

**HAZARDOUS WASTE MANAGEMENT
PLAN ELEMENT**

VIII

Approved by the City Council
December 1990

CITY OF HERCULES
FINAL HAZARDOUS WASTE MANAGEMENT PLAN
AN ELEMENT OF THE
HERCULES GENERAL PLAN

December 1990

Prepared for: CITY OF HERCULES
111 Civic Drive
Hercules, California 94547

Prepared by: NETWORK ENVIRONMENTAL SYSTEMS, INC.
13407 Folsom Boulevard, Suite B
Folsom, California 95630

CITY OF HERCULES HAZARDOUS WASTE MANAGEMENT PLAN
CONTENTS

Executive Summary	1
1.0 Introduction	7
2.0 Purpose	11
3.0 Goals and Objectives	13
4.0 Legislation, Policies and Programs	16
4.1 Legislative and Regulatory Background	17
4.2 Plan Components and Key Results	18
4.3 Hazardous Waste Management Policies	18
4.4 Plan Recommendations	21
5.0 Topics	24
5.1 Current Waste Generation	24
5.1.1 Wastes Shipped Off-Site	27
5.1.2 Wastes Managed On-Site	28
5.1.3 Small Quantity Generators	28
5.1.4 Household Wastes	31
5.1.5 Contaminated Sites	32
5.1.6 Designated and Non-Hazardous Wastes Facilities	33
5.1.7 Wastes Imported and Exported	33
5.2 Projected Waste Generation	33
5.2.1 Large Industrial Producers	34
5.2.2 Small Quantity Generators	34
5.2.3 Household Hazardous Wastes	35
5.2.4 Contaminated Sites	35
5.2.5 New Waste Streams	37
5.2.6 Wastes From New Industries	38
5.3 TSDF Facility Inventory	38
5.4 TSDF Needs Analysis	39
5.5 TSDF Capacity Excess or Shortfall	41
5.6 Hazardous Waste Reduction	41
5.6.1 Projection of Hazardous Waste Reduction; Impacts on Facility Siting Needs	42
5.6.2 Barriers to Waste Reduction	43
5.6.3 Local Waste Reduction Programs	44

CITY OF HERCULES HAZARDOUS WASTE MANAGEMENT PLAN
CONTENTS (Continued)

5.7	Siting of Hazardous Waste Facilities.	44
5.7.1	Intent	45
5.7.2	Siting Criteria	46
5.8	Transportation	50
5.9	Inspection, Technical Assistance and Enforcement	51
5.10	Organizational Responsibilities for Implementation	51
5.11	Emergency Response Procedures	51
5.12	Storage Regulations	54
5.13	Contaminated Sites	55
5.14	Small Quantity Generators	56
5.15	Household Hazardous Wastes	58
5.15.1	Current Household Hazardous Waste Management	59
5.15.2	Recommended Household Hazardous Waste Management	61
6.0	CHWMP Implementation	63
6.1	Public Education and Participation	63
6.2	Ongoing Data Collection and Analysis Program	64
6.3	Waste Reduction Implementation Program	64
6.4	Siting	66
6.5	Transportation	66
6.6	Storage	67
6.7	Contaminated Sites	68
6.8	Small Quantity Generators	68
6.9	Household Wastes	69
6.9.1	Collector Days	69
6.9.2	Education Programs	70
6.9.3	Responsibility and Resources	71

CITY OF HERCULES HAZARDOUS WASTE MANAGEMENT PLAN
CONTENTS (Continued)

6.10 Emergency Response	71
6.11 Regulations, Enforcement and Surveillance	72
6.12 Organization and Responsibility	72
6.13 Funding	73
6.14 Monitoring and Evaluation	73
7.0 References	75
8.0 Project Staff	77
9.0 Figures	78
10.0 Tables	88
11.0 Technical Appendices	100

