Kittitas County

2020 Solid Waste and Moderate Risk Waste Management Plan Update

Agency Review Draft

July 2019

Kittitas County Solid Waste Department

Kittitas County

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- Kittitas County Board of County Commissioners
- Kittitas County Solid Waste Department
- Kittitas County Solid Waste Advisory Committee
- Washington Department of Agriculture
- Washington Department of Agriculture

Executive Summary

Executive Summary

ES.1 Introduction

The Kittitas County *2020 Solid Waste and Moderate Risk Waste Management Plan Update* (Plan; SWMP) has been prepared to document changes in Kittitas County (County) solid waste management programs and policies since adoption of the last Plan update in 2010. The Plan provides a planning and implementation tool for County decision makers, businesses, and residents.

The purpose and authority for solid waste planning are derived from state legislation that defines the roles of counties and cities in solid waste management. The Plan is the guide for managing solid waste in the County for a 20-year planning period. Updates are to occur a minimum of every 5 years in accordance with Chapter 70.95.110 of the Revised Code of Washington (RCW).

Recommendations presented in the Plan provide decision makers with three important tools:

1) Guidelines for the development of programs, policy, and operating plans
2) A basis for permitting decisions by the jurisdictional health district and other local government agencies
3) The support needed to obtain grants and funds for subsequent planning and project implementation

The Plan also addresses the standards and requirements of solid waste regulations, as outlined in guidelines developed by the Washington Department of Ecology (Ecology).[1] In accordance with the 2010 guidance, this update combines the Local Hazardous Waste Plan with the SWMP.

Another important motivation behind the development of a Plan such as this one is the need to establish a coordinated, regional approach to solid waste management within cities and counties that enables decision makers to effectively manage resources while assuring adequate protection of the environment and public health.

ES.2 Plan Requirements

Under the State Solid Waste Management Act, Chapter 70.95 RCW, primary responsibility for managing solid waste is assigned to local government. The state, however, is responsible for assuring that effective local programs are established statewide. Therefore, state and local solid waste planning go hand in hand. Local government is responsible for determining the nature and extent of the various solid waste categories and establishing management concepts for their handling, utilization, and disposal consistent with the priorities established in the State Solid Waste Management Act for waste reduction, waste recycling, energy recovery and incineration, and landfill. Each local plan is to be prepared in accordance with Chapter 70.95.080, 090, 100 and 110 RCW, and the Local Hazardous Waste Planning Guidelines, RCW 70.105.220 and RCW 70.95I.020. Chapter 70.95.165 RCW also requires counties to establish a local solid waste advisory committee (SWAC) to assist in the development of programs and policies concerning solid waste handling and disposal and to review and comment on proposed rules, policies, or ordinances prior to their adoption. This 2020 Plan provides data through calendar year 2018, with projected values for calendar years 2019 and 2020.

Table ES-1 provides a summary of the required elements of the Plan and their location in this SWMP.

[1] Washington State Department of Ecology (Ecology). 2010. *Guidelines for Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions*, publication 10-07-005, February; and *Guidelines for Developing and Updating Local Hazardous Waste Plans*, publication 10-07-006, February.

Table ES-1. Required Plan Elements and Location

Required Element	Location in 2020 SWMP
Detailed inventory of all solid waste handling facilities	Chapter 4: Waste Reduction, Recycling, and Composting Chapter 5: Solid Waste Collection Chapter 6: Transfer and Disposal
Description of any deficiencies in the handling of solid waste	Chapter 4: Waste Reduction, Recycling, and Composting Chapter 5: Solid Waste Collection Chapter 6: Transfer and Disposal
20-year solid waste handling projection (facility needs)	Chapter 3: Waste Generation and Characterization
Meets the minimum functional standards (MFS) for solid waste handling in Washington State Addresses relationship to other plans	Chapter 1: Introduction Chapter 9: Administration and Enforcement
Six-year capital and acquisition projection	Chapter 10: Implementation
Financing plan for capital and operational costs for the proposed programs	Chapter 10: Implementation Appendix F: WUTC Cost Assessment Questionnaire
A permitting and enforcement program is clearly defined	Chapter 9.2 Enforcement Chapter 9.2.3 Permitting
Current inventory of all solid waste collection programs (G-certificated and City-operated) including population densities served, address and name of all G-certificated haulers and projected solid waste collection needs for the next six years	Chapter 4: Waste Reduction, Recycling, and Composting Chapter 6: Transfer and Disposal Appendix F: WUTC Cost Assessment Questionnaire
Waste Reduction Strategies	Chapter 4: Waste Reduction, Recycling, and Composting Chapter 10: Implementation; Chapter 10.3: SWAC Recommended Actions
Source Separation Strategies	Chapter 4: Waste Reduction, Recycling, and Composting Chapter 10: Implementation; Chapter 10.3: SWAC Recommended Actions
Inventory of recycling programs	Chapter 4.3: Recycling
Current and projected recovery rates through the current and proposed recycling programs	Chapter 3.2.2: Recycling Quantities and Rate Chapter 4: Waste Reduction, Recycling, and Composting
Programs to monitor commercial and industrial recycling where there is sufficient density to sustain a program	Chapter 4: Waste Reduction, Recycling, and Composting
A waste reduction and recycling outreach and education program	Chapter 4: Waste Reduction, Recycling, and Composting; Table 4-2: Kittitas County Waste Reduction and Recycling Public Outreach
Recycling strategies, a discussion on existing markets, characterization of the waste stream and a description of existing programs and deficiencies	Chapter 4.3: Recycling Chapter 3: Waste Generation and Characterization
Programs to assist the public and private sector with recycling and an implementation schedule for those programs	Chapter 4: Waste Reduction, Recycling, and Composting Chapter 10: Implementation; Table 10-2: Options Carried Forward and Table 10-3 Six-year Capital and Operational Financing
A list of designated recyclables	Table 4-3: Tiered Designation of Recyclable Materials

Table ES-1. Required Plan Elements and Location

Required Element	Location in 2020 SWMP
A Washington Utilities and Transportation Commission (WUTC) cost assessment questionnaire	Appendix F: WUTC Cost Assessment Questionnaire
State Environmental Policy Act (SEPA) checklist and necessary SEPA documents	Appendix G: SEPA Checklist
Evidence of SWAC participation (for example, SWAC meeting minutes and signed roster), Interlocal agreement(s)	Appendix B: SWAC Membership and Minutes
Interlocal agreement(s)	Appendix A: Interlocal Agreement
Resolution(s) of adoption	Appendix H: Resolutions of Adoption

ES.3 Developing the Plan

The Kittitas County Solid Waste Department (Solid Waste) and Kittitas County SWAC are primarily responsible for the development of this Plan. The SWAC represents state and local government, business, and citizens from various areas of Kittitas County. In addition, staff members from Kittitas County and each participating jurisdiction actively participated through review and comment as the Plan was developed. Each participating jurisdiction will adopt the Plan once it has been finalized.

