

# APPENDIX M

# SITING GUIDELINES FOR SOLID WASTE HANDLING FACILITIES

## Introduction

The *Siting Guidelines for Solid Waste Handling Facilities* contained in this appendix and incorporated into the plan update consists of the following four sections. The section on Facility Categories establishes standard definitions and categories for handling facilities that may be sited in Clark County in the future. The definitions also identify types of handling facilities that are not recommended by this plan or are recommended only as an essential public facility. The General Locational Considerations section establishes the potential physical, environmental, and institutional impact areas that must be considered and specifically addressed in the siting process for each type of facility. The third section on Generic Siting Process establishes a standard sequence of activities for investigating and selecting a solid waste handling facility site. The last section on Public Information and Involvement Program establishes recommended guidelines for communicating with and involving the general public and the affected local community in the site investigation and selection process.

In order to carry out their solid waste management planning responsibilities, the County and the participating cities in this Plan must provide for the proper and uniform development of handling facilities to meet future solid waste management needs. The selection and community approval of a site is often the most public, controversial, and difficult step in the overall development process.

The siting guidelines described in this appendix are applicable to potential facilities that are being either publicly or privately developed. The siting guidelines include, by reference, any locational criteria or location related design requirements established by the federal [Resource Conservation and Recovery Act \(RCRA—Subtitle D\)](#), the state Solid Waste Management— Recovery and Recycling Act ([RCW 70.95](#)), state for Solid Waste Handling Standards ([WAC 173-350](#)), and Criteria for Municipal Solid Waste Landfills ([WAC 173-351](#)).

These siting guidelines are intended to promote a proper and uniform siting process that can be consistently applied throughout all participating local government jurisdictions in Clark County. These guidelines will provide resource and environmental agencies and the general public with the assurances that the siting process will consider all relevant factors and site selections will be made from an objective basis. In addition, the guidelines will identify how the general public, the local community, potentially impacted parties, and others can provide input into the siting process.

The siting process covered in these guidelines includes both the initial site investigations leading up to the selection of a specific site and the public involvement and education activities associated with these initial investigation activities. Land use permitting (with the local government jurisdiction), solid waste facility permitting (with the jurisdictional health department) and other permitting activities, are not directly covered by these guidelines.

Planning for and siting a solid waste facility is an integrated part of the County's waste management strategy and this Plan. Planning for future facilities incorporates and utilizes the County programs for waste prevention, recycling and recovery of waste; capacity at existing contracted solid waste facilities; and capacity at private waste and recovery facilities.



# Facility Categories

This section defines and establishes standard categories for solid waste handling facilities. These definitions and categories are listed below. Note that no facility category or definition has been established for recyclable materials receiving centers that accept only source-separated materials. This plan recommends that no privately owned and operated inert waste landfills or limited purpose landfills be sited in the County. Any municipal solid waste landfills to be sited in the County will be a part of the regional solid waste management system, specifically recommended by the SWMP, and designated as an essential public facility. Such a landfill could be opened to assist in response to a disaster or major event. In 2006, EPA designated the **Troutdale Aquifer** (which underlies much of Clark County) as a Sole Source Aquifer. This designation greatly inhibits the likelihood that any landfill will be sited in the county for any purpose.

- A. **Conditionally exempt small quantity generator collection facility.** A facility that receives, sorts, temporarily stores, and processes for safe transport extremely hazardous waste and dangerous waste from conditionally exempt small quantity generators.
- B. **Household hazardous waste collection facility.** A facility for receiving, sorting, temporarily storing, and processing (for safe transport) household hazardous waste from residential generators.
- C. **Inert waste landfill.** A land disposal site for receiving and disposing of inert materials only as defined in WAC 173-3350.
- D. **Limited purpose landfill.** A land disposal site for the receiving, sorting and disposing of limited types of solid wastes (other than unseparated municipal solid wastes) including, but not limited to, asbestos, treated and untreated petroleum contaminated soils, construction, demolition, and land clearing (CDL) wastes, wood wastes, treated sludges from municipal and industrial processes, and other special waste materials as defined in WAC 173-350.
- E. **Mixed construction, demolition, and land clearing (CDL) waste recycling facility.** A facility that receives, temporarily stores, processes, and recovers recyclable materials from mixed CDL wastes for reuse, sale, or further processing.
- F. **Mixed municipal solid waste landfill.** A land disposal site for the receiving, sorting, and disposing unseparated municipal solid wastes.
- G. **Municipal solid waste storage facility.** A facility, not open to the general public, where sealed containers are received, stored up to 72 hours, staged, and/or transferred from one transportation mode to another.
- H. **Petroleum-contaminated soil processing facility.** A facility that receives and processes petroleum contaminated soils to remove contaminants through chemical, biological, or other treatment methods.
- I. **Resource recovery facility.** A facility for receiving, temporarily storing, and processing solid wastes to obtain useful material or energy.
- J. **Small-scale specialized incinerator.** A relatively small-scale facility that receives, processes, temporarily stores, and burns a separated special solid waste material, including, but not limited to, incinerators for disposal of infectious wastes, municipal and industrial sludges, and other special wastes.
- K. **Solid waste composting facility.** A facility that receives, temporarily stores, and processes solid waste by decomposing the organic portions of the waste by controlled biological means to produce useful products, including, but not limited to, compost, mulch and soil amendments.

