

SECTION I
BACKGROUND AND PURPOSE

Chapter 1
INTRODUCTION AND SUMMARY

**A. ALAMEDA COUNTY'S HAZARDOUS WASTE
MANAGEMENT PLAN: PURPOSE AND APPROACH**

PURPOSE

The purpose of the County Hazardous Waste Management Plan is to develop and implement hazardous waste management policies for the management of hazardous waste in Alameda County. The primary focus of the plan is to encourage the reduction of the amount of hazardous waste that is generated in the County to the greatest extent feasible to minimize the number of hazardous waste management facilities that are needed to manage the waste. Alameda County, its cities and special districts will act to provide for the safe, effective management of hazardous wastes generated within the County. As stated in Policy 14, Chapter 2 of this Plan, new offsite hazardous waste management facilities will be primarily limited to a scale necessary to meet the hazardous waste management needs of Alameda County; larger facilities may be permitted in accordance with interjurisdictional agreements reached between Alameda County and other jurisdictions or upon determination of the local governing body that the project meets local planning criteria and serves public needs. Alameda County, its cities, and special districts recognize their collective responsibility to cooperate with other governments in the region and the state in planning for the effective management of hazardous wastes generated in the region and the state in accordance with the hazardous waste management hierarchy described later in this chapter.

Recent state and federal laws mandate the phase-out of land disposal of untreated hazardous wastes over the next few years. Alternative management approaches must be implemented by May 1990, so that land disposal can be ended.

GOALS AND OBJECTIVES

Alameda County's Hazardous Waste Management Plan dated March 1989 was developed by the County Waste Management Authority's Hazardous Waste Committee and an Advisory Committee, with the assistance of a technical consultant, county staff, and the cities. A separate programmatic Environmental Impact Report (EIR) on the plan was prepared to meet the requirements of the California Environmental Quality Act (CEQA). The 1989 Plan was not approved by the California Department of Health Services (DHS) for a variety of reasons. The DHS also rejected the Hazardous Waste Management Plans of 44 other California counties for many of the same reasons.

Alameda County's Hazardous Waste Management Plan has been revised for resubmission to the DHS under the provisions of Assembly Bill 2595 (1990). The revised Plan was prepared by the Alameda County Waste Management Authority's Hazardous Waste Committee, with the assistance of a technical consultant, the Authority staff, and the cities. To meet the requirements of the California Environmental Quality Act, a Mitigated Negative Declaration has been prepared.

The plan's goals are, first, to protect the public health, safety, and welfare, and environment through eliminating land disposal of untreated hazardous wastes; second, to maintain economic vitality by helping businesses and households reduce production of hazardous wastes and manage their remaining wastes effectively; and third, to reduce the tonnage of hazardous waste generated

in the year 2000 by 30 percent from the baseline year of 1989. While there are certain recognized barriers to minimizing the generation of hazardous waste, the economic benefits to the generator and the potential reduction in liability, as well as regulatory incentives and disincentives are expected to result in an estimated 25 to 30 percent reduction in the generation of hazardous waste by 2000. Economic well being and quality of life are related to industrial, commercial, and household activities within the county and also have a relationship to mismanagement of wastes. Waste reduction and waste recycling should be the goal of industry, small business and households. The overall objectives of the planning process include:

- Accepting local responsibility to plan for effective management of hazardous wastes produced by local businesses and households
- Encouraging maximum feasible source reduction
- Involving the public in planning and decisions on facility siting
- Determining local levels of source reduction, and resulting needs for alternative treatment methods and facilities to manage hazardous wastes
- Identifying designated general areas in which hazardous waste facilities might be able to be located, based on siting criteria and local government planning/permitting requirements. Any proposed facility will also be subject to the local land use review process and this Plan does not supersede the local process.
- Encouraging development of needed facilities by the private sector

APPROACH

The Alameda County Hazardous Waste Plan was prepared in response to AB 2948 (Tanner, 1986) which established procedures for preparation of the plan. AB 2948 has three major components: a planning process; a hierarchy of waste management strategies; and a facility siting process.

