Environmental Review Documents Outline for Composting Facilities and In-Vessel Digestion Facilities

This outline was developed as a guide to Lead Agencies in the preparation of California Environmental Quality Act (CEQA) documentation and to Responsible Agencies for their review of documentation for the construction and/or operation of a composting facility and an in-vessel digestion facility requiring a full solid waste facility permit (SWFP). All of this information is pertinent to the processing and issuance of a SWFP and is of great benefit if discussed fully in an Environmental Impact Report (EIR) or at an appropriate level of detail in a Negative Declaration (ND) or Mitigated Negative Declaration (MND) developed for the issuance of a SWFP. The appropriate level of detail should be determined by early consultation and cooperation between the Lead Agency, Local Enforcement Agency (LEA) and other Responsible Agencies.

General Background Information

- Project Location (including Township, Range and APN where appropriate)
- Owner and operator of the facility (property owner if different)
- Name and registration number of site design engineer
- Need for project
- Area served and population
  - city
  - county
  - out-of-county
- Service projections for the life of the facility taking into account (AB 939 waste diversion mandates)
- Existing facilities
- Regional map/ Surrounding Area map
- Conformance to Waste Management Plan (compliance with PRC Section 50000)
- Waste Management Plan and General Plan Consistency (compliance with PRC Section 50000.5)
- Initial Study and environmental checklist.

Project Description

Site Description

- topographical map
- size of site (acres or square feet)
- site design, including but not limited to site/layout map with building locations, turn around areas, storage areas, well locations, and property boundaries
- total capacity
- average and maximum quantity of individual types of waste received daily

- sources of individual types of waste received daily
- expected facility life span
- current land use
- historic land use
- current zoning
- detailed environmental setting, including but not limited to climatological factors, physical setting, ground and surface water, soils, surrounding land use
- type of users of the site (commercial, public, private)
- construction description (e.g. grading plan)
- list of approvals required by federal, state and local agencies in order to implement project

If a composting facility, include:

- site design including but not limited to active compost area and drainage features
- maximum quantities of active compost, feedstocks, amendments, and additives stored on-site at any one time (in cubic yards)

Design and Operations

- verification of compliance with USEPA, California Department of Health Services, Department of Toxic Substances Control, Air Quality Management District or Air Pollution Control District, CalRecycle, Regional Water Quality Control Board, State Minimum Standards for solid waste handling and disposal requirements
- general facility design
    - configuration and equipment
    - energy recovery components
    - resource recovery components
    - screening of incompatible wastes
    - typical operation cycle, processing time for each phase
- waste characterization
- waste handling method
    - removal frequency
    - final deposition: route, distance and time to travel to disposal site
- equipment
    - number and types
    - emissions
    - stand-by equipment availability, number and type of equipment
- operating days and hours (days/week, hours/day, start stop times)
    - describe the operating cycle of the facility
- traffic number and types of vehicles
    - access routes (ingress/egress)
    - unloading/loading (recovered materials, waste transfer vehicles)
    - on-site roads
    - public and commercial routing
    - number and types of vehicles entering and leaving the site per day
    - emissions
    - modification required during inclement weather

- provisions for site security (fencing, gates, police or security protection)
- fire controls
    - nearest fire department
    - on-site
- vector controls
- litter controls
- odor controls
- dust controls
- drainage
    - surface water run-on and run-off
- noise and vibration control provisions
    - noise levels generated by the project (construction and operation)
    - vibration levels generated by the project (construction and operation)
    - weight scales
- water supply
- leachate control
    - separator
    - disposal, public sewer or other
- emissions
    - background
    - project
        - process controls
- energy consumption
    - transfer facility
    - transportation
    - resource recovery activities
- method of handling special wastes (liquids, sludge, white goods)
- method of handling incidental hazardous waste
    - exclusion
    - storage
    - removal
- number of employees and duties
- site improvements
    - drinking water (well, municipal, bottled)
    - sanitary facilities
    - communications
    - office building
- risk of upset
    - contingency plan
    - public health and safety
    - employee health and safety

If a composting facility, include:

- leachate containment
    - low permeability barrier, pad liner

        - material type
        - availability
        - moisture content
    - collection and containment system
    - recirculation plan
- method of composting
    - construction
    - window, static, “within vessel”
    - forced air, mechanical
    - maximum height, length and width, spacing
    - typical operation cycle, processing time for each phase
    - type of emission
    - rate of production
- additives
    - types, amount, and application method
    - chemical (e.g. fertilizer)
    - bulking agent
    - microbial
- monitoring
    - feedstock types
        - type of test
        - frequency
        - responsible party
        - reporting method
- provisions for unacceptable feedstock
- compost process
    - type of test
    - frequency
    - responsible party
    - reporting method
- leachate
    - type of test
    - frequency
    - responsible party
    - reporting method
- product
    - type of test
    - frequency
    - responsible party
    - responsible method
- water supply
    - to piles, windrows
    - to grinders
    - to mixers

    - for fire suppression
    - for drinking supply

Existing Environment

Climate

- average precipitation
    - seasonal
    - annual
- seasonal temperature range
- wind conditions (wind rose)
    - direction
    - velocity
- evaporation rate
    - seasonal
    - annual

