



1.0 Introduction

This update to the Hawai'i County solid waste management plan (the Plan) presents an evaluation of the County's existing waste management practices and programs, explores opportunities for implementation of zero waste policies and practices, and outlines potential options for improving the waste management program. In addition, the Plan presents information on the status of active and closed landfills, historical information regarding the County's evaluation of waste reduction technology alternatives during the past decade, and potential options for expanding and extending the capacity of the South Hilo Sanitary Landfill (SHSL). The County of Hawai'i produced this plan in accordance with the requirements of HRS 342-G.

The information in the Plan is organized by section according to HRS 342-G. Each section contains a description of the existing waste management practices and conditions, a brief summary of previous plan recommendations along with the status of implementation of those recommendations, a description of options available to the County for improvement of the waste management program, and recommendations for implementation.

1.1 On the Path to Zero Waste

Historically, waste management in many areas including Hawai'i County consisted of collection, transfer, and disposal of garbage with a primary focus on protecting public health. Modern waste management practices must consider multiple driving factors, including protecting public health and the environment on both a local and global scale. The paradigm for waste management during the first part of the 21st century has shifted away from the concept of garbage being simply considered as "waste". The zero waste philosophy, waste reduction, recycling, sustainability, and product stewardship are key concepts that drive contemporary approaches to waste management.

Many municipalities in the U.S. and elsewhere are incorporating these concepts into their waste management programs and realizing significant benefits. Concurrent with the development of this IRSWMP update, the County contracted with a consultant to develop a zero waste implementation plan¹. The recommendations of that study were considered by SWAC and other stakeholders during the development of this plan. This IRSWMP update includes a number of specific recommendations from that study that will keep the County moving forward on its journey toward zero waste.

The County of Hawai'i has made significant progress towards implementation of updated waste management practices, and with the adoption of the Zero Waste philosophy, and completion of this IRSWMP, is positioned to become a leading example of innovative waste management practices in the State.

¹ Recycle Hawaii and Richard Anthony Associates. March 14, 2009. *Zero Waste Implementation Plan for County of Hawai'i*.

1.2 Goals of the Integrated Resources and Solid Waste Management Plan Update

This IRSWMP presents not only recommendations for the short-term, but a vision for solid waste management within Hawai'i County for the next few decades. Consideration was given to the current state of waste management technology in the U.S. and internationally, the history of waste management practices in the County, and an assessment of what waste management practices are being used successfully in other jurisdictions. The objective was to develop county-wide solutions for both the near- and long-term, that take into account the desires of the many stakeholders, while balancing the fiscal realities of operating the selected programs. It was recognized that selected programs must be both implementable and sustainable in order to be successful.

The following goal statement and the individual goals that follow were developed over a series of meetings and adopted unanimously by members of the County's Solid Waste Advisory Committee (SWAC).

"The people of the County of Hawai'i understand they are a part of the global community and can create a model for others. They value the environment, healthy social relationships, fiscal prudence, and long-term goals coupled with specific, local accomplishments. The following long-term goals will guide us as we develop an implementable Plan."

The goals presented below were used to guide the development of waste management options and the resulting recommendations of this IRSWMP update.

- Sustainability – Ensure that programs and actions meet the environmental, economic, and social equity needs of the present without compromising the ability of future generations to meet their own needs.
- Make Progress Toward Zero Waste - To act in a consistent manner with the zero waste concept. This ongoing process views waste as an inefficient use of resources, and seeks to eliminate all discards to landfills by reducing waste, reuse (and repair) of still good stuff, and recycling/composting by all County residents, visitors, businesses, and institutions.
- Efficient and Affordable – To balance funds available for managing solid waste with other County priorities. The Plan will identify programs that get the best value (bang for the buck) for County ratepayers and taxpayers.
- Minimize Environmental Pollution – To improve the environment and reduce our greenhouse gas emissions, the Plan will emphasize transportation efficiencies, support material reuse and recycling, and minimize organic materials sent to landfill.
- Litter-free – To eliminate illegal dumping on public and private lands. The Plan will include legislation, education, and outreach programs.

- Sound Finances with Appropriate Incentives – To include financial incentives that will speed us down the path towards zero waste, such as pay-as-you-throw (PAYT), while ensuring that the Division has sufficient funds to pay for the services it provides.
- Customer Service – To share aloha as well as information.

