ATTACHMENT C

REVISED APPENDIX 6-A
(SOLID WASTE DISPOSAL FACILITY SITING CRITERIA)

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APPENDIX 6-A

SOLID WASTE DISPOSAL FACILITY SITING CRITERIA

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SOLID WASTE LAND DISPOSAL AND TRANSFORMATION FACILITY SITING CRITERIA

I. SITING CRITERIA

The criteria presented herein can be used to evaluate the suitability of locations for solid waste land disposal and transformation facilities.

The criteria have been developed to assist in achieving the following objectives to safeguard the public heath and safety when siting a solid waste land disposal/transformation facility. These criteria are not intended to replace any existing or future requirements/regulations mandated by Federal, State, and/or local agencies. However, these criteria have not been developed to be used for exclusionary purposes.

- Protect the residents
- Ensure the structural stability and safety of the facility
- Protect surface water
- Protect groundwater
- Protect air quality
- Protect environmentally sensitive areas
- Ensure safe transportation of solid waste
- Protect the social and economic development goals of the community

Each objective is defined in terms of a series of factors. These factors are listed in Table 5A-1. The description of each factor (pages 5A-5 through 5A-41) provides a definition of the factor, an explanation of the significance of each factor in terms potential impacts of the facility and concerns likely to arise from the community, a set of criteria to allow application of each factor to a site, and where applicable procedures for mitigating potential adverse impacts. For each criteria, the applicable solid waste land disposal/transformation facility is specified; unless otherwise noted, “land disposal facilities” are defined as both Class III and Unclassified (inert) landfills. It should also be recognized that some of the factors listed may not be applicable to all types of solid waste land disposal/transformation facilities, and therefore, care should be used as to the applicability of individual factors.

~~Both the~~The United states Code of Federal Regulations (CFR) ~~and the California Code of Regulations (CCR)~~ defines a sanitary landfill as “a land disposal site employing an engineered method of disposing of solid wastes on land in a manner that minimizes environmental hazards by spreading the solid wastes in thin layers, compacting the solid wastes to the smallest practical volume, and applying a compacting cover material at the end of each operating day.” (40 CFR ~~241.101 (s)~~240.101 (w) ~~& CCR Title 14, Chapter 9, Section 17225.62)~~

The California Public Resources Code (PRC) defines solid wastes as "all putrescible and nonputrescible solid, semi-solid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semi-solid wastes, and other discarded solid and semi-solid wastes. It does not include hazardous waste, low-level radioactive wastes or medical wastes." (PRC Section 40191)

California classifies landfills further by defining the acceptable material disposed, and the construction and safety standards for each landfill classification. These classifications are found in Title 23, Division 3, Chapter 15 of the CCR, Article 2, Section 2520 et seq. As defined, Class III landfills can accept any type of non-hazardous solid waste for disposal. Unclassified landfills can accept only non-organic inert materials.

The CCR defines a transformation facility as "a facility whose principal function is to convert, combust, or otherwise process solid waste by incineration, pyrololysis, destructive distillation, or gasification, or chemically or biologically process solid wastes, for the purpose of volume reduction, synthetic fuel production, or energy recovery. A transformation facility does not include a composting facility." (CCR Title 14, Division 7, Chapter 9, Article 3, Section 18720(a)(77))

II. USE OF THE SITING CRITERIA

The siting criteria presented here for the planning and evaluation of proposed sites for solid waste land disposal and transformation facilities have broad applicability in the siting process. For each phase of the siting process (i.e., site selection, site evaluation, site permitting, and facility permitting), the siting criteria can be applied either directly or indirectly during the decision making processes. The use of a standard set of siting criteria can add predictability to the siting process for all participants by providing uniformity in the planning and evaluation of proposed facilities. The siting criteria provide the proponent, the regulator, and the community with a rational set of factors on which to judge the attributes (both positive and negative) of a proposed facility.

In the site selection phase, the siting criteria provide the facility developer with a set of guidelines and constraints to be used to screen potential sites for facilities. If the facility developer knows at the outset that the regulators will be evaluating the proposed sites with the same set of criteria, the facility developer is less likely to propose a site that will be unacceptable in terms of the criteria. The developer can determine the best site location with respect to achieving the criteria and eliminate location that are deficient with respect to one or more crucial siting factors, especially those where mitigation measures would be limited, costly, or not feasible. The criteria also provide the facility developer with incentives to

blend the proposed facility into existing and future land use patterns. In addition, the siting criteria were developed within the realm of current solid waste and environmental regulations applicable to facility siting, and by meeting the criteria the proposed facility will likely have fewer problems to be worked out in the permitting phase of the siting process.