The first step in the Plan process was to develop a methodology for evaluating and revising the existing solid waste management plan. Early on, it was agreed that this update should result in a plan that was user friendly and implementable, while meeting the State requirements of a Plan update.

The next step involved identifying, collecting, and analyzing data pertinent to the existing waste stream and waste management system. The following categories of information were developed and assembled using available Kittitas County data and state or national ratios:

1) Current solid waste generation and characterization/composition of solid waste
2) Descriptions of existing private and public sector solid waste facilities and planned expansion/modifications, including existing recycling and composting facilities
3) Current solid waste management operations
4) Existing haulers and waste management contract agreements

To identify viable and appropriate options for the planning horizon, demographic and economic development data and projections were gathered, as available. This information was then integrated with the information on the existing system, and used to forecast trends regarding solid waste generation, geographic distribution of solid waste in the County, solid waste disposal locations and capacities, and local and regional markets for recovered materials. The projections became the basis to formulate an integrated waste management strategy.

A list of options was developed and provided to the County and SWAC for comment or additions. The waste management options that were considered were designed to provide:

1) Long-term stability and flexibility
2) Cost-effective, efficient services and programs
3) Environmental protection
4) Improvements to the waste management infrastructure

After review and selection of options, this Preliminary Draft Plan was prepared for review and comment by the public, cities, County, and Ecology. Comments received during this process were incorporated into a revised Agency Review Draft Plan. Comments received from the Agency Review process will be incorporated, as necessary. The revised Agency Review Draft Plan will then be adopted through

resolution by the Kittitas County Board of Commissioners and incorporated cities and submitted to Ecology for final review.

Yearly evaluation of the plan will be conducted as needed by the SWAC, Ecology, and WUTC.

ES.4 Organization of the Plan Update

The Plan update has been organized to facilitate ease of use and implementation by the County and member jurisdictions. Each section contains a description of the current conditions, needs, options, discussion, and selected or recommended options.

ES.5 Goals and Objectives

The goal of this Plan is to document the development of an integrated waste management system that influences individual waste generation patterns while providing for necessary and economically efficient waste management services. Implementation of the Plan will minimize environmental impacts and protect human health. The Plan aims to provide the mechanisms by which solid waste is handled in the County in a manner that promotes, in order of priority, waste reduction, recycling, and composting.

The goal statement is supported by the following general policies and objectives:

1) Continue and enhance waste reduction and recycling programs to achieve specified recycling and diversion goals, which will be subject to periodic review and modification.
2) Provide convenient recycling opportunities throughout the County to maximize participation from all practicable waste generator sectors.
3) Support the local economy (private and nonprofit) by maximizing the use of local markets, capabilities, and resources.
4) Manage the solid waste management system in the most efficient and cost-effective way to best protect public health, safety, and the environment.
5) Evaluate the need for, and when necessary, provide additional solid waste management facilities, including technology options that may enhance existing infrastructure.
6) Address and support evaluation, collaboration, and enforcement of intergovernmental policies relating to solid waste management.
7) Increase public awareness of solid waste issues by continuing and expanding educational opportunities within the County to promote waste reduction, recycling, and reuse options.
8) Manage waste in a manner that promotes Washington State's waste management priorities.
9) Encourage coordination and communication among all jurisdictions and governmental entities to carry out components of this solid waste plan.
10) Provide an ongoing mechanism for evaluation and feedback of the County’s solid waste management system, including proper documentation of activities.
11) Maintain sufficient funding mechanisms to support selected program options.
12) Evaluate strategies for managing specific waste streams.

ES.6 Evaluation Methodology

The pool of solid waste management options is large, and therefore decisions must be made about which ones to include and exclude when developing a preferred waste management strategy. The 2010 Plan update included an extensive ranking exercise of numerous options. For the 2020 Plan update, the focus was to create a plan that was user-friendly and implementable. The results from the 2010 Plan update were used as the starting point. This list was reviewed with County staff and then again with SWAC to determine the selected list of options to include in the 2020 Plan update.

ES.7 Summary of Recommendations

SWAC selected a set of options in keeping with the solid waste goals, policies, and objectives. These recommendations form an integrated program of waste management for Kittitas County through the year 2025. The selected options are included in each chapter. Many of the selected options are similar to those in the previous Plan. The SWAC reviewed each option, and those options that were previously implemented and/or recommended, but deemed ineffective, were not included in this 2020 Plan. Others were modified to better reflect current conditions. New options were evaluated and selected to replace those options that were eliminated from the Plan. Table ES-2 lists the options recommended to be carried forward.

Table ES-2. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Waste Reduction				
Waste Reduction Policies	Track progress of the procurement policy.	x		4.2.6.1
Public Education and Outreach	Continue to implement electronic, print, and presentation recycling outreach elements including moderate risk waste (MRW). Consider preparing videos to discuss various solid waste related topics. Videos will be posted to the County website.	x		4.2.6.2
Commercial Technical Assistance	Continue to offer more technical assistance and provide a case study of high-performing businesses.	x		4.2.6.3
Institutional and Nonprofit Assistance	Support community activities and local organizations to expand their programs through sponsorships and presentations.	x		4.2.6.4
Purchasing	Develop procurement policies for agencies, ensure the success of the plastic ban bag, and promote smart purchasing options.	x		4.2.6.5
Recycling				
Collection	Work with haulers and cities to provide recycling services that support the viability of those programs and are economically feasible based on market conditions.	x		4.3.12.1
Commercial Programs	Provide technical assistance to large businesses. Target agricultural activities. Develop a recognition program to increase recycling.	x		4.3.12.2
Large Venue and Special Event Recycling	Continue reviewing event plans and develop best management practices for event planners.	x		4.3.12.3
Self-Haul	Provide recycling services that support the viability of those programs and are economically feasible based on market conditions.	x		4.3.12.4
Rate Structure	Maintain the PAYT structure. Evaluate if rate changes are necessary to adequately cover the cost of recycling.	x		4.3.12.5
Recycling Incentives	Assist organizations in applying for grants. Encourage use of the recycling trailer.	x		4.3.12.6
Evaluation and Monitoring	Conduct annual assessment of progress meeting the goals and objectives of the Plan.	x		4.3.12.7
Identify Funding and Other Nonmonetary Resources	Identify and pursue funding and nonmonetary resources for developing and implementing recycling programs and promotion.	x		4.3.12.8