- The Planning Process requires each county to assess its current hazardous waste stream, and make projections to 2000. Existing waste management approaches and facilities within and outside the county are evaluated, and future needs projected for expanded or new waste management facilities. Special attention is paid to the problems of small quantity waste generators, household hazardous wastes, and waste transportation issues. Each county develops criteria to identify general areas appropriate for facility locations and involve the public in preparing the county plan and siting criteria.
- The plan must be approved by a majority of cities containing a majority of the Population of the incorporated area of the county, by the Waste Management Authority, and by the Board of Supervisors; it must also be approved by the State Department of Health Services. Once approved, the County and all cities must incorporate the Plan into their general plans within 180 days.
- A Hierarchy of Waste Management Strategies is encouraged by AB 2948. Figure 1-1 shows this hierarchy graphically. The hierarchy urges that the first priority be to reduce hazardous wastes during manufacturing (and service and household) activities through the use of fewer hazardous materials, material substitutions, process modifications, and housekeeping measures. Once source reduction has been pursued to the extent technologically and economically feasible, the second

priority is to recycle and reuse wastes. Remaining wastes and the residuals left by recycling would then be treated or incinerated. Where hazardous waste is amenable to forms of treatment other than incineration, these other forms of treatment should be given preference over incineration. The treatment residuals not capable of further reduction would be placed in secure land disposal units. No untreated wastes will be placed on or in the land.

- AB 2948 establishes a new Facility Siting Process. Procedures to speed and coordinate the permitting process at the state and local levels are provided. The bill requires that all proposed offsite hazardous waste management facilities, such as new treatment units, be consistent with the Plan's stated goals, policies, and siting criteria. A Local Assessment Committee, supported by a technical consultant, enters into dialogue with a facility developer on behalf of the host community concurrent with the request for a land use permit. Regulations relative to the membership and functions of the Local Assessment Committee are in the California Health and Safety Code (HSC) Section 25199.7. The following quote from HSC 25199.7 shows the functions of the Local Assessment Committee:

"(2) The local assessment committee shall, as its primary function, advise the appointing legislative body of the affected local agency of the terms and conditions under which the proposed hazardous waste facility project may be acceptable to the community. To carry out this function, the local assessment committee shall do all of the following:

(A) Enter into a dialogue with the proponent for the proposed hazardous waste facility project to reach an understanding with the proponent on both of the following:

(i) The measures that should be taken by the proponent in connection with the operation of the proposed hazardous waste facility project to protect the public health, safety, and welfare, and the environment of the city or county.

(ii) The special benefits and remuneration the facility proponent will provide the city or county as compensation for the local costs associated with the operation of the facility.

(B) Represent generally, in meetings with the project proponent, the interests of the residents of the city or county and the interests of adjacent communities.

(C) Receive and expend any technical assistance grants made available pursuant to subdivision (g).

(D) Adopt rules and procedures which are necessary to perform its duties.

(E) Advise the legislative body of the city or county of the terms, provisions, and conditions for project approval which have been agreed upon by the committee and the proponent, and of any additional information which the committee deems appropriate. The legislative body of the city or county may use this advice for its independent consideration of the project."

As discussed in Chapter 9 of this Plan, local government land use decisions on facility proposals may be appealed to a new seven-member state board. If the board finds that the proposed facility would be consistent with the reasonable restrictions contained in the approved Plan, the local decision may be overridden and the facility granted the necessary land use permit.

This plan provides criteria for identifying environmentally suitable locations for needed facilities. The process is intended to reinforce traditions of local home rule, and yet still overcome the "Not in my backyard" (NIMBY) problem. This delicate balance is achieved by encouraging counties to develop appropriate, responsible plans based on equity and local need; to have these plans approved by the State and by the cities in their jurisdictions; and to hold those local jurisdictions accountable through the new Appeal Board for approval of facility siting proposals in environmentally sound locations, consistent with the approved County Plan.

KEY POLICIES DIRECTING THE PROCESS

Plan policies are summarized in this section and described in full in Chapter 2.