In the site evaluation phase, the siting criteria provide the local land use planner and others with review responsibility, and with a uniform set of criteria for evaluating all proposals. In essence, the criteria act as a template against which all facility proposals can be compared. The criteria will identify pertinent issues which will need to be specifically addressed in the evaluation of the site and in the environmental impact assessment, particularly with regard to the adequacy of proposed mitigation and the need for additional mitigation. The criteria can also be used as a checklist to determine which issues are likely to be of concern and should be focused on in the public debate over the siting of the facility.

In the site permitting phase, the siting criteria provide the decision-maker with a uniform set of factors on which to base judgments. If the proponent, decision-maker, and the public all view the proposed facility in the same context (i.e., through a uniform set of criteria) then the decisions on the facility will be based on the attributes of the facility and not on emotionalism or arbitrary judgment. By building a rational decision-making process into the facility siting process, facility developers and decision-makers can work with each other rather than against each other.

In the facility permitting process, the regulators will evaluate the facility with respect to established performance criteria (i.e., current regulations). As these are incorporated into the siting criteria, the use of the siting criteria by the facility developer will allow the facility developer to incorporate the performance criteria into his site selection and facility design decisions.

The siting criteria area applicable to both informal and formal review and evaluation processes. The selection of a site will likely involve an informal use of the criteria (e.g., preliminary decisions based on visual siting or secondary information), whereas the site evaluation and permitting components will require formal review and evaluation processes in the form of technical studies and preparation of environmental impact analyses. But whether the criteria are applied formally or informally, the siting criteria provide an uniform set of constraints, standards, and guidelines to be used in evaluating proposed facilities within a rational decision-making process.

TABLE 5A-1
SITING FACTORS

OBJECTIVES	FACTORS
A. Protect the residents	- proximity to populations
B. Ensure the structural stability and safety of the facility	- flood hazard areas - areas subject to tsunamis, seiches, and storm surges - proximity to active or potentially active faults - slope suitability - subsidence/liquification - dam failure inundation areas
C. Protect surface water	- aqueducts and reservoirs - discharge of treated effluent
D. Protect groundwater	- proximity to supply wells and well fields - depth to groundwater - groundwater monitoring - major aquifer recharge areas - permeability of surficial materials - existing groundwater quality
E. Protect air quality	- PSD* areas - nonattainment areas - landfill surface emission
F. Protect environmentally sensitive areas	- wetlands - proximity to habitats of threatened and endangered species - agricultural lands - natural, recreational, cultural, and aesthetic resources - significant ecological areas
G. Ensure safe and economic transportation of solid wastes	- proximity to areas of waste generation - distance from major transportation routes - structures and properties fronting minor routes - highway accident rate - capacity versus AADT* of access route
H. Protect social and economic development goals of the community	- consistency with General Plan

*NOTE PSD - Prevention of Significant Deterioration
AADT – Average Annual Daily Traffic
Source: Los Angeles county Department of Public Works, January 2005

PROTECT THE RESIDENTS

OBJECTIVES: PROTECT THE RESIDENTS

FACTORS: Proximity to Populations

PROXIMITY TO POPULATIONS

Definition: Proximity to populations is defined as the distance from the active portion of the facility to one or more dwellings used by one or more persons as a permanent place of residence, or to structures inhabited by persons temporarily for purposes of work other than daily activity.

Significance: Solid waste land disposal/transformation facilities should be located such that the health, safety, and quality of life of nearby residents and other persons are not jeopardized from planned or fugitive air emissions, odors, vectors, fires, noise from facility operations, subsurface migration of potentially harmful substances, and other possible impacts.

A host community should consider requiring either a buffer distance or natural or engineered barriers, such as berms, buildings, trees, fences, etc., between solid waste land disposal/transformation facilities and residences.

Criteria:

Land Disposal Facilities

Facility must be in conformance with local land use and zoning requirements of a county or city planning agency.

The County of Los Angeles prohibits construction of buildings or structures on or within 1,000 feet of a land disposal facility which contains decomposable materials/waste unless the facility is isolated by an approved natural or manmade protection system. The cities may have similar restrictions.

Transformation Facilities

These facilities should be located where the zoning and existing land use are compatible with the proposed use. For example, an abandoned chemical plant site in an industrial district could be considered to be a compatible land use for a transformation facility.

