

Preliminary Siting Assessment

This preliminary siting assessment identifies general areas of the County that may be potentially suitable for siting a regional garden refuse processing facility. There are four sections of this preliminary assessment:

1. **Preliminary Siting Criteria**—Describes the preliminary siting criteria used to identify potentially suitable general areas for siting a garden refuse processing facility within the County.
2. **Preliminary Siting Criteria Application**—Maps the preliminary siting criteria and discusses the results.
3. **Ordinances and Previous County Siting Efforts**—Summarizes the numerous siting efforts performed for various planning and solid waste management activities in Sacramento County. This section also discusses pertinent ordinances and land use planning documents.
4. **Recommendations**—Recommends next steps.

6.1 Preliminary Siting Criteria

The project team (SWA staff and consultants) developed preliminary siting criteria based on a review of previous siting efforts. The criteria were intended to be an initial effort designed to screen areas of the County in which siting a garden refuse processing facility could be excluded. The criteria fall into two categories:

- **Excluding**—criteria that preclude a region or area from having likely locations for a regional garden refuse processing facility.
- **Informational**—criteria that are presented at this stage to understand how the non-excluded areas may be limited in further, site-specific siting efforts.

In conjunction with the subsequent communications and stakeholder relations effort, detailed and specific siting criteria will be developed for selection and evaluation of specific sites. Table 6-1 presents the preliminary screening criteria and summarizes the preliminary assessment.

6.2 Application of Preliminary Siting Criteria

The preliminary siting criteria were mapped to block out large areas of the County where development of the regional garden refuse processing facility would likely be excluded; the resulting areas are termed “excluded areas.”

TABLE 6-1
Preliminary Siting Criteria
Sacramento Regional SWA Garden Refuse Processing Facility Development

Criteria Description
Excluding Criteria
<p>General Location and Surrounding Development—Sites should be remote and not located in areas of current or expected future residential or commercial land uses or within the Urban Services Area, as established by the Land Use Element of the County of Sacramento General Plan (see Section 6.3 for a discussion of the General Plan).</p> <p>Assessment: The criterion screens large portions of land within the County.</p> <p>Resource Preservation—Sites should not be located within known state preserves.</p> <p>Assessment: The criterion provides both general information to screen large portions of the County and specific information that will be applicable later for selection and evaluation of specific sites.</p>
Informational Criteria
<p>Sensitive Land Uses—Sites should be located away from sensitive land use areas. Land uses that limit siting of the facility include convalescent facilities, schools (existing or planned), colleges, childcare facilities, hospitals, prisons, and other facilities with relatively immobile populations.</p> <p>Assessment: The criterion provides information that is excluding when sensitive land uses are highly concentrated, mainly within urban areas, but also may contain information relevant to selection and evaluation of specific sites at a later stage of the project.</p> <p>Transportation and Access—Sites should be accessible, but not located such that garden refuse and product transportation routes significantly impact residential neighborhoods or sensitive uses.</p> <p>Assessment: The criterion provides information that will aid in selection and evaluation of specific sites at a later stage of the project.</p>

Note: There are many other types of criteria that may be applied as part of the communications and stakeholder relations effort during the identification and evaluation of specific sites later in the project development process. The criteria in this table may also be used in their current format or expanded and reapplied during that stage.

6.2.1 Siting Criteria Information Sources

Table 6-2 lists the data sources for information used to apply the siting criteria.

TABLE 6-2
Preliminary Siting Criteria Information Sources

Siting Criteria Information	Information Sources	Notes
Excluding Criteria		
Urban Service Area Boundary	Digitized from the County of Sacramento General Plan	From Figure III-8 of the Land Use Element
Residential or commercial land use (current and planned)	Geographical Information system (GIS) layers provided by County of Sacramento Planning and Community Development Department	GIS layers from the County of Sacramento General Plan for planned and current commercial and residential land use
Resource Preservation	GIS layer provided by County of Sacramento Planning and Community Development Department	GIS layer for state and federal lands, edited to show just federal or state-owned preserves and refuges

TABLE 6-2
Preliminary Siting Criteria Information Sources

Siting Criteria Information	Information Sources	Notes
Informational Criteria		
Sensitive land uses/immobile populations	GIS layer provided by County of Sacramento Planning and Community Development Department	GIS layers for child care facilities, colleges/universities, convalescent facilities, hospitals, prisons, and schools
Transportation and Access	GIS layer provided by County of Sacramento Planning and Community Development Department	GIS layer for roadways

6.2.2 Criteria Mapping and Results

Figure 6-1 displays the results of mapping the criteria presented in Table 6-2. This figure shows:

- Clear areas where currently available data indicate facility siting may be likely, but where additional site-specific evaluation would still be necessary.
- Excluded areas where siting a facility is less likely. It is possible but less likely that specific sites could be identified within these areas, especially considering the following limitations.

6.2.3 Limitations

The information mapped for criteria application was strictly based on data obtained from the reports summarized in this section, and from consultation with the County Planning and Community Development Department. Accuracy of the data obtained from the references presented herein is neither assumed nor implied based on the presentation of figures presented in this report.