- The Plan's top priority is to promote aggressive waste reduction, including reduction in the use of toxic materials. New firms entering the county (or those seeking to expand existing facilities) shall demonstrate how they will comply with the waste management hierarchy as a condition of receiving land use and business permits. All existing hazardous waste generators will be required to implement the hazardous waste management hierarchy to the maximum extent feasible both technically and economically.
- Provide a sound basis for source reduction and for planning and siting needed new facilities which offer alternatives to continued reliance on disposal of hazardous wastes in the air, water, or land.
- Encourage active involvement of the public, large and small industry, and civic and environmental organizations, in the development and implementation of this plan.
- Promote widespread ongoing education of citizens on hazardous materials and waste management issues. A program will be developed to educate households about their hazardous materials and wastes and the effects when they are discarded into solid waste landfills; this program should include ways to collect and treat household hazardous wastes effectively.
- Provide special attention to small firms and small generators which have special needs. Programs to provide technical and financial assistance will allow small firms to pursue waste reduction and the hierarchy. Such programs will be financially self-sustaining, yet with fees designed not to impose such a burden that it discourages participation and responsible hazardous waste management.
- Encourage onsite treatment of hazardous wastes in preference to offsite treatment. Where needed, however, offsite facilities should be located as close as practical to the sources of hazardous waste generation--within the limits reasonably imposed by economies of scale, market service areas, and environmental suitability (including consistency with this plan's siting criteria). In particular, transfer stations meet an important need, especially for the county's many small businesses.
- Recognize local agency responsibility to assist other governments in the region and state in planning for the effective management of hazardous wastes generated in the region and state in accordance with the hazardous waste management hierarchy. Local agencies will participate in and support efforts designed to allocate and develop facilities among all jurisdictions according to interjurisdictional agreements, each facility's environmental suitability, and each facility's economic viability.
- Local agencies should prepare to approve siting proposals in environmentally acceptable locations for modern treatment facilities, transfer stations, and residuals repositories sized to meet local needs and/or commitments in interjurisdictional agreements.

B. MAJOR ISSUES AFFECTING THE HAZARDOUS

WASTE MANAGEMENT PLAN

In addition to the policies, a number of critical issues affect hazardous waste management, and preparation and implementation of the plan in Alameda County. The county's current and future hazardous waste stream must be understood and appropriate criteria for designating general areas in which facilities might be located must be developed and applied. Barriers include public concern over proposed nearby facilities, shortages in funding for data and staff, and the lack of local government experience in implementing the Tanner legislation. The public must be involved throughout the process.

Understanding County Current and Future Waste Streams: A major requirement of the planning effort involves evaluating the types and amounts of hazardous wastes currently being generated within Alameda County, and estimating production through 2000. This is a difficult task, given the uncertainties associated with current data and with economic projections and the complexities of new treatment standards being implemented.

Siting Criteria and Designation of General Areas: Under AB 2948, the siting criteria apply only to offsite, multi-user hazardous waste management facilities, including transfer stations, recycling and treatment facilities, incinerators, and residuals repositories. The siting criteria (Chapter 9) are based on the criteria in the DHS Guidelines for preparation of County Hazardous Waste Management Plans, but they reflect the characteristics and adopted policies of Alameda County as well. As recognized in the DHS Guidelines, some of the criteria are exclusionary, meaning that some or all types of hazardous waste facilities cannot be located in areas identified by these criteria. Others of the criteria are conditional, meaning that some or all types of facilities may be located there if they can meet certain conditions.

AB 2948 and the DHS Guidelines require that the County Hazardous Waste Management Plan must either show specific sites for hazardous waste facilities, or contain siting criteria and designated general areas in which hazardous waste facilities may be able to be located. The DHS requires that the Plans contain maps showing the county's siting criteria applied across the county area (to the extent that the criteria can be mapped) and composite maps showing designated general areas for different types of hazardous waste facilities. The Alameda County Hazardous Waste Management Plan contains maps showing designated general areas for different types and sizes of hazardous waste facilities. It is important to recognize that the designated general areas might meet general siting criteria but represent only the results of a first screening of county areas to eliminate those areas in which hazardous waste facilities can clearly not be located (such as wetlands). The fact that the Plan maps show designated general areas does not provide assurance to a facility developer that the facility will be permitted to locate in that area nor does it imply a priori acceptance of siting in these general areas.

When a hazardous waste facility is proposed, the facility developer must demonstrate through the local permit process and environmental review that the specific facility at the specific site is appropriate and will be protective of public health and welfare and the environment. The facility developer must apply for a land use permit from the local jurisdiction (the city, or the county if in an unincorporated area). The local planning commission will review the proposal, and set forth its recommendations to the local government. The local government, with assistance from the developer of the proposed new facility, will comply with CEQA. A new Local Assessment Committee to be appointed by the local governing body (under AB 2948) will meet with the developer, assess the proposal, discuss appropriate mitigation strategies, and place its recommendations before the local government. A new statute allows the local government to acquire as compensation up to 10 percent of the gross receipts of the hazardous waste management facility.