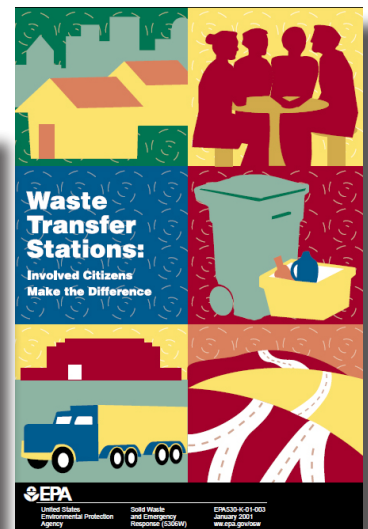
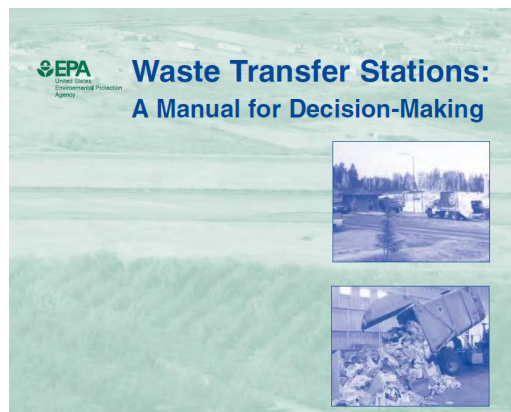
- L. **Solid waste transfer station.** A facility that receives, processes, temporarily stores, and prepares solid wastes for transport to a final disposal site, with or without materials recovery before transfer.
- M. **Wood waste recycling facility.** A facility that receives, temporarily stores, and processes untreated wood, scrap lumber, timbers, and natural wood debris (e.g., logs, limbs, and tree trunks) into products such as hog fuel, fuel pellets, chips, or fireplace logs.
- N. **Yard debris collection facility.** A facility that receives yard debris for temporary storage, awaiting transport to a composting or processing facility.
- O. **Yard debris processing facility.** A facility that receives, temporarily stores, and processes yard debris into a soil amendment, mulch or other useful product through a chipping, screening, or grinding process other than biological decomposition (composting).

## General Considerations

Consideration must be given to the physical, environmental, and institutional impact areas that need to be specifically addressed for each category of handling facility. No specific locational standards or requirements are established as part of these guidelines except those federal, state, and local siting restrictions already in existence. Instead, these guidelines establish potential impact areas for each type of handling facility that must be specifically considered and evaluated as part of the siting process.

An integral part of a siting process is public input and involvement. Public involvement takes place during the entire process. Guidance for ensuring public participation is discussed in the Public Information and Involvement Program section below. The U.S. Environmental Protection Agency (EPA) has many resources and documents to help with siting and public involvement of solid waste facilities. These resources are available online; a few are listed below:

- **Waste Transfer Stations: Involved Citizens Make the Difference** (EPA530—01-003)  
<http://www.epa.gov/osw/nonhaz/municipal/pubs/wtsguide.pdf>
- **Sites for our Solid Waste: A Guidebook for Effective Public Involvement** (EPA530-SW-90-019)  
<http://www.epa.gov/epawaste/nonhaz/municipal/pubs/sites/toc.pdf>
- **Waste Transfer Stations: A Manual for Decision-Making** (EPA530-R-02-002)  
<http://www.epa.gov/epawaste/nonhaz/municipal/pubs/ro2002.pdf>
- **Criteria for Solid Waste Disposal Facilities A Guide for Owners/Operators** (EPA530-SW-91-089)  
<http://www.epa.gov/osw/nonhaz/municipal/landfill/criteria/landbig.pdf>



