimeter buffer area.
CAPACITY	Remaining capacity as of January 1, 2009 would increase form 3,075,000 cubic yards or 2,230,000 tons to 61,500,000 cubic yards, or 44,585,000 tons with the proposed expansion.
LIFE EXPECTANCY	Site life is projected to increase from less than 5 years to approximately 41 years (36 years at current maximum permitted rate of disposal)
EXPANSION OPTIONS	No further expansion of the PHLF is proposed; however, a sister entity has purchased an additional 430 acres located to the southeast of the existing landfill. This area is not proposed for landfilling; the intent of the purchase is to control future use.
FUTURE LAND USE	Future land use for the existing landfill is open space and a Resource Recovery

these are likely future land uses for the proposed expansion area as well.
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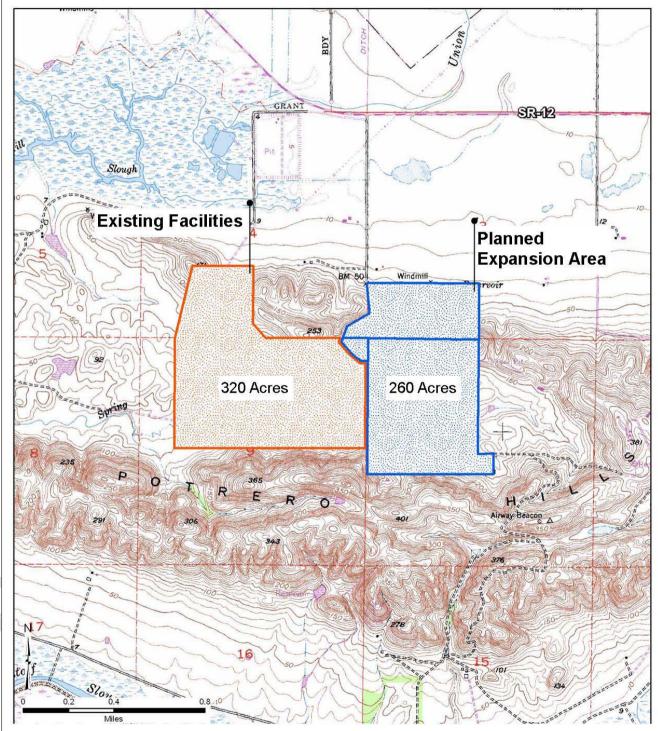


Figure VI-1

Potrero Hills Landfill

CHAPTER 7 GENERAL PLAN CONSISTENCY

A. <u>INTRODUCTION</u>

Under CCR Section 187563 the Siting Element must review proposed new landfills or expansion of existing landfills for consistency with the County or city general plans. As noted in Chapter VI, there is one proposed landfill expansion, Potrero Hills Landfill. There are no proposed new landfills in Solano County.

B. <u>PROPOSED SITE EXPANSION CONSISTENCY WITH COUNTY</u> <u>GENERAL PLAN</u>

As indicated in the previous chapter, Potrero Hills Landfill has applied for an expansion of the existing landfill. As indicated in Chapter III, the expansion is not required to ensure 15 years of disposal capacity at this time. The landfill expansion area is designated as Public/Quasi-Public on the 2009 General Plan Land use Diagram. The potential expansion is noted under Solid Waste in Chapter 8 Public Facilities and Services of the 2009 Solano County General Plan.

CHAPTER 8 SOLID WASTE DISPOSAL STRATEGIES WHEN SITES FOR ADDITIONAL CAPACITY ARE UNAVAILABLE

A. INTRODUCTION

The requirement to devise strategies for assuring 15 years of capacity applies only to those counties and regional agencies which are unable to demonstrate 15 years of existing capacity, and who are unable to identify sites for new disposal facilities or expansions of existing disposal facilities to ensure 15 years of disposal capacity. Since Solano County has 15 years of disposal capacity, this requirement does not apply here.

CHAPTER 9 SITING ELEMENT IMPLEMENTATION

A. **INTRODUCTION**

This chapter describes those tasks necessary for implementation of Siting Element goals, the agency responsible for implementation, the schedule for implementation of these tasks, and funding sources for implementation. Tasks, responsible agencies, schedules, and revenue sources are presented in Table IX.I.