Table ES-2. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Formal Working Relationships	Encourage the establishment of formal working relationships between the County and other agencies, institutions, and organizations.	x		4.3.12.9
Sustainable Community	Promote complementary programs like green building and food waste reduction.	x		4.3.12.10
Evaluate Expansion of Programs	Evaluate the expansion of programs to target specific waste generators; evaluate curbside recycling.	x		4.3.12.11
Public Outreach and Education	Continue existing outreach and expand program resources online.	x		4.3.12.12
Composting				
Composting Public Education and Outreach	Continue to develop, distribute, and post composting education materials. Expand the Master Composter program and offer additional seminars.	x		4.4.4.1
Compost Facility	Develop new Compost Facility at the new transfer station that is being developed.		x - 2022	4.4.4.2
Vermicomposting	Continue composting workshops and recruit small-scale pilot composting projects.	x		4.4.4.3
Residential Yard Waste Collection Programs	Continue existing green waste collection programs and evaluate expanding curbside service.	x		4.4.4.4
Commercial Collection of Organics	Conduct a feasibility study to evaluate collection of preconsumer food waste.	x		4.4.4.5
Marketing of Finished Compost Products	Evaluate the marketing of finished compost.	x		4.4.4.6
Tiered Rate Structure for Organics	Review the green waste tipping fee and implement a higher charge for contaminated green waste.	x		4.4.4.7
Solid Waste Collection				
Routing of Collected Waste Through County Facilities	Continue to route all municipal solid waste to the County.	x		5.5.1
Curbside Recycling Collection	Evaluate curbside program outside served areas.	x		5.5.2
Review Collection Contracts	Periodically review hauler contracts to confirm obligations are met. Review complaints to confirm resolution is met and fees are paid.	x		5.5.3
Funding Sources	Identify and procure additional funding sources to meet minimum level of service requirements.	x		5.5.4
Transfer Stations				
Replace Ellensburg Transfer Station	Complete the design, permitting, and construction phase of the Ellensburg Transfer Station Replacement project.		x - 2022	6.1.4.1
Use of Transfer Stations	Continue to route all municipal solid waste through facilities within the County and ensure collection of program fees.	x		6.1.4.2
Landfill Disposal				
Long-Term Disposal Opportunities	Evaluate disposal opportunities like waste-to-energy (WTE) and rail transport to other landfills or WTE.	x		6.3.4.1
Contractual Arrangements	Evaluate landfills with lower tipping rates or long-term pricing; evaluate the escalation rate for the transfer stations to manage future budgets.	x		6.3.4.2
Alternative Disposal Technologies				

Table ES-2. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Future Consideration and Feasibility	Review the feasibility of developing a WTE facility in the County.	x		6.4.2.1
Alternative Energy Technologies	Track advancements in alternative technologies.	x		6.4.2.2
Special Waste				
Construction and Demolition Debris				
Recovery of Construction and Demolition (C&D) Debris	Evaluate the recovery of debris at Ryegrass and the two transfer stations with private recyclers.	x		7.2.5.1
Materials Exchange Program	Continue working with nonprofit organizations to promote materials exchange and reuse stores for C&D material.	x		7.2.5.2
Evaluate Flow Control Measures	Write a flow control ordinance to keep all solid waste within the County.	x		7.2.5.3
Agricultural Waste				
Evaluate Opportunities for Beneficial Reuse of Biomass	Maintain biomass as an option; review feasibility of developing biomass facilities in the County.	x		7.3.3.1
Agricultural Pests and Other Nuisances	Operate within the apple maggot quarantine rules. Enforce commercial and residential onsite solid waste storage.		x - 2021	7.3.3.2
Tires				
Public Education Programs for Tires	Provide the public lists of facilities that accept tires with the web and apps; target education of companies with commercial fleets.	x		7.4.3.1
Evaluate Diversion Options for Tires	Evaluate whether tire diversion options are viable.	x		7.4.3.2
Continue Current Tire Ban	Continue to promote the tire ban from landfills.	x		7.4.3.3
Biomedical Waste				
Public Education of Residential Medical Waste	Develop and distribute education materials for correct management of residential medical waste.	x		7.5.3.1
Monitoring municipal solid waste (MSW) for Biomedical Waste	Encourage the Health Department to monitor the MSW program.	x		7.5.3.2
Pharmaceutical Waste	Evaluate options for drop-off sites. Support private efforts for take-back programs.	x		7.5.3.3
Veterinary Waste				
Large Animal Disposal	Support development of programs for large animal disposal alternatives.	x		7.6.4.1
Education and Outreach - Large Animal	Provide information on County disposal options including proper composting techniques onsite.	x		7.6.4.2
Petroleum-Contaminated Soils				
In-County PCS Site	Support the development a site that can convert remediated soil to daily cover.	x		7.7.3.1
Street Sweepings Management	Evaluate management of street sweepings to become r remediated and then used as daily cover.	x		7.7.3.2
Feasibility Study for PCS Management	Conduct a feasibility study about the options to handle PCS effectively.	x		7.7.3.3