# General Siting Process

The primary goal of the solid waste handling facility siting process described in this appendix is to provide decision makers with a choice of sites that maintain solid waste service levels, are environmentally acceptable, are feasible from an engineering and cost perspective, and are acceptable to the local community and general public. This generic approach has been developed with uniform procedures that will result in an efficient and streamlined process and will provide for the proper comparisons of alternative sites.

The process begins with the development of “facility-specific” site screening criteria, as outlined in Step 1. Possible sites are then identified and screened with clearly unsuitable sites dropped from further consideration. This leads to preliminary feasibility and environmental evaluations on the reduced number of candidate sites. For publicly developed facilities, the evaluations may produce a preferred set of alternatives for the jurisdictional local government to pursue for development. For privately developed facilities, that same process should be followed with the lead permitting agency for the jurisdictional local government coordinating the development of the site screening criteria and assisting in the selection process.

No facility siting process should proceed unless a demonstrated need or recommendation exists in the most recently adopted solid waste management plan update. If the need or recommendation is not in the current solid waste management plan, the need must be demonstrated and recommended by the jurisdictional local government to be included in the *Solid Waste Management Plan*. A plan amendment must be adopted before proceeding further in the siting process.

There are eight steps in the generic siting process:

- **Step 1** — Submit a Notice of Intent to Site Solid Waste Handling Facility
- **Step 2** — Development of site screening criteria
- **Step 3** — Candidate site identification
- **Step 4** — Broad site screening
- **Step 5** — Focused site screening
- **Step 6** — Comparative site evaluations
- **Step 7** — Developer and local government decision-making
- **Step 8** — Environmental review process

## **Step 1—Submit a Notice of Intent to Site Solid Waste Handling Facility**

Before beginning the siting process, the developer should formally notify the local government jurisdiction, **Clark County Environmental Services**, the **Solid Waste Advisory Commission (SWAC)**, and **Clark County Public Health** of their intent to begin the siting process. This notification will provide the local government with the lead time required to properly respond to the needs and effects of the siting process and trigger the public involvement process of the affected local governments.

## **Step 2—Development of Site Screening Criteria**

The facility developer and the jurisdictional local government should establish a set of site screening criteria to eliminate candidate sites with “fatal flaws” and rank sites with the highest potential for successful development. These criteria should be specific to the facility category being sited and should consider those impact areas identified in Figure E-I. The criteria should also reflect the standards established in Resource Conservation and Recovery Act (RCRA)—Subtitle D, Revised Code of Washington (RCW) 70.95, Washington Administrative Code (WAC) 173-350 and 173-351, and any other applicable federal, state, or local laws and regulations. Site screening criteria is discussed in more detail below.

## **Step 3—Candidate Site Identification**

The level of effort expended by the developer in identifying possible sites should depend upon the size and type of facility being sited as well as the nature of the service area. However, a considerable effort should be made county-wide to inform citizens and businesses that a facility siting effort is under way and that the developer will

be accepting nominations for possible sites. These nominations will allow sites that have other ongoing or temporary uses (that might not otherwise be considered) to be included as candidate sites.

Large landholders (such as the County, cities, federal and state agencies, major commercial enterprises, and institutions) with potential land parcels appropriate in size and zoning for the intended facility can be contacted directly or through letters of inquiry. Also, real estate firms dealing in appropriate land parcels can be sent a letter of inquiry and a site selection criteria report. Advertisements can be placed in local newspapers and through other media. Other sources for identifying candidate sites include previous siting studies; use of former and present waste handling sites; aerial surveys and inventories; and county-wide listings of land parcels with GIS programs.