ENSURE THE STRUCTURAL STABILITY OF THE FACILTY

OBJECTIVES:	ENSURE THE STRUCTURAL STABILITY AND SAFETY OF THE FACILITY
FACTORS:	o Flood hazard areas o Areas subject to tsunamis, seiches, and storm surges o Proximity to active or potentially active faults o Slope stability o Subsidence/Liquefaction o Dam failure inundation areas

FLOOD HAZARD AREA

Definition: Flood hazard areas are defined as areas which are prone to inundation by floods having a 100-year return period, and debris flows resulting from major storm events. These areas can be determined by checking the Federal Emergency Management Agency flood insurance maps or with the Los Angeles County Department of Public Works.

Significance: Inundation of a solid waste land disposal/transformation facility by flood waters, debris and/or flash flooding may lead to the physical transport of wastes, possibly impacting water quality and water-dependent species. In addition, flooding interrupts the operation of the facility and could stress leachate handling systems of a land disposal facility.

Criteria:

All Facilities

Disposal facilities must comply with requirements of the Federal Clean Water Act, as amended, and local Stormwater/Urban Runoff requirements.

Land Disposal Facilities

Federal and State regulations require new, existing and expansions of existing Class III landfills to be designed, constructed, operated and maintained to prevent inundation or washout due to floods with a 100-year return period. In addition, the landfill must not reduce the flow of a 100-year flood or reduce the temporary storage capacity of the floodplain.

AREAS SUBJECT TO TSUNAMIS, SEICHES, AND STORM SURGES

Definition:

Areas subject to tsunamis, seiches, and storm surges are defined as areas bordering oceans, bays, inlets, estuaries or similar bodies of water which may flood due to tsunamis (commonly known as tidal waves), seiches (vertically oscillating standing waves usually occurring in enclosed bodies of water such as lakes, reservoirs, and harbors caused by seismic activity, violent winds, or changes in atmospheric pressure), or storm surges.

Significance:

Inundation of a facility by flood waters may lead to the physical transport of waste, possibly impacting water quality and water-dependent species. In addition, flooding interrupts the operation of the facility and could stress the leachate handling system of a land disposal facility.

Areas subject to tsunamis, seiches, and storm surges include the coastal areas of Los Angeles County. Inland lakes and reservoirs could be subject to seiching and storm surges. Coastal development is heavily restricted by Federal and State regulations, including the California Coastal Act of 1976.

Criteria:

All Facilities

Disposal facilities should avoid locating in areas subject to tsunamis, seiches, and storm surges unless designed, constructed, operated, and maintained to preclude failure due to such events.

PROXIMITY TO ACTIVE OR POTENTIALLY ACTIVE FAULTS

Definition:

An active fault is defined as a fault along which surface displacement has occurred during Holocene time (about the last 11,000 years) and is associated with one or more of the following:

- A recorded earthquake with surface rupture
- Fault creep slippage
- Displaced survey lines

A potentially active fault is defined as a fault showing evidence of surface displacement during Quaternary time (from the last 11,000 years to about the last 2 to 3 million years) and characterized by the following:

- Considerable length, e.g., over 30 miles
- Association with an alignment of numerous earthquake epicenters
- Continuity with faults having historic displacement
- Association with youthful major mountain scarps or ranges
- Correlation with strong geophysical anomalies

Significance:

The stability of a facility, a major concern for permanent facilities, is related to the potential for movement of the earth along fault zones.

Criteria:

All Facilities

All facilities are to be designed and constructed in accordance with the local building code.

Class III Land Disposal Facilities

Federal and State regulations prohibit the locating a new Class III landfill or a lateral expansion of an existing Class III landfill on a known Holocene Fault.

SLOPE STABILITY

Definition: Slope stability is defined as the relative degree to which the site will be vulnerable to the forces of gravity, such as erosion, landslide, soil creep, earth flow or any other mass movement of earth material which might cause a breach or carry wastes away from a facility, or inundate the facility.

Significance: The long-term containment of solid wastes at a site requires that the site be located in a geomorphic environment which does not encourage long-term instability by the processes of landslides and mass movement.

The State of California prohibits the locating of new Class III landfills within the areas of potential rapid geological change, including landslides and mass movement, unless containment structures are designed, constructed, and maintained to preclude failure.

Criteria: <u>All Facilities</u>

Facilities located within these areas should have engineered design safety features to assure structural stability.

SUBSIDENCE/LIQUEFACTION

Definition: Subsidence is defined as a sinking of the land surface following the removal of solid mineral matter or fluids (water or oil) from the rock beneath. Liquefaction refers to surface materials that develop liquid properties upon being physically disturbed.