GIS information is provided on a parcel basis, which results in an entire parcel being identified as having the noted concern, even if the concern may be restricted to a specific area of a parcel. This situation could result in larger than realistic areas being shown to have siting concerns. In the site-specific siting evaluation in a later stage of the regional facility development, these criteria should be reconsidered to ensure that they are being applied appropriately at that level of study.

6.3 Ordinances and Previous Siting Efforts

Over the years, several waste management facility siting studies and analyses have been prepared by a variety of entities for different applications and areas within Sacramento County. Also, ordinances exist to address land uses throughout the County. This section presents a brief summary of each document reviewed, including the document's purpose, scope, and summary of pertinent findings. Table 6-3 lists these documents, their publication

dates, and authors. Figure 6-2 displays a compilation of the different solid waste facility locations identified in some of these reports.

TABLE 6-3
Siting and Land Use Documents and Ordinances
Sacramento Regional SWA Garden Refuse Processing Facility Development

Document	Publication Date	Source
Landfill Siting Study	November 1991	EMCON Associates
Fatal Flaw Review of Proposal (sic) Sanitary Landfill Site	October 14, 1992	EMCON Associates
Fatal Flaw Review of Proposal (sic) Sanitary Landfill Sites in Southeastern Sacramento County (Phase II)	November 23, 1992	EMCON Associates
Integrated Solid Waste Management Facilities Site Analysis	October 4, 1993	HDR Engineering, Inc.
Land Use Element of the County of Sacramento General Plan	December 15, 1993 (Includes revisions as of May 2, 1997)	County of Sacramento, Planning and Community Development Department, General and Advance Planning Section
Waste Facilities Analysis Report	April 1994	HDR Engineering, Inc.
Environmental Impact Report, Kiefer Landfill Expansion, Volume I (Chapter 4, CEQA Topical Issues)	December 1994	Parsons Engineering Science, Inc.
Proposed Solid Waste Policy and Overlay Ordinance	May 22, 2003	City of Sacramento Planning Division

6.3.1 Landfill Siting Study

The “Landfill Siting Study,” dated November 1991, (EMCON Associates) identifies and assesses disposal sites in the County as alternatives to expansion of the Kiefer Landfill. The report describes alternative sites, discusses constraints and discretionary siting criteria, and outlines the regional screening process. It contains a review of previously identified landfill sites and a discussion of the selection and evaluation of alternative landfill sites. Figure 6-2 shows the alternative landfill sites identified in the 1991 EMCON study.

The report concludes that, when all factors are considered, the proposed site expansion at Kiefer Landfill is the best alternative. In the final analysis, the landfill expansion rated higher overall than four alternative sites in the following categories: sufficient area and capacity, electric transmission lines, access roads, traffic, haul distance, site visibility, ease of permitting, economic effects, and watershed drainage.

6.3.2 Fatal Flaw Review of Proposal (sic) Sanitary Landfill Site

See Section 6.3.3 for a discussion on Phase II of the Fatal Flaw Review.

Figure 6-1 (color)

front

Figure 6-1 (color)

back

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Front

Insert Figure 6-2 (color)

Back

6.3.3 Fatal Flaw Review of Proposal (sic) Sanitary Landfill Sites in Southeastern Sacramento County (Phase II)

The “Fatal Flaw Review of Proposal (sic) Sanitary Landfill Sites in Southeastern Sacramento County (Phase II),” dated November 23, 1992, (EMCON Associates) identifies the major fatal flaws within a study area of approximately 10,000 acres north and south of State Highway 104, east of Rancho Seco Power Plant, north of the Sacramento/San Joaquin County boundary, and west of the Sacramento/San Joaquin County boundary. The report considered the study area in the context of primary constraints of drainage, flood zone, groundwater, seismicity, wetlands, and unstable areas. The study concludes that a landfill of significant size (50 years of capacity) should be able to be located within the study area consistent with the siting criteria evaluated. It also concludes that the incidence of wetlands in the form of vernal pools may preclude part of the study area from being developed into a landfill, but that a conceptual landfill configuration was identified with minimal impact on identified vernal pools. The report recommends that the County consider a more detailed review of vernal pools in the study area to confirm that a significantly sized landfill could be located that would not impinge on protected wetlands or could be implemented under the Nationwide 26 permit.

This letter report provides a fatal flaw analysis using broad screening criteria identical to the letter report summarized previously. This analysis identified several potential landfill sites, as shown on Figure 6-2.

6.3.4 Integrated Solid Waste Management Facilities Site Analysis

The “Integrated Solid Waste Management Facilities Site Analysis,” dated October 4, 1993 (HDR Engineering), is a technical evaluation developed to support the “Waste Facilities Analysis Report” (HDR, 1994), discussed later in this section. The “Integrated Solid Waste Management Facilities Site Analysis” presents and rates 15 candidate sites within the County for siting of solid waste facilities. The evaluation identifies the top combinations of solid waste facilities and sites to meet the needs of the SWA region for materials recovery, transfer, composting, and hazardous waste diversion facilities, and maintenance and repair facilities. These preferred candidate sites from the HDR Site Analysis are shown on Figure 6-2.