#### **Step 4—Broad Site Screening**

During this initial screening step, the strategy should be to quickly evaluate candidate sites using both the siting criteria and preliminary descriptions of each of the sites. Site-screening criteria may include regulatory, environmental, physical, land use, and other locational factors. The outcome of Step 4 is a prioritized list of candidate sites. In addition, Step 4 will also identify those sites with clear fatal flaws that should be eliminated from further consideration. Depending on the number of higher ranked sites, a decision may be made to drop the lower-rated sites from subsequent (Step 5) evaluations

#### **Step 5—Focused Site Screening**

Step 5 will further evaluate and re-rank, as necessary, the remaining candidate sites. These evaluations may require additional field investigations, conceptual facility planning, and environmental studies. As in Step 4, the intent is to examine sites for characteristics which would preclude them from further consideration before in-depth site evaluations are performed. SWAC will review and recommend the highest ranked sites and the number that should be carried forward to the detailed comparative evaluations in Step 6.

#### **Step 6—Comparative Site Evaluations**

Step 6 further evaluates and directly compares the remaining candidate sites based on their ability to satisfy facility-specific siting criteria, community-specific criteria, operational requirements, and potential impacts on the surrounding environment. Step 6 is somewhat more qualitative than Steps 4 and 5, with the highest-ranked sites re-examined from environmental, constructability, operational, cost, land use, and public policy perspectives in a final feasibility appraisal. In this and later steps, the screening criteria should not be exclusively utilized. Instead, all site related characteristics and impacts should be considered and assessed. SWAC will be involved in this evaluative process.

#### **Step 7—Developer and Local Government Decision Making**

The potential developer of the facility and the local government jurisdiction should then select a preferred site for consideration for permitting by the governing body of the local jurisdiction. If the preferred site is acceptable, the local government should support the permitting process, if necessary.

#### **Step 8—Environmental Review & Permitting Process**

As a part of the handling facility siting permit process, an environmental review must be done as a part of the SEPA process. A SEPA determination is to be made by the permitting jurisdiction. This environmental review process will be used to establish the potential environmental impacts of the candidate site. This may require the preparation of an Environmental Impact Statement (EIS) depending on the level of determination issued by the reviewing jurisdiction and whether the project will generate significant adverse environmental impacts.

Acquisition of necessary state, local, and federal permits must be completed once a specific site is selected. Potential problems in permit acquisition should be identified and resolved as early as possible in the siting process. However, if a permit is deemed unobtainable at any point in the process, the second or third ranked sites can be pursued for development.

# Public Information and Involvement Program

A sound public information and community involvement program is vitally important to successful solid waste facility siting efforts. Such a program must be tailored to fit the particular size and category of facility and the intended service area. A siting process includes continuous public participation to integrate community needs, concerns and influence the decision-making process. Addressing public concerns is also essential to building integrity and instituting good communications with the community. The community should be informed as to why a solid waste facility is needed. Technical information and assistance in understanding the information should be provided. Information should be relayed in various formats and should consider language barriers, literacy levels and preferred types of communications. The public needs to know why a facility is needed and what the consequences will be if no facility is sited. The public needs information about the alternatives to choose between and need to know the facts about a proposed decision to decide whether or not they support it.

Steps for public involvement include:

## Step 1 - Identify who and why

Different groups and interests will participate at different stages in the siting process, with different levels of interest and intensity of involvement. For each stage of the process, staff should identify the public involvement objectives. Objectives will be determined by deciding what is to be accomplished with the public during this step in the siting process.

## Step 2 - Determine the information needed

Each step of the siting process will have different information needs. An exchange of information includes what information the public needs to participate and what the County needs to ask to solicit information about the process.

## Step 3 - Identify the interest groups and organizations with whom the information must be exchanged

Interest groups and organizations for each stage of the siting process must be defined. Reviewing the kind of information needed from the public at each step will help define who should be involved.

## Step 4 - Describe any special circumstances that could affect selection of public involvement techniques

Special circumstances may change during the course of the process. A periodically review of the public involvement strategy is necessary and the strategy may adapt to changing circumstances. Example of special circumstances may include: the site may be in an area a short distance from a school or dust may be of concern for communities that believe they experience unusually high asthma rates.

## Step 5 - Identify appropriate techniques and their sequence to accomplish the information exchange

The preceding steps provide the information to complete this step. Some of the major techniques for communicating with the public include briefings, feature stories, news conferences, newsletters, newspaper inserts, news releases, paid advertisements, presentations to civic and technical groups, press kits and public service announcements. Forums through which the public can express feelings, thoughts or concerns include advisory groups/task forces, focus groups, hotlines, interviews, hearing, meetings, workshops and polls.