Significance: Subsidence of the land may weaken the structural integrity of a facility. Liquefaction can quickly convert soil materials to fluid masses, resulting in the lateral spreading and subsidence of surface materials, and threatening the structural integrity of the facility.

Criteria:

All Facilities

Avoid locating in areas determined to have a high potential for failure due to subsidence or liquefaction unless containment structures are designed, constructed, and maintained to preclude failure as a result of such change.

DAM FAILURE INUNDATION AREAS

Definition: Dam failure inundation areas are defined as areas immediately adjacent to a river or stream below an embankment or masonry dam which would be inundated by the flow of water from the impoundment created by the dam if the dam were to fail.

Significance: Failures of large U.S. dams in the past 35 years illustrate the potential destruction to natural and manmade features in the danger reach. Dam impoundments have the potential to create a flood hazard which would have the same or worse effects as this associated with flood hazard areas.

Dam owners in California are required by the State Office of Emergency Services to prepare and submit dam failure inundation maps to local jurisdictions for use on local land use planning activities.

Criteria: All Facilities

Facilities should be located outside dam failure inundation areas.

PROTECT SURFACE WATER

OBJECTIVES:	PROTECT SURFACE WATER
FACTORS:	o Aqueducts and reservoirs o Discharge of treated effluent

AQUEDUCTS AND RESERVOIRS

Definition: Aqueducts are defined as conduits for conveying drinking water supplies. Reservoirs are defined as impoundments for containing drinking water supplies with minimal natural drainage areas.

Significance: Run-off or drainage from a facility could possibly enter aqueducts or reservoirs depending upon a number of factors.

Criteria:

All Facilities

Disposal facilities must comply with requirements of the Federal Clean Water Act, as amended, and local Stormwater/Urban Runoff requirements.

Class III Land Disposal Facilities

Federal and State regulations require new and existing Class III landfills to ~~fitted with~~include subsurface barriers, as well as precipitation and drainage control facilities.

DISCHARGE OF TREATED EFFLUENT

Definition:

Discharge of treated effluent is defined as the availability of wastewater treatment facilities to accept wastewater (effluent), or the ability to discharge treated effluent, when permitted, directly into a stream, including a dry stream bed, or into the ocean through a State-permitted outfall.

Significance:

Some facilities will generate a treated effluent requiring discharge to receiving waters. Facilities could discharge to sanitary sewers, with the appropriate regulatory agency requiring adequate pretreatment of wastewaters to a specified level before discharge.

Criteria:

Facilities Generating Wastewaters:

Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternately, wastewaters could also be transported in bulk via highways to facilities capable of treating them.

Facilities discharging into streams or into the ocean, directly or via storm drains, will require National Pollutant Discharge Elimination System (NPDES) permits issued by the Regional Water Quality Control Board. The NPDES permit sets limitations on the quantity and quality of the waste discharges, and may specify engineering and technical requirements to ensure compliance.

PROTECT GROUNDWATER

OBJECTIVES: PROTECT GROUNDWATER

FACTORS:
- Proximity to supply wells and well fields
- Depth to groundwater
- Groundwater monitoring
- Major aquifer recharge areas
- Permeability of surficial materials
- Existing groundwater quality

PROXIMITY TO SUPPLY WELLS AND WELL FIELDS

Definition: Proximity to supply wells and well fields is defined as the distance to an area~~s~~ used for extraction of groundwater drinking water supplies by high capacity production wells as identified by the presence of several wells that constitute a well field.

Significance: Areas that are immediately adjacent to wells and well fields may be extremely susceptible to contamination due to increased gradients and velocities caused by extraction of large volumes of water. An increased risk is associated with locating land disposal facilities in near proximity to existing production wells due to the potential danger of contaminating water.

Criteria: Land Disposal Facilities:

Facilities must meet the State of California's geologic setting criteria for ensuring no impairment of beneficial uses of surface water or of groundwater beneath or adjacent to the landfill.

DEPTH TO GROUNDWATER

Definition: Depth to groundwater is defined as the minimum seasonal depth to the highest anticipated elevation of underlying groundwater from the bottom of any proposed waste containing facility.

Significance: If the water table arises above the bottom of a facility, it may breach the facility liner or foundation and come into direct contact with the waste, causing groundwater contamination to occur.

Criteria: Land Disposal Facilities:

For Class III landfills, all containment structures must be capable of withstanding hydraulic pressure gradients to prevent failure due to settlement, compression or uplift as certified by a registered civil engineer or engineering geologist registered in California.