Table ES-2. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Import PCS	Explore the import of treated PCS for daily cover at Ryegrass.	x		7.7.3.4
Asbestos				
Public Education on Asbestos-Containing Materials	Allow current private solid waste hauler to inform the public on proper handling of ACM.	x		7.8.3.1
Liquid Waste				
Catch Basin Liquids	Evaluate the feasibility of constructing of a new lagoon.	x		7.9.4.1
Electronic Waste				
Monitor and Evaluate E-Waste Program	Submit annual Satisfaction Report summarizing program.	x		7.10.3.1
E-Waste Education	Promote the drop-off locations for educational materials from the E-Cycle Toolkit.	x		7.10.3.2
Moderate Risk Waste				
MRW Facilities	Expand existing MRW facilities to accommodate more waste types. Increase participation by hosting regular business hours.	x		8.7.1
Commercial Outreach, Education, and Technical Assistance	Implement outreach education and technical assistance to commercial entities.	x		8.7.2
Funding for MRW Programs	Seek additional funding sources from the State as well as increasing handling and disposal fees.	x		8.7.3
Administration and Enforcement				
Staffing and Resources	Utilize a cooperative approach to staffing and program evaluation with the SWAC.	x		9.3.2.1
Administration Funding	Explore additional grant funding.	x		9.3.2.2
Other Long-Term Needs	Consider other policies between Plan updates.	x		9.3.2.3
New Regulations and Ordinance Requirements	Update other policies when regulations change between Plan updates.	x		9.3.2.4
Permit Procedures, Policies, and Fee Structures	County Health Department to continue to implement relevant policies, procedures, and fees for solid waste facilities.	x		9.3.2.5
Permit Review	SWAC to review all new solid waste facility permit requests.	x		9.3.2.6
Emergency Debris Management Plan	Connect SWMP with Emergency Debris Management Plan.		x - 2021	9.3.2.7

ES.8 Implementation Schedule

The majority of the programs shown in Table ES-2 are underway. The anticipated start date for two new programs is indicated in the “new option” column. Some implementation strategies are already underway, but the capital costs are forecast in the future. These dates are shown in more detail in Chapter ES.9 (Implementation Budget).

ES.9 Implementation Budget

Table ES-3 presents a detailed accounting of the six-year capital and operational financing implementation budget.

Table ES-3. Six-year Capital and Operational Financing

		2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)
Waste Reduction							
	Existing Programs	18,540	19,096	19,669	20,259	20,867	21,493
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Waste Reduction		18,540	19,096	19,669	20,259	20,867	21,493
Recycling							
	Existing Programs	77,250	79,568	81,955	84,413	117,846	121,381
	New Programs	0	0	30,000	30,000	0	0
	Capital Expenditures	0	0	Included with Transfer Station	Included with Transfer Station	0	0
Subtotal, Recycling		77,250	79,568	111,955	114,413	117,846	121,381
Composting							
	Existing Programs*	173,500	178,750	184,150	189,650	195,350	201,211
	New Programs	0	0	50,000 New Compost Facility operations	350,000	0	0
	Capital Expenditures	0	0	Included with Transfer Station	Included with Transfer Station	0	0
Subtotal, Composting		173,500	178,750	234,150	539,650	195,350	201,211
Solid Waste Collection							
	Existing Programs	7,919	8,157	8,401	8,653	8,913	9,180
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Solid Waste Collection		7,919	8,157	8,401	8,653	8,913	9,180
Transfer Stations							
	Existing Programs	335,750	352,000	387,800	426,000	469,000	483,070
	New Programs	0	0	0	100,000	0	0
	Capital Expenditures	500,000	10,000,000 New Transfer station	10,000,000 New Transfer Station	0	0	0
Subtotal, Transfer Stations		835,750	10,352,000	10,387,800	526,000	469,000	483,070
Landfill Disposal and Waste Import/Waste Export							
	Existing Programs	2,391,453	2,463,176	2,537,071	2,613,183	2,691,578	2,769,6342
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Waste Import/Export		2,391,453	2,463,176	2,537,071	2,613,183	2,691,578	2,769,634
Alternative Disposal Technologies							
	Existing Programs	1,910	1,968	2,027	2,088	2,150	2,215

Table ES-3. Six-year Capital and Operational Financing

	2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Alternative Disposal Technologies	1,910	1,968	2,027	2,088	2,150	2,215
Special Waste						
Construction and Demolition Debris						
Existing Programs	245,000	275,000	250,000	257,500	265,000	272,553
New Programs	0	0	0	0	0	0
Capital Expenditures		75000 Open new area	0	0	0	0
Subtotal, Construction and Demolition Debris	245,000	350,000	250,000	257,500	265,000	272,553
Agricultural Waste						
Existing Programs	1,910	1,968	2,000	2,058	2,118	2,179
New Programs	0	10,000	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Agricultural Waste	1,910	11,968	2,000	2,058	2,118	2,179
Tires						
Existing Programs	33,000	33,500	34,000	34,000	35,000	35,525
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Tires	33,000	33,500	34,000	34,000	35,000	35,525
Biomedical Waste						
Existing Programs	5,078	5,230	5,387	5,548	5,715	5,886
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Biomedical Waste	5,078	5,230	5,387	5,548	5,715	5,886
Veterinary Waste						
Existing Programs	5,657	5,827	6,002	6,182	6,367	6,558
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Veterinary Waste	5,657	5,827	6,002	6,182	6,367	6,558
Petroleum-Contaminated Soils						
Existing Programs	46,000	46,000	46,000	0	0	0
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Petroleum-Contaminated Soils	46,000	46,000	46,000	0	0	0
Asbestos						
Existing Programs	1,775	1,802	1,829	1,856	1,884	1,913

Table ES-3. Six-year Capital and Operational Financing

		2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
	Subtotal, Asbestos	1,775	1,802	1,829	1,856	1,884	1,913
Liquid Waste							
	Existing Programs	184,500	190,000	190,000	195,000	200,800	206,623
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
	Subtotal, Liquid Waste	184,500	190,000	190,000	195,000	200,800	206,623
Electronic Waste							
	Existing Programs	4,498	4,633	4,772	4,915	5,063	5,214
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Electronic Waste		4,498	4,633	4,772	4,915	5,063	5,214
Moderate Risk Waste							
	Existing Programs	90,000	92,700	95,000	98,000	100,000	102,000
	New Programs	0	0	15,000	10,000	0	0
	Capital Expenditures	0	0	Included in new Transfer Station	150,000 Clean up old Site	0	0
Subtotal, Moderate Risk Waste		90,000	92,700	110,000	258,000	100,000	102,000
Administration and Enforcement (Solid Waste only, not Public Health Enforcement)							
	Existing Programs	747,000	770,375	793,400	817,000	841,806	866,218
	New Programs	0	10,000	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Administration and Enforcement		747,000	780,375	793,400	817,000	841,806	866,218
Other							
	Existing Programs	20,840	21,153	21,470	21,792	22,119	22,451
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Other		20,840	21,153	21,470	21,792	22,119	22,451
	GRAND TOTAL	***4,891,581***	***14,645,901***	***14,765,932***	***5,428,098***	***4,991,575***	***5,135,304***