The facility developer will also have to apply for all necessary federal and state permits to construct and operate the facility; including permits from EPA, DHS, RWQCB, and BAAQMD, and possibly from the Corps of Engineers, and BCDC and any other regulatory agencies that may have regulatory oversight/approval authority over the facility. New mechanisms for accelerated permit processing introduced by AB 2948 will ensure coordination and assistance from the Governor's Office of Planning and Research (OPR).

AB 2948 created a seven-member State Appeal Board composed of three state officials--the heads of Health Services, Air Resources Board, and Water Resources Control Board; a county supervisor and city council member serving statewide; and a county supervisor and city council member from the local area. Local decisions can be appealed by:

- The facility proponent, if the locality rejects the proposal (or approves it with onerous conditions tantamount to rejection).
- Any interested party (a person who participated in local hearings) concerned about the facility's impact on public health or the environment. The appeal must be based solely on the grounds that the conditions imposed on the project by land use decisions do not adequately protect the public health, safety, or welfare.

A developer must have all required state and federal permits which can be obtained prior to construction before the appeal can proceed.

Implementation: An Implementation program is included in this plan, as required by AB 2948. The strategy includes the following elements.

- Public participation and education programs
- Source reduction program
- Meeting small generators' special needs
- Dealing with household hazardous wastes
- Ongoing data collection and analysis
- Siting areas for new needed offsite, multi-user facilities

The Waste Management Authority (JPA) will continue to hold primary responsibility for the long-term process of hazardous waste planning and management in Alameda County. Chapter 10 includes a short and long range implementation program.

Public Participation: Involvement is sought from all sectors of the public, business, and local governments throughout the process of developing and implementing this plan. With release of the draft plan in March 1988, meetings were held throughout the county. Each city council received a public briefing; and a number of formal public hearings were held. Copies of the draft plan were available in public libraries, in County Supervisors' offices, and in city halls.

In sum, the planning process has followed a logical sequence of steps:

- Identify key issues for Alameda County hazardous waste management to 2000
- Set goals, policies, objectives
- Compile best data available
- Conduct public involvement/education

- Stimulate maximum feasible source reduction
- Determine needs for new facilities in the context of an interjurisdictional agreement
- Lay the basis for private sector siting decisions (and review the need for greater government role)
- Set milestones for actions by public agencies and the private sector
- Provide for effective program coordination

With these actions underway, Alameda County and the thousands of hazardous waste generators within it should be in a strong position to accelerate source reduction, phase out land disposal, and site those facilities needed to manage these wastes into the 21st century.

C. SCOPE OF PLAN

KINDS OF WASTES

This plan covers hazardous wastes: not municipal solid wastes (garbage), not radioactive wastes, not sewage sludge, not groundwater quality. Under California's Hazardous Waste Control Law (HWCL), passed in 1972 and amended on numerous occasions since, hazardous wastes are those which: cause increased mortality, serious irreversible illness or incapacitating reversible illness; or which pose substantial hazards to human health or the environment. DHS has issued regulations for determining hazardous wastes based on: toxicity; bioaccumulation; ignitability; reactivity; and corrosivity.

Extremely hazardous wastes, under DHS rules, are those which would cause death, disabling personal injury, or serious illness.

Restricted hazardous wastes form a subclass for purposes of bans on land disposal, and include hazardous wastes with cyanides, PCBs, strong acids, concentrated heavy metals, and so on. The plan covers past wastes, present wastes, and future wastes. It emphasizes protection of future needs (based on maximum feasible source reduction), working from 1986 data.

STATUTORY COVERAGE

This plan is primarily concerned with those laws specifically directed at hazardous wastes. These center around the general framework created by the California Hazardous Waste Control Law, which predated the analogous federal legislation, embodied in the Resource Conservation and Recovery Act of 1976 (RCRA)--which itself incorporates and expands a number of HWCL provisions. Similarly, a number of the expansions of the HWCL have been incorporated into federal law through subsequent amendments to RCRA.

The California Department of Health Services (DHS) is the state's lead agency implementing HWCL, and those provisions of RCRA which can be assumed by states that operate substantially equivalent programs. Between 1981 and January 1986, DHS implemented RCRA provisions under interim authorization from the EPA, which is the national lead agency for RCRA. This interim authorization expired in January 1986, but DHS continues to implement HWCL provisions under a reversion agreement with EPA while the state seeks final authorization. California allows county health departments the option to implement certain HWCL provisions regulating hazardous waste generators, under terms of Memoranda of Understanding (MOUs) with DHS. Alameda County Department of Environmental Services has an MOU with DHS.