Federal and State regulations require new and expansions of existing Class III landfills to be fitted with containment structures that meet specified permeability standards. In addition, the facility must be fitted with a groundwater collection system and a leachate collection and removal system.

Furthermore, facilities must meet the State of California's minimum requirements for ensuring no impairment of beneficial use of surface water or of groundwater beneath or adjacent to the landfill, which also includes location restrictions.

GROUNDWATER MONITORING RELIABILITY

Definition:

Groundwater monitoring reliability is the reliability of a scientifically designed monitoring program to measure, observe, and evaluate groundwater quality and flow.

Significance:

A reliable groundwater monitoring system around a facility is required to provide an early warning detection system for possible contaminant migration within the facility property boundaries. Corrective measures and remedial action are more effective and less expensive if initiated during the early stages of any contaminant migration.

To assure that groundwater is reliably monitored, a facility should be located where the following can be characterized, modeled, and analyzed with a relatively high degree of confidence:

- Subsurface geology
- Hydrologic characteristics
- Direction and magnitude of groundwater flow

This implies that the site should be geologically and hydrologically uniform.

Criteria:

Land Disposal Facilities:

Facilities must comply with the California Regional Water Quality Control Board permit requirements for groundwater monitoring.

MAJOR AQUIFER RECHARGE AREAS

Definition:

Major aquifer recharge areas area defined as regions of principal recharge to major regional aquifers, as identified in the existing literature or by hydrogeologic experts familiar with Southern California. Such recharge areas are typically found in:

- Outcrop or subcrop areas of major water-yielding facies of confined aquifers.
- Outcrop or subcrop areas of confining units which supply major recharge to underlying regional aquifers.

Significance:

Aquifers receive their principal water supplies from areas which allow water infiltrating from the land surface to rapidly recharge the aquifer.

Criteria:

Land Disposal Facilities:

Facilities must meet the State of California's minimum requirements for ensuring no impairment of beneficial use of surface water or of groundwater beneath or adjacent to the landfill, which also includes location restrictions.

PERMEABILITY OF SURFICIAL MATERIALS

Definition: Permeability of surficial materials is defined as the ability of geologic materials at the earth's surface to infiltrate and percolate water.

Significance: The surficial materials overlying major water bearing formations in an area provides a pathway for vertical migration of potential contaminants. Permeable geologic materials can allow rapid movement of pollutants into major regional aquifers. Thick deposits of fine-grained materials of low hydraulic conductivity retard the rate of vertical percolation of pollutants to the groundwater, and provide an opportunity for detection and control of pollutant releases before it contaminates aquifers. Materials having a low permeability tend also to have favorable attenuation characteristics for individual contaminants.

Criteria: Land Disposal Facilities:

Federal and State regulations require new and lateral expansions of existing Class III landfill facilities to be underlain by a composite liner, consisting of a lower clay liner and an upper synthetic membrane, and which is of sufficient thickness to prevent vertical movement of fluids including waste and leachate. The lower component of which shall consist of a minimum of two feet of compacted soil/clay with a hydraulic conductivity of no more than $1x10^{-7}$ cm/sec.

Facilities must meet the State of California's minimum requirements for ensuring no impairment of beneficial use of surface water or of groundwater beneath or adjacent to the landfill, which also includes location restrictions.

EXISTING GROUNDWATER QUALITY

Definition:

Existing groundwater quality is defined as the chemical quality of the groundwater in comparison to the U.S. Environmental Protection Agency (EPA) Interim, Primary, and Secondary Drinking Water Standards; and, for constituents with no standards-to-follow guidelines suggested by research and reported in literature.

Significance:

The significance of the potential impact of a facility on groundwater quality is related to the actual potential use of the groundwater. The EPA has released guidelines defining protection policies for three classes of groundwater, based on their respective value and their vulnerability to contamination. The three classes are:

- Class I: Groundwater that is highly vulnerable to contamination and characterized by being irreplaceable or ecologically vital. These are designated as Special Groundwaters.

- Class II: Current or potential sources of drinking waters having other beneficial uses.

- Class III: Groundwaters not considered potential sources of drinking water and of limited beneficial use or otherwise contaminated beyond levels that allow cleanup using reasonably employed treatment methods.

Criteria:

Land Disposal Facilities:

Facilities must meet the California Regional Water Quality Control Board's minimum water quality protection standards and criteria in order to ensure no impairment of the beneficial uses of groundwater beneath or adjacent to the landfill.