Contents

Appendixes

Tables

Figures

Acronyms and Abbreviations

C&D	construction and demolition
County	Kittitas County
CWU	Central Washington University
Ecology	Washington Department of Ecology
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
HDPE	high-density polyethylene (plastics –- typically labeled #2, milk jugs and detergent bottles)
HHW	household hazardous waste
KCCP	*Kittitas County Comprehensive Plan*
KCHD	Kittitas County Health Department
LWEL	liquid waste evaporation lagoon
MRW	moderate risk waste
MRWMP	Moderate Risk Waste Management Plan
MSW	municipal solid waste
MTCA	Model Toxics Control Act
NPL	National Priorities List
OFM	Washington Office of Financial Management
PAYT	Pay-As-You-Throw
PCS	petroleum-contaminated soils
PETE	Polyethylene terephthalate (plastics – typically labeled #1 – soft drink bottles and cooking oil bottles)
Plan	*2020 Solid Waste and Moderate Risk Waste Management Plan Update* [also called the SWMP]
SEPA	State Environmental Policy Act
Solid Waste	Kittitas County Solid Waste Department
SWAC	solid waste advisory committee
SWMP	*2020 Solid Waste and Moderate Risk Waste Management Plan Update* [also called the Plan]
RCW	Revised Code of Washington
WAC	Washington Administrative Code
WMMFA	Washington Materials Management and Financing Authority
WSDA	Washington State Department of Agriculture
WTE	waste-to-energy
WUTC	Washington Utilities and Transportation Commission

Chapter 1
Introduction

1. Introduction

The Kittitas County Solid Waste Management Plan (Plan; SWMP) provides a guide for the short- and long-term management of the solid waste system within the Kittitas County, Washington (County) planning area. The Plan documents the existing solid waste programs and facilities, describes the opportunities for improving the existing solid waste system, evaluates alternatives and recommends programs and facilities capable of achieving the County's goals, and describes the strategy for implementing the recommended programs and facilities. This 2020 Plan provides data through calendar year 2018, with projected values for calendar year 2019 and 2020. The Plan's 20-year planning period is from 2020 through 2040. The six-year implementation schedules and the WUTC cost assessment were developed for the years 2020 through 2025.

This Plan identifies and discusses elements of the revised comprehensive solid waste and moderate risk waste management plans for the incorporated and unincorporated areas of Kittitas County. The Plan elements conform to requirements of the State Solid Waste Management "Reduction and Recycling Act" (Chapter 70.95 Revised Code of Washington [RCW]), and to the solid waste handling standards (Washington Administrative Code [WAC] 173-350). The Plan follows the guidelines outlined in *Guidelines for the Development of Local Solid Waste Management Plans and Plan Revisions* (Ecology, 2010a).

1.1 Plan Organization

This SWMP has new features to guide the reader through the plan contents. The general chapters included in the plan are consistent with previous plan updates with the introduction and background in Chapter 1, a more detailed description of the planning area in Chapter 2, waste generation and characterization in Chapter 3, and then individual focus areas included in Chapters 4 through 9, and the implementation plan in Chapter 10. The main difference is that within Chapters 4 through 9, the information has been slightly reorganized. Each of those chapters starts with a summary table that provides the reader with an overview of the recommended actions for this focus area. Following the summary table are subchapters for existing conditions/practices, followed by a discussion of needs and opportunities, and ending with recommended options and implementation actions.

Chapters 1 through 11 are titled as follows:

- Chapter 1: Introduction and Background of the Planning Area
- Chapter 2: Description of the Planning Area
- Chapter 3: Waste Generation and Characterization
- Chapter 4: Waste Reduction, Recycling, and Composting
- Chapter 5: Solid Waste Collection
- Chapter 6: Transfer and Disposal
- Chapter 7: Special Waste
- Chapter 8: Moderate Risk Waste
- Chapter 9: Administration and Enforcement
- Chapter 10: Implementation
- Chapter 11: References

Appendixes A through H provide additional information in support of the chapters.

1.2 Planning

Formal adoption and approval of this plan is scheduled for 2020. Annual informal reviews may take place under SWAC guidance with minor amendments (if any) following the prescribed process. A formal five-year review, as required by law, should be scheduled to begin in 2025.

1.2.1 Governments Involved in the Plan

The planning area includes the five municipalities located in Kittitas County and the unincorporated area of Kittitas County, excluding the lands under the authority of the U. S. Military.

The 1979 Solid Waste Interlocal Agreement (Appendix A) established the County's authority to prepare the solid waste management plan on behalf of the following entities within the County:

- City of Roslyn
- Town of South Cle Elum
- City of Cle Elum
- City of Ellensburg
- City of Kittitas

1.2.2 Solid Waste Advisory Committee (SWAC)

The statute concerning SWAC functions states that:

> *"Each County shall establish a local solid waste advisory committee to assist in the development of programs and policies concerning solid waste handling and disposal and to review and comment upon proposed rules, policies, or ordinances prior to their adoption. Such committees shall consist of a minimum of nine members and shall represent a balance of interests, including, but not limited to, citizens, public interest groups, businesses, the waste management industry, and local elected public officials."*
>
> Chapter 70.95.165 (3)

The Solid Waste Planning Guidelines address SWAC roles and state that this Solid Waste Management Plan is to specify the procedures and operations of the local SWAC, including what specific documents the SWAC is to review and comment on.

SWACs are to be ongoing committees, with meetings to be held at least four times per year during development of a comprehensive plan, and at least twice a year at other times. Notice to the media is to be given stating the SWAC meeting times.

The SWAC operates under bylaws (see Appendix B) adopted by the Committee, elects its own chairman, and has a regular rotation of new members appointed by the Board of Commissioners. The Solid Waste Department (Solid Waste) provides staff support to the SWAC, including meeting arrangements, minutes and agenda preparation, and supplemental information. A current roster is provided in Appendix B along with recent minutes.