Air

- baseline air quality data (attainment status)
- existing emissions
    - landfill equipment
    - hauling vehicles
    - other emission sources
- project emissions
    - landfill equipment
    - hauling vehicles
    - other emission sources
    - dust including PM-10 data for project construction operations
- landfill gas emissions
- leachate evaporation
- odor

Water

Surface water

- existing surface waters (streams, rivers, etc.)
- drainage courses
- average seasonal flows
- greatest anticipated 24 hour or 6 day rainfall amount
- beneficial uses of waters
- water quality analyses
- watershed characteristics

Subsurface water

- existing subsurface water (aquifer, aquiclude, etc.)
- beneficial uses of waters
- water quality analyses (site specific tests)
- location of wells within one mile of site
- depth to groundwater (from site specific tests)

Geology

- description of subsurface strata (in place)
- soils
    - unified soil classification (CH, OH, etc.)
    - soil texture, percent passing through #200 sieve
    - liquid limits
    - plasticity index
    - permeability of soils (field samples)
- seismicity
    - estimate of seismic risk to the site (faults underlying the site, distance to nearest fault, maximum probable earthquake (MPE), maximum ground acceleration (MGA) of fault, etc.)
    - liquefaction potential
    - differential settlement potential
    - boring logs (include locations)
- mineral deposits (including gavels)

Land

- description of site surface
- maximum slope on the site
- slope stability

Flora

- description of site flora
- vegetation which will be permanently removed
- relation between vegetation and slope stability and erodability
- rare and endangered flora (including takes)

Fauna

- description of site fauna
- resident population of rodents and other potential vectors
- rare and endangered fauna (including takes)

Noise

- local noise ordinance criteria
- background noise levels at and adjacent to site
- location of noise receptors (residents, schools, hospitals)

Social

- growth inducement

Land use compatibility

- zoning
- adjacent land use
- distance to nearest residences

Plan consistency

- general plan
- regional plan (CIWMP)

Historical/Cultural

- archaeological sites
- historical sites
- cultural sites

Traffic

- existing traffic conditions

Aesthetics

- compatible with specific general plan policies or viewshed ordinances

Cumulative Impacts and/or Significant Impacts Review (only required for EIR)

If project induced impacts are found to be significant or cumulative, then a discussion within the appropriate environmental factor (below) is warranted.

- Climate
- Air
- Water
    - surface
    - subsurface
- Geology
- Land
- Flora
- Fauna
- Noise
- Social
- Historical/Cultural
- Traffic
- Aesthetics

Alternatives (if required)

- Review of alternative locations
- Other alternatives (e.g. reduced project)
- No project

Executive Summary

- Summary of project
- Impacts, mitigation measures and alternatives
- Areas of controversy
- Resolution of issues

Organizations and People Consulted

- Contributors to report (names and qualifications)
- Persons consulted

Mitigation Reporting or Monitoring Program

- Identification of impacts
- Identification of mitigation measures

- Implementation schedule
- Monitoring frequency
- Responsible party
- Enforcement method

CalRecycle's CEQA Review

Per CEQA Guidelines (Section 15096), once a document is completed by the Lead Agency, Responsible Agencies must determine whether or not the evaluation of potential environmental impacts assessed in the ED is adequate for their agencies specific needs (i.e., CalRecycle's permitting process).

The purpose of CalRecycle staff's review and preparation of comments during the public review period is to help decision-makers to (1) identify potential impacts from proposed projects, (2) determine whether any such impacts are significant, and (3) ascertain whether significant impacts can be mitigated to a level of insignificance in compliance with the CEQA statutes and guidelines. In order for CalRecycle staff to ascertain that the ED is adequate for use in the solid waste permitting process, the proposed project must be described in sufficient detail and the potential environmental impacts that may result from the proposed project must be identified and evaluated clearly in the environmental assessment and offer mitigating measures to avoid or lessen potentially significant effects (CEQA Guidelines, Section 15071[e]).

If the Lead Agency identifies a potential significant environmental impact but finds that the impact is less than significant or that no mitigation is available or necessary, supporting documentation and/or studies should be specifically referenced and be made available for review or included in the ED to support such analysis.

CEQA Analysis and SWFP Conditions

CEQA Guidelines (CCR) Section 15063(a)(1) states that: "All phases of project planning, implementation and operation must be considered in the Initial Study of the project". This consideration, when evaluating for a SWFP revision, should consider the potential environmental impacts of any changes in design and operation of the facility that were not specifically considered in the existing SWFP.

When determining the adequacy of an ED for purposes of SWFP concurrence, CalRecycle staff will compare the design and operation of the facility as described in the SWFP with the project as described and evaluated in the ED. The first question is: does the CEQA evaluation for potential impacts resulting from the project thoroughly assess the potential primary and secondary impacts to the environment and/or public health and safety? The second question is: does the CEQA evaluation in the ED support the conditions of the proposed permit? For instance, does the ED also assess the potential traffic, noise, dust, vector and other impacts that can be associated with a significant increase in permitted waste throughput requested in a SWFP? When this type of information is included and addressed in the ED, the CEQA process is greatly facilitated. When this type of information is not included in the project description or elsewhere in the ED, it becomes very difficult for CalRecycle staff to determine the adequacy of the ED for purposes of our environmental evaluation.

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