PROTECT AIR QUALITY

OBJECTIVES: PROTECT AIR QUALITY

FACTORS:

- PSD areas
- Nonattainment areas
- Landfill surface emissions

PSD AREAS

Definition:

Prevention of significant deterioration (PSD) areas are defined as areas in attainment of the National Ambient Air Quality Standards (NAAQS) for one or more criteria pollutants. PSD areas are divided into three classes. Class I includes international parks, national wilderness areas exceeding 5,000 acres, national memorial parks exceeding 5,000 acres, and other areas approved by the EPA Administrator. All other areas are classified as Class II.

Significance:

The prevention of significant deterioration of high quality airsheds is mandatory under the Clean Air Amendments of 1990. Any new source meeting the statutory definition of either a new major source or modification to a major source locating in a PSD area must meet stringent conditions, including the installation of Best Available Control Technology (BACT), before initial construction or major modifications are allowed. Sources required to submit to PSD preconstruction review are:

- A new source of modification to an existing source where the increase in potential to emit is either 25 or 40 tons per year, depending on source category
- A significant emission increase of an attainment pollutant at an existing major stationary source,
- A net emission increase at a major stationary source located within 10 kilometers of a Class I PSD area, if the emission increase would impact the Class I area by 1.0 $\mu g/m^3$ (24-hour average).

The South Coast Air Quality Management District (SCAQMD), through the authority of the Stat Air Resources Board, is managing the PSD program in the South Coast Air Basin. The District's PSD regulations require BACT for all stationary sources with a net emission increase of a criteria pollutant.

<u>All Facilities:</u>

Criteria:

Facilities locating in regions which are classified under PSD regulation as major stationary sources will be required to submit to preconstruction review and apply BACT. All facilities locating in the South Coast Air Basin will be required to apply BACT for any net emission increase of an attainment criteria air pollutant.

NONATTAINMENT AREAS

Definition:

Nonattainment areas are defined as areas in which the level of one or more of the criteria pollutants (total suspended particulates, ozone, oxides of sulfur and nitrogen, and carbon monoxide) exceed the National Ambient Air Quality Standards (NAAQS).

Significance:

Federal law requires states to implement air pollution control programs to improve or preserve existing air quality in accordance with the NAAQS. Facilities, particularly incinerators, will emit pollutants in quantities which may exceed allowable limits.

The South Coast Air Basin in nonattainment for ozone, particulates, carbon monoxide, and nitrogen dioxide. Facilities emitting nonattainment air contaminants will be subject to New Source Review requirements including application of BACT or Lowest Achievable Emission Rate (LAER). Net cumulative emission increase exceeding certain threshold limits will require the obtaining of offsets to balance the increased pollutant levels.

Criteria:

All Facilities:

Facilities with air emissions locating in non-attainment areas and emitting air contaminants in excess of established limits will require preconstruction review under New Sources Review requirements, and the obtaining of a permit to Construct and a Permit to Operate from the SCAQMD. Air pollution control requirements vary by type of facility and are specified by SCAQMD.

Transformation Facilities:

In addition, the SCAQMD is required under Section 42315 of the State Health and Safety Code (H&SC) to perform a health risk assessment and make a determination that no significant increase in illness or mortality is anticipated by a project before issuing or renewing a permit to construct or operate.

EMISSIONS FROM CLASS III LANDFILLS

Definition: Landfill gases can be generated as a result of organic waste decomposition process. These gases generally consist of methane, carbon dioxide, with small quantities of hydrogen sulfide and carbon chain substances.

Significance: Methane gas, produced from the decomposition of organic materials, can be emitted from Class III land disposal facilities without a landfill gas control system.

Criteria: Land Disposal Facilities:

Class III land disposal facilities are subject to the SCAQMD rules and regulations. All existing and proposed Class III land disposal facilities must comply with the SCAQMD Rule 1150.1 “Control of Gaseous Emissions from Active Landfills.” The Rule requires installation of a landfill gas control system and perimeter monitoring probes, as well as, implementation of a monitoring program to ensure that landfill gas emissions do not exceed specified SCAQMD standards.

PROTECTION OF ENVIRONMENTALLY SENSITIVE AREAS

OBJECTIVES:	PROTECTION OF ENVIRONMENTALLY SENSITIVE AREAS
FACTORS:	o Wetlands o Proximity to habitats of threatened and endangered species o Agricultural lands o Natural, recreational, cultural, and aesthetic resources o Significant ecological areas

WETLANDS

Definition:

Wetlands are defined as areas, such as saltwater, freshwater, and brackish swamps, marshes, or bogs inundated by surface or groundwater with a frequency to support, under normal circumstances, a prevalence or vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.