LIST OF FIGURES AND TABLES

Figures

Figure 1. Area Map	79
Figure 2. Hercules Vicinity Map	80
Figure 3. Hercules Boundary Map	81
Figure 4. Major Existing Generators	82
Figure 5. Major Existing Transportation Corridors	83
Figure 6. Major Land Uses in Hercules	84
Figure 7. Projected Countywide Waste Generation and TSD Facilities	85
Figure 8. Sensitive Areas Inappropriate for TSD Facilities Siting	86
Figure 9. Major Known Contaminated Sites	87

Tables

Table 1. Quantities of Manifested Waste Generated in Hercules and Shipped Off-site	89
Table 2. Current Manifested Hazardous Waste Imported and Exported from Hercules (1988, 1989)	90
Table 3. Current Waste Production from Small Quantity Generators by Waste Type (1988 Estimated)	91
Table 4. Waste Oil Generation by Small Quantity Generators in the City of Hercules for 1990	92
Table 5. Household Hazardous Waste Generated in 1989	93
Table 6. Known Contaminated Sites Within and Near the City of Hercules Designated by the State Bond Expenditure Plan	94
Table 7. Projected Quantities of Hazardous Waste Generation in Hercules (Year 2000)	95
Table 8. Estimate of Household and SQG Hazardous Waste in the Year 2000 (Tons/Year)	96

LIST OF FIGURES AND TABLES
(Continued)

Table 9. Projected Quantities of Cleanup Wastes and New Wastestreams	97
Table 10. Projected City of Hercules Needs Assessment Year 2000 (Tons/Year)*	98
Table 11. Methods for Reducing Exposure to Household Toxics	99

EXECUTIVE SUMMARY

The City of Hercules has created this Hazardous Waste Management Plan (HWMP) to be included as an element of the City General Plan. The Plan is intended to achieve the twin goals of:

- o Safe and effective management of hazardous waste within the City of Hercules

- o Protection of public health and safety and the environment

In order to accomplish these goals, the Plan focuses on land uses and facility siting criteria as a major emphasis. The Plan also inventories existing hazardous waste generation and export, projects hazardous waste generation to the year 2000 and defines facilities siting needs and criteria. Policies and programs for effective management of hazardous waste now and in the future are identified as well as implementation measures for those policies and programs.

REGULATORY BACKGROUND

This Plan has been developed under the provisions of the Tanner Legislation (AB 2948 (1986), AB 1201 (1989)) which provides that cities may adopt a Hazardous Waste Management Plan provided that it is consistent with provisions of the respective County Plan. This Plan has been prepared to be consistent with the Contra Costa County Final HWMP (Contra Costa County 1989a) which was approved by the California Department of Health Services (DHS) on February 28, 1990. This Plan has also been developed to conform to the guidelines for HWMPs formulated by the DHS (DHS 1987a,b).

The City of Hercules was notified of approval of the Contra Costa County HWMP during June 1990. Following that notification, the City must adopt a Plan within 180 days if it wishes to do so. This Draft HWMP is being circulated for public comment so that it may be revised and ready for final approval within the statutory period.

HAZARDOUS WASTE GENERATION AND MANAGEMENT

The City of Hercules has been dealing with the issues of hazardous waste management, solid waste management and emergency response for several years. The City is a member of Joint Powers Authority (JPA) for solid waste management and for emergency response with four other Contra Costa County cities and the County to deal with these issues. The West County Solid Waste JPA is currently working with the requirements of AB 939 to address household hazardous waste, resource recovery and recycling issues. The West County Emergency Response JPA has been dealing with multi-hazard issues and has been instrumental in the establishment of a HAZMAT response team at the Richmond-Hilltop Fire Station.

Hazardous waste generated within the city limits is currently limited to one "large quantity generator" (as defined by DHS as those generating more than 1.0 tons per month of hazardous waste), a number of small quantity generators and household hazardous waste. The large quantity generator is Pacific Refining Company. This company accounted for approximately .57 percent of the approximately 741.3 tons of hazardous waste shipped off-site in 1988. Seven percent of the hazardous waste generated in the City in 1988 came from disposal of contaminated soil from site cleanups, while 26 percent came from small quantity generators (except waste oil), 7 percent from small quantity waste oil and three percent came from household hazardous waste.