Depending on the specifics of the siting process, the following elements should be used in the public involvement process:

- **Early Notification.** The general public and local communities, including affected advisory committees and business groups, should be notified as soon as the intention for siting a facility has been reviewed and determined by policy makers. The public and community should be informed



of the goals, procedures, and timeliness of the process as well as when the facility would be constructed and become operational.

- **Appoint a Project Contact Person.** A single, designated contact person affiliated with the project should be appointed and made known to the public. This individual will ensure that consistent, correct information is given out and that the public and media know the sources of accurate information.
- **Update the Public.** Meetings, newsletters, press releases, and other information mechanisms should be used to provide status updates to the public on a regular basis. It is unlikely that too much information about a potential project will cause problems. However, too little information can often cause surprises that lead to problems.
- **Provide Opportunity for Public Interaction and Input.** During development of the siting criteria, identification of sites, and candidate site screening activities, the general public and local community should be given opportunities to provide input. These opportunities include providing comment on siting criteria; allowing the public to nominate potential sites; and providing information about potential and screened sites, including those features which the public views to be unfavorable.
- **In spite of extensive public information efforts, public response and participation may be initially low.** However, as the siting process continues and candidate sites are further evaluated and the number of sites is reduced, citizens may respond that they were not informed of the siting effort or given opportunity to participate in the process. Public information and involvement activities will not eliminate these types of complaints but reasonable efforts will keep these responses to a minimum.
- **Utilize Appropriate Facilities and Materials.** Public meetings should be staffed with persons knowledgeable about the siting process. Meeting facilities should be of a size and layout that all persons attending can see and hear speakers. It is better to overestimate the number of attendees rather than underestimate the number that will attend an informational meeting in order to provide adequate seating. In addition, attendees may be unhappy with the siting process, so materials and speakers should be provided that are even-tempered, objective, and conciliatory.
- **Acknowledge Site- and Program-Specific Concerns.** Site- and program-specific concerns will emerge as the siting process unfolds. Programmatic concerns that relate to broad questions of the efficiency and appropriateness of the handling technology to be used and management priorities will predominate in the early phases of siting process. Local community groups that form in and around individual candidate sites will articulate the concerns of many individuals through a few leaders and form an important part of the public information and involvement effort. As the process continues, local groups with site-specific focuses will be joined by individuals and organizations with more programmatic interests and focuses. It is important to acknowledge the different types of concerns so that presentation materials can be developed in response to both types of concerns.



## Siting Criteria

Criteria should be developed for identifying and evaluating potential sites. Three categories of criteria are applied during various stages of the siting process. These are exclusionary, technical and community-specific criteria. It is important to note that no site may meet all the criteria, in which case, each criterion's relative weight and importance should be considered.

### **Exclusionary siting criteria**

Exclusionary criteria are often defined by federal, state or local laws or regulations and might include such areas as:

- Wetlands and floodplains
- Endangered and protected flora and fauna habitats
- Protected sites of historical, archeological or cultural significance
- Prime agricultural land
- Parks and preserves
- Proximity to airports

### **Technical criteria**

Technical criteria are used to ensure that sites selected for evaluation meet required engineering, operational and transportation needs. These criteria address the following issues:

- Central location to collection routes
- Access to major transportation routes
- Site size requirements
- Sufficient space for on-site roadways, queuing and parking
- Truck and traffic compatibility
- Ability for expansion
- Space for recycling, composting and public education
- Buffer space
- Gently sloping topography
- Access to utilities
- Zoning designations and requirements

### **Community-specific criteria**

Community-specific criteria address impacts that the facility may have on the surrounding community. These criteria are typically less technical in nature and incorporate local, social and cultural factors. Examples of these criteria include:

- Environmental justice considerations
- Impact on air quality
- Impact on the local infrastructure
- Adjacent land uses
- Proximity to schools, churches, recreation sites and residences
- Prevailing winds
- Number of residences impacted
- Presence of natural buffers
- Impacts on existing businesses
- Expansion capability
- Buffer zones and screening measures
- Traffic compatibility
- Impact on historic or cultural features
- Impact on neighborhood character

First, exclusionary criteria are applied to potential sites. Once unsuitable areas are eliminated, the technical criteria and community-specific criteria are applied to all remaining options. Information for each potential site should be developed so the sites can be ranked. Based on the ranking, the top two to four sites should undergo more rigorous analysis to determine technical feasibility and compliance with the environmental and community objectives.

*End of Appendix M*