The primary function of the SWAC is to review all significant policy and program development issues and recommend a position to the Board of Commissioners and Board of Health. Specific documents to be submitted for SWAC review prior to action by the Board include:

1) Solid Waste and Moderate Risk Waste Management Plans and Plan amendments.
2) Proposed changes in the County regulations on solid waste handling, and in the Board of Health regulations relating to solid waste.
3) Annual budgets and work plans that are related to implementation of current Solid and Moderate Risk Waste Management Plan recommendations.
4) Rates and rate revisions concerning solid and moderate risk wastes.
5) Annual operating data concerning solid and moderate risk waste diversion, recycling, and disposal.

In Kittitas County, meetings are typically held semiannually, but more frequent meetings are held as necessary. Meeting notices are provided to the media and the public is encouraged to attend and participate.

SWAC will consider issues, concerns, and possible amendments to the Plan at their regular meetings, as follows:

- Complete, factual written information is submitted to Solid Waste Staff.
- Solid Waste Staff will review with SWAC Chair for completeness.
- Information is disseminated to each SWAC member 2 weeks in advance of the next SWAC meeting (see Appendix B for Kittitas County Solid Waste Advisory Committee Bylaws and Meetings Procedures, Section VIII Amendments).

1.3 Changes in Solid Waste Regulation and Policy Since 2010

Several new rules and regulations have been adopted since the previous Plan was developed. The applicable changes are discussed below and were considered as part of the Update.

1.3.1 Apple Maggot Quarantine

The majority of Kittitas County (83%) is within an Apple Maggot Quarantine area including the existing and proposed Transfer Station (Figure 1-1). Both municipal green waste (MGW[2]) and municipal solid waste (MSW) are currently listed as regulated commodities under the apple maggot quarantine rule. RCW 70.95 was amended in 2016 to prevent the spread of agricultural plant pathogens and pests. These changes require the following:

- Inclusion of an agricultural representative on the SWAC.
- Review of the draft SWMP by the Washington State Department of Agriculture (WSDA).
- Submittal of a copy of solid waste permits by local health departments to WSDA for compost facilities in a nonquarantine area, when they will receive organic waste from a quarantine area.
- Special permits for transporting regulated commodities between quarantined and nonquarantined areas.

[2] Municipal green waste: "includes yard debris, organic feedstock, organic materials, and agricultural wastes." https://app.leg.wa.gov/ReportsToTheLegislature/Home/GetPDF?fileName=1807026_394d570e-500f-4374-906d-69c49d098fa2.pdf

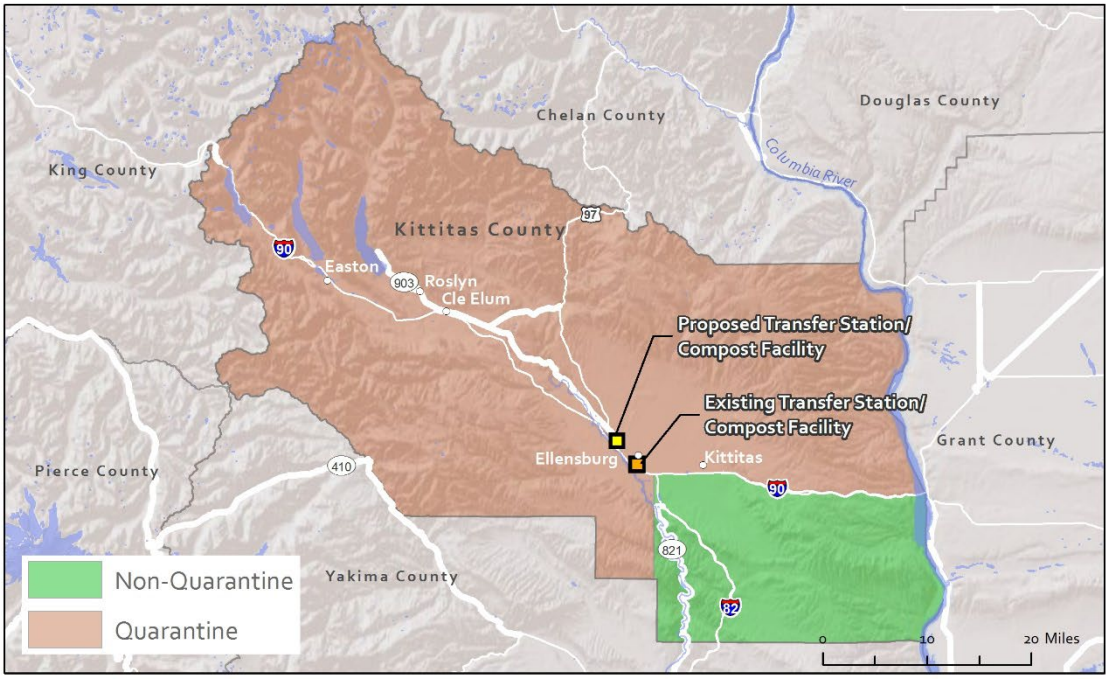

Figure 1-1: Apple Maggot Quarantine Area Coverage of Kittitas County

Effective in 2017, the Washington State Department of Agriculture (WSDA) amended WAC 16-470 by adding MSW and MGW (yard debris, organic feedstocks, organic materials, and agricultural wastes) to the list of commodities regulated under the apple maggot quarantine. Special permits, mentioned above, are required for the following:

1) Transportation and disposition of MSW from an area under quarantine for disposal at a solid waste landfill or disposal facility in the apple maggot and plum curculio pest-free area. *Currently MSW is transferred to Wenatchee Landfill which is in a non-quarantine area.*

2) Transportation and disposition of yard debris, organic feedstocks, organic materials, and agricultural wastes from the area under quarantine for disposal at a solid waste landfill or treatment at a composting facility in the apple maggot and plum curculio pest-free area. *Currently organic material is composted in-county.*

Kittitas County complies with the quarantine rules by implementing four key elements:

1) A segregation program of MSW from MGW – As described above, Ellensburg curbside yard waste goes to Ellensburg transfer station and is processed at the onsite composting facilit. Self-hauled MGW is brought to Ellensburg and processed onsite or Cle Elum transfer stations which is hauled to the Ellensburg transfer station and processed onsite. MGW is 1/3 the price of MSW so there is great incentive to segregate it.