Hazardous waste production in Hercules is expected to increase in the future both from expansions of existing businesses and the addition of new businesses. This Plan projects waste generation in the year 2000 both with and without waste minimization programs. It is possible that concerted cooperative waste minimization programs supported by both the City and local industry could result in overall reduction of hazardous waste on a citywide or regional basis.

LOCAL RESPONSIBILITIES

The Local Government Commission has identified local government responsibilities for hazardous waste management involving three categories:

- o Waste reduction
- o Enforcement
- o Providing for waste management capacity

Since the City of Hercules has a relatively small amount of waste generation within its borders, a regional approach is probably the best means of addressing these local responsibilities. The City will investigate the feasibility of a Joint Powers Agreement (JPA) to deal with hazardous waste management issues. Waste reduction programs could be better handled by an entity (such as a JPA) with a larger base of industries than are present in Hercules.

Enforcement of hazardous waste ordinances will be carried out by the City within its boundaries in terms of police response. The City will co-inspect industrial facilities as needed in coordination with the Rodeo-Hercules Fire Protection District. Other hazardous waste management issues will be coordinated with the JPA (if deemed feasible) or with appropriate county agencies.

Waste management capacity is only present in the City as on-site waste reduction capabilities at large quantity generator sites. There is no treatment, storage or disposal facility (TSD) in or near the City of Hercules. The City intends to explore siting of any facilities, as needed, on a regional basis in coordination with the existing JPA's, a newly created JPA for hazardous waste (if deemed feasible) or with Contra Costa County. This Plan contains siting criteria for TSD facilities.

PLAN POLICIES AND PROGRAMS

From the two major goals of the HWMP, this document defines a set of objectives and corresponding policies and programs with which the City of Hercules proposes to improve and more closely control hazardous waste management. The policies and programs involve: 1) adoption of administrative authority to more closely monitor and enforce hazardous waste ordinances, 2) establishment of coordinated efforts with appropriate regional and county agencies, 3) training for city workers, and 4) establishment of necessary programs to minimize hazardous waste produced by businesses and households.

PLAN IMPLEMENTATION

Recommendations for effective implementation of the HWMP include public education and participation, an ongoing data collection and analysis program and a waste reduction implementation program. Specific recommendations for facilities siting requirements, transportation and storage regulations for hazardous waste, emergency response coordination, monitoring and enforcement are included in the Plan. Also included are recommended management measures for large and small quantity generators, contaminated sites and household hazardous waste. The City of Hercules intends to implement hazardous waste management programs which do not cause duplicative effort or paperwork on the part of industry, small businesses or residents.

Implementation will occur through the City Manager and designated departments coordinating specific hazardous waste management tasks to be assigned as shown in the following chart. All emergency response implementation will be coordinated with the Rodeo-Hercules Fire Protection District (RHFPD) and appropriate county and state agencies. The City will investigate the feasibility of a JPA for hazardous waste management issues which would most likely be implemented with other west-county cities.

CHART OF DEPARTMENT RESPONSIBILITIES
FOR HWMP IMPLEMENTATION

TASK	POSITION/DEPARTMENT	PAGE
<u>One Time Tasks</u>		
JPA Development	City Manager	14
Establish Data Base	Planning Director	64
Waste Reduction Implementation	Planning Director	64
Review of New Facility Applications	Planning Director	46
City Facility Inventory	Public Works Director	67
<u>Ongoing Tasks</u>		
Maintain Data Base	Planning Director	64
Public Education/Participation	Planning Director	63
Waste Reduction Programs	Planning Director	64
Household Hazardous Waste Program	Public Works Director	63
Transportation Programs	Public Works Director	66
Monitoring & Evaluation Programs	Planning Director	73
Small Quantity Generator Programs	Planning Director	68
Emergency Response Programs	Police Chief, (RHFPD)	71