TABLE 9.1SITING ELEMENT GOALS & IMPLEMENTATION

GOAL/TASK	RESPONSIBLE PARTY	IMPLEMENTATION	REVENUE SOURCES	
		SCHEDULE		
Goal: Implement IWM plan to maximize diversion and provide for environmentally safe land disposal of residue				
Maximize diversion	See Summary Plan & SRRE	Summary Plan &	Summary Plan & SRRE	
Ensure compliance of landfill design and	Solano County LEA & CalRecycle	SRRE	Landfill permit fees	
operations with applicable local, state, and				
federal requirements				
Goal: Provide additional landfill capacity through expansion of Recology Hay Road & Potrero Hills Landfill				
Issuance of Solid Waste Facility Permit	Solano County LEA & CalRecycle	Completed	Permit application fee	
for Recology Hay Road expansion				
Potrero Hills Landfill Expansion:				
Determine CIWMP consistency	Planning Services	Completed	Landfill mitigation fee	
Determine General Plan consistency	Planning Commission	Completed	General fund	
Conduct environmental review of facility	Planning Services	Completed	Permit application fee	
Secure funding for facility construction	Potrero Hills Landfill, Inc.	T.B.D.	T.B.D.	
Facility final design	Potrero Hills Landfill, Inc.	T.B.D.	T.B.D.	
Issue Solid Waste Facility Permit	Solano County LEA & CalRecycle	T.B.D.	Permit application fee	

GOAL/TASK	RESPONSIBLE PARTY	IMPLEMENTATION	REVENUE SOURCES	
		SCHEDULE		
Facility Construction	Potrero Hills Landfill, Inc.	T.B.D.	T.B.D.	
Start-up	Potrero Hills Landfill, Inc.	T.B.D.	T.B.D.	
Full operation	Potrero Hills Landfill, Inc.	T.B.D.	Landfill tipping fees	
Goal: Provide additional needed landfill capacity through export to other Counties with sufficient capacity.				
Ensure adequate disposal capacity at	Republic Services, Inc. & Contra Costa	Completed	N/A	
Keller Canyon Landfill for Cities of	County LEA	Y		
Benicia & Vallejo				
Goal: Continue to implement recycling and composting programs at the local landfills				
Develop programs for increasing salvage	Recology Hay Road & Potrero Hills	Ongoing	Summary Plan and Tipping	
of recyclable material at landfills	Landfill, Inc.		Fees	
		Completed		
Develop composting programs at landfills	Recology Hay Road & Potrero Hills		Tipping fees	
	Landfill, Inc.			
Goal: Continue to support existing landfill load check programs				
Continue load checking program at	Recology Hay Road & Potrero Hills	Ongoing	Tipping Fees	
Recology Hay Road & Potrero Hills	Landfill, Inc.			
Landfill		Ongoing	Tipping Fees	
Program oversight	Solano County LEA	Ongoing	Landfill permit fees	
	Y			

CHAPTER 10 REFERENCES

Norcal Waste Systems Hay Road Landfill Inc., letter to Jim Leland and Narcisa Untal, Department of Resource Management, Subject: Norcal Waste Systems Public Comments on Potrero Hills Landfill Expansion, March 30, 2009.

Hurl, Susan, Allied Waste Services, letter to Narcisa Untal, Department of Resource Management, Subject: City of Benicia disposal information for Kelley Canyon Landfill, July 28, 2009.

Hurla, Susan e-mail to Narcisa Untal, Department of Resource Management, Subject: Remaining Kelley Canyon Land Fill Capacity, July 30, 2009

EDAW Inc., Recirculated Draft Environmental Impact Report for the Potrero Hills Landfill Expansion Project. Prepared for County of Solano, Department of Resource Management, December 21, 2007.

Solano County Department of Resource Management, Land Use Permit No. U-88-33 / Marsh Development Permit No. MD-99-09 (Revision2) Potrero Hills Landfill Expansion Project, June 9, 2009

Solano County Department of Resource Management, Land Use Permit No. U-91-28 (Revision No. 3) Norcal Waste Systems Hay Road Landfill, Inc,

Dunbar, Jim, e-mail to Narcisa Untal, Department of Resource Management, Subject: Siting Element update – Potrero Hills, Jun 27, 2009

Untal, Narcisa, e-mail to Harry Englebright, Englebright and Associates, Subject: Potrero Hills Landfill Update for Current Activity, July 6, 2009

Clarkson, Bryan, e-mail to Narcisa Untal, Department of Resource Management, Subject: Hay Road Landfill Fact Sheet for County Integrated Waste Management Plan Siting Element, July 21, 2009

Untal, Narcisa, e-mail to Harry Englebright, Englebright and Associates, Subject: Hay Road Landfill capacity if Potrero Hills Landfill Closes.

Solano County Department of Resource Management, Land Use Permit No. U-82-42 / Marsh Development Permit Nol. MD-82-12, Gary Tonnesen, Pet Cemetery

Solano County Department of Resource Management, Land Use Permit U-89-33 (Revision No. 2), Aqua Clear Farms, Inc