2) Properly informed residents – The County attends various venues to educate the public about proper MGW management. One method for proper MGW management is back yard composting. More detail about Public Outreach and backyard composting resources can be found in Table 4-2 and Section 4.4.4.1)

3) A monitoring program - At the transfer stations, the scale house attendant screens waste loads. at the landfill, the landfill owner conducts a minimum of 5 spot checks per week. Their customers are notified if MGW is found in a load. The landfill owner reports this has not been an issue.

4) Proper Containment for Transit – Residents are instructed to have covered loads as mandated by the Solid Waste Ordinance 199-01 (Appendix C). The WUTC hauler loads are sealed in transit. More detail about the permit to transport MSW out of a quarantine area is described in Section 6.3.2.

1.3.2 Solid Waste Handling Standards Chapter

New changes to sections 220,225 and 250 of 173-350 WAC (the "350" regulations) were adopted in August 2018 that:

- Standardizes language and organization to improve usability and consistency across the rule.
- Improves user ability to identify solid wastes apart from commodities.
- Clarifies operational requirements and timeframes for managing solid wastes in piles.
- Distinguishes between clean and contaminated soils and dredged material and clarifies management requirements.

The management of contaminated soil has become more complex because the rules now distinguish it from other solid waste.

1.3.3 Anaerobic Digesters Permit Exemption

In effect since 2009, Washington State law (RCW 70.95.330) allows certain anaerobic digesters an exemption from obtaining a solid waste handling permit provided they meet specified criteria including:

- Process at least fifty percent livestock manure by volume.
- Process no more than 30 percent imported organic waste-derived material by volume.

1.3.4 Mercury-Containing Lights Product Stewardship Program

In effect since 2013 but implementation delayed until 2015, WAC 173-910 required establishment of a product stewardship program for mercury-containing lights throughout Washington. Producers of mercury-containing lights sold for residential use finance and participate in the product stewardship program. EcoLights NW, LLC is the state-contracted stewardship organization that serves as the "final destination" lamp recycler in Washington.

RCW 70.275.080 banned mercury-containing lights in waste bins or landfills.

1.3.5 Paper Conservation Program

Effective in 2010, RCW 70.95.725, requires that each state agency will conserve paper by at least thirty percent of their current paper use and encourage recycling of all paper products with the goal of recycling one hundred percent of all copy and printing paper in all buildings with 25 employees or more.

1.3.6 Revenue-Sharing Agreements

An update to RCW 81.77.185 allows waste collection companies to retain up to fifty percent of the revenue paid to the companies for selling material if the companies submit a plan to the Washington Utilities and Transportation Commission (WUTC) that is certified by the appropriate local government authority as being consistent with the local government solid waste plan and that demonstrates how the revenues will be used to increase recycling. The remaining revenue shall be passed to residential customers.

1.3.7 Tipping Fees

Tipping fees will likely be adjusted 3% to reflect CPI later this year. The 2018 tipping fees are included in this SWMP.

1.3.8 C& D Requirement

In 2010, the State Legislature amended RCW 70.95.080 to require that solid waste management plans address source-separation and collection of recyclable materials, and the handling and proper preparation of materials for reuse or recycling. Plans are also required to address "construction and demolition waste for recycling or reuse; recoverable paper products for recycling; metals, glass, and plastics for recycling; and waste reduction strategies."

1.3.9 Marijuana Composting

WAC 314-55-097 defines liquid and solid "dangerous wastes" resulting from the production and processing of marijuana. If mixed with the designed quantities of waste types, the marijuana waste can be disposed or composted at permitted solid waste facilities.

1.4 Plan Goals and Objectives

1.4.1 Goal Statement

The goal of this solid waste management plan is to document the development of an integrated waste management system that influences individual waste generation patterns while providing for necessary and economically efficient waste management services. Implementation of the Plan will minimize environmental impacts and protect human health. The plan aims to provide the mechanisms by which solid waste is handled in the County in a manner that promotes, in order of priority, waste reduction, recycling, and composting.

1.4.2 General Policy and Objectives

The goal statement is supported by the following general policies and objectives:

1) Continue and enhance waste reduction and recycling programs to achieve specified recycling and diversion goals, which will be subject to periodic review and modification.
2) Provide convenient recycling opportunities throughout the County to maximize participation from all practicable waste generator sectors.
3) Support the local economy (private and nonprofit) by maximizing the use of local markets, capabilities, and resources.
4) Manage the solid waste management system in the most efficient and cost-effective way to best protect public health, safety, and the environment.
5) Evaluate the need for, and when necessary, provide additional solid waste management facilities, including technology options that may enhance existing infrastructure.
6) Address and support evaluation, collaboration, and enforcement of intergovernmental policies relating to solid waste management.
7) Increase public awareness of solid waste issues by continuing and expanding educational opportunities within the County to promote waste reduction and recycling options.
8) Manage waste in a manner that promotes Washington State's waste management priorities.
9) Encourage coordination and communication among all jurisdictions and governmental entities to carry out components of this solid waste plan.
10) Provide an ongoing mechanism for evaluation and feedback of the County's solid waste management system, including proper documentation of activities.
11) Maintain sufficient funding mechanisms to support selected program options.
12) Evaluate strategies for managing specific waste streams.

1.5 Relationship to Other Plans

1.5.1 Moderate Risk Waste Management Plan

The Washington State Hazardous Waste Management Act requires local governments to prepare a plan to manage moderate risk wastes in their jurisdiction. Moderate risk wastes are hazardous wastes produced by households and by businesses and institutions in small quantities. Kittitas County implemented its Moderate Risk Waste Management Plan (MRWMP) in January 1992. The MRWMP has been part of the Plan since the 2010 Update. It adopts the sustainable materials management approach outlined in the June 2015 Moving Washington Beyond Waste and Toxics plan and follows the guidelines outlined in *Guidelines for Developing and Updating Local Hazardous Waste Plans* (Ecology, 2010b).

The local governments who participated in the MRWMP included Kittitas County, the cities of Kittitas, Ellensburg, Cle Elum, South Cle Elum, and Roslyn. The unincorporated areas of the County and agricultural community also participated. The plan promotes the proper usage, safe storage, and correct disposal of household chemicals to protect the health of land and water resources. Products labeled with words like danger, flammable, warning, corrosive, poisonous, caution, explosive, reactive, combustible, and/or toxic are considered hazardous waste.