For an updated summary of the hazardous waste regulations prepared for the California Partnership for Safe Hazardous Waste Management (by Specialty Technical Publishers), please contact Steve Britten at (800) 251-0381 or via e-mail, <stp@direct.ca>.

D. STRUCTURE OF THE PLAN

The Alameda County Hazardous Waste Management Plan has six sections. Section I is designed to provide the reader with background on hazardous waste issues, relevant legislation, and the planning process (Chapter 1). This section also sets out the policy direction for hazardous waste management in Alameda County: goals and policies to be followed (Chapter 2).

Section II provides a comprehensive overview of current hazardous waste management in this county. Patterns of waste generation in 1986 are summarized in Chapter 3: types and volumes of wastes; types and locations of generators. This chapter discusses wastes sent offsite with DHS manifests; wastes sent for recycling (oils and solvents); wastes generated by small businesses; household hazardous wastes; and wastes from cleanup of remedial action locations and from leaking underground storage tanks.

In Chapter 4, the various waste management practices are described. Here onsite hazardous waste source reduction, storage, recycling, and treatment activities are summarized. Descriptions are presented of the principal land disposal and treatment facilities receiving wastes from Alameda County generators in 1986: in Contra Costa, Solano, Kings, and Santa Barbara Counties.

Chapter 5 presents basic information on the many existing regulatory programs affecting hazardous waste management. The chapter includes hazardous waste programs; hazardous materials programs; and air quality and water quality programs.

In Section III, the focus of the analysis shifts from the present to the future: expected patterns of hazardous waste management in 2000. Chapter 6 reviews basic factors affecting hazardous waste issues in Alameda County in the next ten or more years: public concerns, national and state policy, and economic factors. Tensions between public and private roles, between onsite and offsite waste management, between new firms and existing ones, and among source reduction, treatment, and land disposal are all addressed.

Chapter 7 contains basic projections of hazardous waste generation in 2000. This involves alterations to the 1986 baseline data to account for economic growth, and then to show the impact of alternative levels of anticipated source reduction and recycling. This chapter includes three different projections:

- An economic forecast, without any source reduction
- A market-driven projection, with moderate source reduction
- A projection reflecting aggressive source reduction, and assuming effective implementation of a series of local government efforts at both new facilities and at existing plants.

Each projection defines waste stream quantities by types of wastes, locations of generators, and types of industries generating the wastes.

In Chapter 8, these data are translated into a needs assessment. Waste stream profiles for 2000 are structured to assess Alameda County's probable needs for new transfer stations, treatment facilities of several kinds, hazardous waste incinerators, and residuals repository, with sufficient capacity to ensure flexibility to meet unanticipated problems. It is essential to note, however, that the needs analysis shown in Chapter 8 has been superseded by the facility allocation process currently being conducted by the San Francisco Bay Area Hazardous Waste Management Capacity Allocation Committee (CAC) of the Association of Bay Area Governments, as part of the

effort to develop an interjurisdictional agreement among the nine Bay Area counties for siting new hazardous waste facilities.

As part of the interjurisdictional agreement, the CAS has developed a Capacity Allocation Plan for providing the capacity necessary to manage hazardous waste in the region. The Capacity Allocation Plan is based on a "Fair Share" method for allocating responsibility within the jurisdictional boundaries of the member counties. The Capacity Allocation Plan shows that the nine-county region will have an overall hazardous waste management capacity deficit of about 195,000 tons in 2000, assuming existing capacity remains and no new capacity is added. The Capacity Allocation Plan distributes responsibility for filling the regional capacity deficit among the participating counties based upon their contribution to the deficit. According to the Capacity Allocation Plan, Alameda County is responsible for providing siting opportunities for managing continued hazardous waste recycling capacity in the region.

Chapter 9 contains siting criteria for the different types of hazardous waste facilities and maps showing the application of those siting criteria to the County area. It also contains composite maps showing designated general areas in which hazardous waste facilities might be able to be sited.

Section IV of the Plan, Chapter 10 presents the Implementation Program for achieving hazardous waste minimization; it includes recommendations on the roles of local jurisdictions and the composition, responsibilities, and funding for a Hazardous Waste Minimization Committee.