Significance:

The preservation of wetlands area is critical to preserve a balanced ecosystem. The location of a land disposal facility in a wetlands area could result in the loss of critical habitats, loss of the wetlands for groundwater recharge, and an increase in the potential for pollutant dispersal in ground and surface waters.

Wetlands areas are located primarily along the coast and near embayments and estuaries. Development in coastal areas, and wetlands areas in particular, is restricted by Federal and State regulations, including the California Coastal Act of 1976.

Criteria:

Transformation Facilities:

Facilities should avoid locating in current wetlands areas, as defined in adopted general, regional, and State plans, unless: a) industrial usage is permitted by the local government's land use planning or zoning, and b) fish, plant, and wildlife resources can be maintained and enhanced in a portion of the site, or preserved elsewhere in the area.

Land Disposal Facilities:

Facilities should be located outside wetland areas, as defined in adopted general, regional, and State plans.

PROXIMITY TO HABITATS OF THREATENED AND ENDANGERED SPECIES

Definition: Habitats of threatened and endangered species are defined as areas known to be inhabited permanently or seasonally or known to be critical at any stage in the life cycle of any species of wildlife or vegetation identified or being considered for identification as “endangered” or “threatened” by the U.S. Department of Interior or the State of California.

Significance: Threatened and endangered species are important as biological resources because of the irreversibility of species extinction.

The loss of such species would seriously interfere with the health of the ecosystem and deter human education and research.

Criteria: <u>All Facilities:</u>

A facility should not locate in habitats of threatened or endangered species unless the local land use authority makes a determination that a proposed facility is compatible with the surrounding resources and does not pose a substantial threat to the resource.

AGRICULTURAL LANDS

Definition: Agricultural lands are lands zoned countywide and/or used locally for agricultural use.

Significance: Farmlands and other agricultural lands are natural and economic resources essential for food production. These lands serve both private and public interests in terms of food, jobs, and open space preservation.

Criteria: Land Disposal Facilities:

A facility located in areas zoned for agricultural uses must obtain a local land use permit from the local jurisdiction.

NATURAL, RECREATIONAL, CULTURAL, AND AESTHETIC RESOURCES

Definition: Natural, recreational, cultural, and aesthetic resources are defined as public and private lands having local, regional, state, or national significance, value, or importance. These lands include national, state, regional, county, and local parks and recreation areas, historic and prehistoric resources, wild and scenic rivers, scenic highways, and public and private preservation areas.

Significance: Facilities sited in these areas could adversely impact the natural, recreational, cultural, or aesthetic value of the lands.

Criteria: All Facilities:

Facilities should avoid locating in these areas unless the applicant can demonstrate that a facility is compatible with the land use in the area.

SIGNIFICANT ECOLOGICAL AREAS

Definition: Significant ecological areas are defined as areas which possess biotic resources that are uncommon, rare, unique, or critical to the maintenance of wildlife on a Federal, Stat, or Countywide basis.

Significance: The preservation of significant ecological areas is critical for the protection and preservation of biological resources or for maintaining natural ecosystems.

Criteria: All Facilities:

Location of a proposed facility must be in conformance with a local jurisdiction's General Plan and abide by Federal and State regulations regarding unique or protected species and their habitat.

ENSURE SAFE TRANSPORTATION OF SOLID WASTE

OBJECTIVES:	ENSURE SAFE TRANSPORTATION OF SOLID WASTE
FACTORS:	o Proximity to areas of waste generation o Distance from major rout o Structures and properties fronting minor routes o Highway accident rate o Capacity vs. Average Annual Daily Traffic of access roads

PROXIMITY TO AREAS OF WASTE GENERATION

Definition: Proximity to areas of waste generation is defined as travel time from the wasteshed areas to the proposed facility.

Significance: The greater the distance between a wasteshed area and a proposed facility will result in the increase of transportation costs; emission of air pollutants; and risk in vehicle accidents.

Generators also benefit from shorter travel requirements. Transportation costs can have a marked impact on waste management costs. High transportation costs could possibly induce some generators to use unsafe disposal practices.

Criteria: All Facilities:

Facilities should be centrally located near wasteshed areas to minimize potential impacts associated with greater travel distances.

Alternate transportation, by rail, may be evaluated in regard to specific sites to be located at distant areas from the wasteshed.