The HDR evaluation was highly detailed and was developed by a broad group consisting of SWA staff, the City and County Joint Powers Authority (JPA) Facilities Analysis Subcommittee, members of the County Solid Waste Advisory Committee (SWAC), and members of the City and County Recycling Advisory Committees (CRACs).

6.3.5 Land Use Element of the County of Sacramento General Plan

The “Land Use Element of the County of Sacramento General Plan,” dated December 15, 1993 (County of Sacramento), sets the policy for the distribution and intensity of land uses in the unincorporated County for a period of 20 years. It illustrates the existing and potential open space, agricultural, conservation, and recreational land uses of the County. It also delineates existing and future locations of the major employment areas and residential areas.

Produced by the County Planning and Community Development Department, the report identifies existing urban, rural, and combined land use designations in the County, and it includes an analysis of and future projections for residential and non-residential land use inventories. It includes land use strategies and policies, such as strategies to manage urban and rural growth, and it prescribes specific implementation measures for accommodating growth throughout the unincorporated County.

For this preliminary siting assessment, information for two criteria was obtained from the General Plan:

- Urban Services Area Boundary
- Residential and Commercial Designations

6.3.6 Waste Facilities Analysis Report

The “Waste Facilities Analysis Report,” dated April 1994 (HDR), recommends the most appropriate types, combinations, and locations of integrated waste management facilities to meet the needs of the SWA service areas. The analysis includes a multi-step process that involves: screening to eliminate unsuitable solid waste sites; researching and identifying available sites; determining the suitability of available sites based on physical, technical, environmental, economic, and socio-political factors; and ranking the sites based on these factors. This report identified sites that may be suitable for composting facilities. These locations are shown on Figure 6-2, and are the same as those identified in the “Integrated Solid Waste Management Facilities Site Analysis,” which is contained in Appendix A of the “Waste Facilities Analysis Report.”

The “Waste Facilities Analysis Report” recommends that SWA construct a garden refuse compost facility adjacent to the Kiefer Landfill across Kiefer Road.

6.3.7 Environmental Impact Report, Kiefer Landfill Expansion, Volume I, Chapter 4

The “Environmental Impact Report, Kiefer Landfill Expansion, Volume I (Chapter 4, CEQA Topical Issues),” dated December 1994 (Parsons Engineering), provides the CEQA-required alternatives analysis and evaluation for the Environmental Impact Report (EIR) for the proposed expansion of the Kiefer Landfill. The discussion focuses on the alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance, even if such alternatives would be more costly or would to some degree impede the project’s objectives. The six alternatives evaluated are as follows: (1) No Project Alternative; (2) Original Permit Expansion Alternative; (3) Alternative Landfill Sites Including Grant Line-Laguna Creek and Clay Station; (4) Limited Height and Footprint Alternatives; (5) Baling/ Alternative Daily Cover Materials (ADCM); and (6) Mitigated Expansion Project Alternative.

Alternative 3 from the EIR presents the most pertinent information that can be used for the present preliminary siting assessment. In Alternative 3, alternative landfill sites are considered; however, the alternative sites identified were previously presented in the EMCON 1991 “Landfill Siting Study” summarized previously, so the EIR did not add any sites to those shown in Figure 6-2.

6.3.8 Solid Waste Policy and Overlay Ordinance

The proposed City of Sacramento “Solid Waste Policy and Overlay Ordinance,” dated May 22, 2003, would establish a “Solid Waste Restricted Overlay Zone” in the General Plan and prohibits the establishment of new solid waste facilities within that zone.

While this ordinance is pertinent to the siting of a new garden refuse processing facility within the City of Sacramento, the entire City of Sacramento is included within the Urban Services Area. As indicated in Section 6.1, the entire Urban Services Area is being used as an exclusionary screening criterion, so no additional siting information results from the “Solid Waste Policy and Overlay Ordinance.”

6.4 Recommendations

This preliminary siting assessment and our review of previous solid waste facility siting efforts indicate that there are likely to be potentially suitable sites for a garden refuse processing facility in Sacramento County. This report is one of the resources available for development of site-specific siting criteria. It is recommended that the SWA implement a communications and stakeholder relations effort in conjunction with a more detailed siting analysis as the next step in the facility siting effort. Specific steps should include:

- Develop site-specific evaluation criteria considering community and neighborhood concerns, SWA member concerns, regulatory requirements, facility technical requirements, traffic inputs, and land use policy of the host jurisdiction.
- Continue the siting effort by identifying and evaluating specific site locations. Identify specific site locations first within the clear areas, but also consider potential sites in screened areas.
- Evaluate specific sites by reapplying the criteria presented in this report at a site-specific level (including addressing the concern about entire parcels being screened) and by applying all other criteria developed.