The goals listed above are intended to support all aspects of plan implementation including the following:

- Policy – In County legislation and support for State legislation
- Funding – Move towards PAYT as well as other funding sources (grants)
- Operations – Reuse and recycling, household hazardous waste collection, residuals management, recycling and transfer stations, and special events
- Regulatory/Legal – Consistency and compliance with all federal, state, and county requirements
- Education and Outreach – For County employees, residents, visitors, businesses, and institutions
- Management and Employee Safety – Working in partnership with the unions (the United Public Workers Union and the Hawai'i Government Employees Association)

The integrated approach to solid waste management developed during this Plan update will be challenging and require a significant amount of public education and stakeholder participation in order to ultimately be successful. The goals were developed to address the overarching waste management goals of the community, in order to foster collaboration between the various stakeholders during implementation of the Plan recommendations.

1.3 Draft Implementation Plan

The draft implementation plan for the County of Hawai'i IRSWMP Update includes a series of recommendations, with estimates of the required annual operations expenditures, and capital improvement funds required for their implementation. These recommendations are provided at the end of each section, and in total in Section 10. An initial draft implementation plan was distributed to stakeholders in March 2009 for comment. This implementation plan is a second draft that has been modified based on comments received during meetings with the SWAC and County Council Environmental Management Committee in April 2009. It is anticipated that this plan will continue to be adjusted on the basis of comments from the administration, Council, SWAC, and members of the public prior to submission of the plan to the State Department of Health (DOH).

1.4 Organization of this Document

The remainder of this IRSWMP is organized into the sections listed below. As noted previously, each section contains a summary of the existing conditions and waste management practices related to the specific topic covered, potential issues or concerns, and

options that the County may consider to improve the program. Each section concludes with recommendations for implementation during the next five years.

- Section 2.0, Waste Stream Assessment, provides an assessment of the Hawai`i County waste stream including background information about population and employment, historical and forecast waste generation, recycling, and disposal, and information about waste composition.
- Section 3.0, Source Reduction, discusses existing source reduction activities within Hawai`i County, identifies current issues and concerns with respect to current source reduction practices, and presents options and recommendations for achieving further source reduction.
- Section 4.0, Recycling, Bioconversion, and Markets, describes existing recycling and bioconversion activities within Hawai`i County, identifies current issues and concerns with respect to current recycling, bioconversion, and marketing practices, and presents options and recommendations for achieving the County's recycling and bioconversion goals.
- Section 5.0, Public Education and Information, contains existing public education activities within Hawai`i County, identifies current issues and concerns with respect to public education, and presents options and recommendations that will help enhance educational opportunities.
- Section 6.0, Household Hazardous Waste & Electronic Waste, describes the current status of the household hazardous waste and e-waste collection and disposal system within Hawai`i County, identifies current issues and concerns, and presents options and recommendations for achieving the County's HHW and e-waste goals.
- Section 7.0, Special Waste, defines special wastes and describes existing conditions, potential improvements, and recommendations for special wastes including asbestos, used oil, petroleum-contaminated soil, used batteries, sewage sludge, agricultural and farm-generated waste, medical waste, used tires, white goods, and derelict vehicles.
- Section 8.0, Collection and Transfer, describes current conditions of the existing solid waste collection and transfer system within Hawai`i County, identifies current issues and concerns, and presents options and recommendations for achieving the County's solid waste collection and transfer goals.
- Section 9.0, Residuals Management, provides current conditions of the existing residuals management system within Hawai`i County, identifies current issues and concerns, and presents options and recommendations for managing the residuals remaining after source reduction, reuse, and recycling.
- Section 10.0, Administration, Funding, and Implementation, discusses current conditions of the existing administration and funding within Hawai`i County, identifies current issues and concerns, presents options currently under consideration by the County, and presents the implementation plan for this IRSWMP update.

Filename: 1_Introduction_071809.doc
Directory: C:\Documents and Settings\jalba\My Documents\Jocelyn
Template: C:\Program Files\Microsoft Office\Templates\CH2M HILL
Documents\Automated Blank Document.dot
Title: 4
Subject:
Author: Tony Kawal
Keywords:
Comments:
Creation Date: 7/18/2009 11:24:00 AM
Change Number: 6
Last Saved On: 8/5/2009 2:59:00 PM
Last Saved By: CH2M HILL
Total Editing Time: 17 Minutes
Last Printed On: 8/5/2009 2:59:00 PM
As of Last Complete Printing
Number of Pages: 4
Number of Words: 1,568 (approx.)
Number of Characters: 9,397 (approx.)