DISTANCE FROM MAJOR ROUTE

Definition: Distance from a major route is defined as the distance along a minor route (city street, boulevard, or undivided highway) that a truck must travel to reach the facility after leaving the major route (street or interstate divided highway).

Significance: Public concern over a hauler's route is heightened when transportation occurs over roads not constructed for heavy truck traffic, not intended for it, or containing many restrictions such as traffic lights or horizontal and vertical curves. The distance on minor routes should be kept to a minimum to avoid interference with commercial or residential traffic and reduce the risks of accidents.

Criteria:

All Facilities:

Distance traveled on minor roads should be kept to a minimum. Facilities are best located near an exit of a major route or accessed from major routes via routes used locally for truck traffic.

Alternately, local roads could be upgraded by increasing their load capacity, improving traffic controls or building truck –only lanes or routes. The facility developer may build a direct access road to avoid the minor route(s).

STRUCTURES AND PROPERTIES FRONTING MINOR ROUTES

Definition: Structures fronting minor routes are defined by the number and type of residences, schools, hospitals, and shopping centers having primary access from the transportation route between the entrance of a facility and the nearest major route.

Significance: A great increase in truck traffic, particularly on roads used primarily by cars, may cause considerable noise, congestion, and disruption of normal daily activities.

Criteria: All Facilities:

Facilities should be located such that any minor routes from the major route to the facility are used primarily by trucks, and the number of nonindustrial structures (homes, hospitals, schools, etc.) is minimal.

HIGHWAY ACCIDENT RATE

Definition: The highway accident rate is defined as the occurrence of minor to fatal accidents per vehicle miles traveled, as recorded by the California Department of Transportation.

Significance: Accident rates vary significantly by type of road and average annual daily traffic (AADT). Accident rates should, however, be analyzed in conjunction with information about the percentage of truck usage and the design of the road. The accident rate alone should not be used to judge the safety of the highway.

Criteria: All Facilities:

The minimum time path from major wasteshed areas to a facility should follow highways with low to moderate average annual daily traffic and accident rates as guided by the research and findings of state, regional, county, and city transportation planners.

CAPACITY VERSUS AVERAGE ANNUAL DAILY TRAFFIC OF ACCESS ROADS

Definition: Capacity versus average annual daily traffic (AADT) of access roads is defined as the number of vehicles the road is designed to handle versus the number of vehicles it does handle on a daily basis, averaged over a period of one year.

Significance: Roads currently handling at or near the maximum number of vehicles should not be considered good routes for the transport of solid waste. Ideally the roads best suited fro solid waste transportation are those on which the additionally vehicles serving the facility will have little or no impact on the average annual daily traffic relative to the capacity.

Criteria: All Facilities:

The changes in the ratio capacity to AADT should be negligible after calculating the number of trucks on the major and minor routes expected to service the facility.

PROTECT THE SOCIAL AND ECONOMIC DEVELOPMENT GOALS OF THE COMMUNITY

OBJECTIVES:	PROTECT THE SOCIAL AND ECONOMIC DEVELOPMENT GOALS OF THE COMMUNITY
FACTORS:	Consistency with General Plan

CONSISTENCY WITH GENERAL PLAN

Definition:

Consistency with the General Plan is defined as consistency of the proposed facility with the long-term goals of the county or city as expressed by its local planning instruments: the General Plan and implementing ordinances.

Significance:

"Local Planning" is an ongoing process of directing growth and development in accordance with previously formulated plans, policy document, ordinances, and actions.

The state of California requires by law that counties and cities develop a General Plan and implementing ordinances. The Los Angeles County General Plan sets forth policies for the unincorporated areas in the County. This plan was coordinated with the cities in the County and basically reflects the planning efforts of these cities.

A General Plan contains policy statements and guidelines reflecting the County's or city's outlook on future growth and development.

Zoning ordinances are used as a principal means of implementing the General Plan. Each zone represents a special application of land use regulations and guidelines. This zoning, as required by State law, must be consistent with the adopted General Plan.

Consistency between the facility and local planning is necessary to ensure that the facility development will not interfere with the achievement of city or County goals. Preferred sits are usually those that area away from residential areas and area well-served by utilities.

Criteria:

<u>All Facilities:</u>

The proposed facility must be consistent with the county or city General Plan. However, the applicant may petition for an amendment to the General Plan. In addition, the proposed facility must be found to be in conformance with the Countywide Sitting Element of the County of Los Angeles. This is accomplished by obtaining a valid Finding of Conformance granted by the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force.

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