The following MRWMP goals relate to the solid waste system:

- Improve opportunities for disposal of moderate risk wastes.
- Improve systems for moderate risk waste management.
- Encourage cooperation and coordination in managing moderate risk wastes.
- Comply with Washington State Hazardous Waste Management Act. Since 1994, used motor oil has been included as part of the MRWMP.

1.5.2 Comprehensive Land Use Plan

The Growth Management Act, passed by the Washington Legislature in 1989, is designed to reduce or mitigate the negative effects of uncoordinated and unplanned population growth. The Act requires that cities and counties update their comprehensive land use plans consistent with state-wide goals and coordinate their planning efforts to prevent unstructured growth and development that depletes natural resources and that creates inefficient and costly provision of public services.

In December 2016, the Kittitas County Board of Commissioners adopted the *Kittitas County Comprehensive Plan* (KCCP), through Ordinance 16-23. This also included the adopted level of service for County services, including solid waste. The KCCP includes:

- A Land Use Element which establishes official policy for appropriate uses of land in the County and ensures that the County can accommodate the population growth projected to occur over the next 20 years.
- A Housing Element that addresses the need for affordable housing.
- A Transportation Element, which will be used as a guide in future street and road construction, programs to produce a safe and efficient arterial system. The Kittitas County Transportation Plan is maintained by the Kittitas County Department of Public Works.
- A Capital Facilities Element which is maintained by the Kittitas County Auditor's Office.
- A Utilities Element that describes planned utility expansions.
- A Rural Element that ensures the protection of rural lands and provides for a variety of rural densities.
- An Economic Development Element that addresses economic growth for the County.
- A Recreation and Parks Element that describes and inventories park and recreation opportunities in the County.

In addition, subarea comprehensive plans are included for the Snoqualmie Pass and Mountainstar Resorts.

1.5.3 Water Quality Plans

Through the "Critical Areas Review" process and the "Shorelines Master Program", the Kittitas County Planning Department governs development activities, construction, and land use activities near lakes, rivers, streams, wetlands, and other water bodies, within the County. This review, and the permit process, is in keeping with the requirements of Chapter 90.58 RCW and the Code of Federal Regulations 44, Part 60. Any modifications to the current Solid Waste System that may take place near water bodies within the County should proceed in consultation with the County Planning Department, and in accordance with these policies.

1.5.4 Capital Facilities Plans

The capital facilities plan is included in the County's most recent *Comprehensive Plan*.

1.5.5 Emergency Management Plan

The *Kittitas County Comprehensive Emergency Management Plan* (revised 2003) is for the use of officials in providing emergency management preceding, during, and following disasters. It gives the policies, information, recommendations and guidance necessary for the officials making operational decisions.

The *Kittitas County Disaster Debris Management Plan* was prepared in 2014 and accepted by the Federal Emergency Management Agency (FEMA) on May 12, 2015. This plan provides guidance and tools for removing and managing debris after a debris generating event.

Both plans can be accessed at: https://www.co.kittitas.wa.us/sheriff/emergency.aspx

1.5.6 Shoreline Management Plan

Shoreline management is included in the County's most recent *Comprehensive Plan*.

1.5.7 Watershed Plan

Elements of watershed management are included in the County's most recent *Comprehensive Plan*. Kittitas County is in the Upper Yakima River Basin Watershed (WRIA 37/38/39) and oversight lies with the Yakima Basin Water Resources Agency. However, the County chose to end their association with the watershed management planning process that prepared a standalone Watershed Management Plan in January 2003.

1.5.8 Floodplain Management Plan

Floodplain management is included in the County's most recent *Comprehensive Plan*.

Chapter 2
Description of the Planning Area

2. Description of the Planning Area

2.1 General Description

Situated near the geographic center of Washington State, Kittitas County encompasses a wide range of environments in its 2,333 square miles. It extends from the crest of the Cascade Mountains in the west, to the Columbia River in the east. Chelan County borders Kittitas County to the north and Yakima County lies across the southern border. The major highways within the County are Interstate 90, which crosses from Snoqualmie Pass to Vantage; Interstate 82, which connects Interstate 90 at Ellensburg with the City of Yakima and the Tri-Cities area to the south; and U.S. 97, which runs north through Ellensburg, into Chelan, Douglas, and Okanogan counties.

An understanding of the environmental, land use, and demographic features of Kittitas County assists in providing baseline information regarding existing and potential future solid waste handling needs. This chapter provides information on the County including geology, climate, land use, industry and employment, and population.

2.2 Geology

The geology of Kittitas County typically is complex, consisting of a variety of rocks and sediments. Volcanic and old marine sedimentary rocks occur mostly in western portions of the County. The eastern half is chiefly composed of younger sedimentary units and basalt flows. Valleys have deep glacial and alluvial deposits, with some areas of wind deposited soils. Depth to ground water is widely variable, reflecting the complexity of the geologic formations in Kittitas County.

2.3 Climate

Kittitas County, like the rest of Washington State, has a wet winter season and a dry summer season. Approximately one-half of the total precipitation measured within the County falls between November and January. In the lowlands of the County, less than 1 inch of rain generally falls between May and September. Temperatures are cool in the winter and warm in the summer, with wide ranges in daily temperatures as well as summer heat waves and winter cold spells. Continental air masses cause Countywide cold spells with below zero temperatures almost every year. The generally dry air results in clear skies during much of the year.

2.4 Land Use

Kittitas County is largely rural in nature. Urban development is located primarily in Ellensburg, and to a lesser degree in the towns of Cle Elum, Roslyn, South Cle Elum, and Kittitas. In Ellensburg, commercial development is found in the central business district and near I-90 along Canyon Road. Central Washington University, which has an enrollment of about 11,000 students, is in Ellensburg on a 350-acre campus. Industrial activities tend to be located along the Burlington Northern Railroad, I-90, and in the airport industrial park. A military reservation used for training purposes covers a 155 square mile area in the southeast corner.

Under current zoning, densities range from one unit per 6,000 square feet to one unit per 80 acres. Specifically, the Suburban zone allows a density of one unit per acre, while the Rural-3, Agricultural-3, Rural- 5, Agricultural- 5, Agricultural-20, and Forest and Range Zones allow for a density range of one unit per 6,000 square feet to 20 acres. The lowest density in the county is in the Commercial Forest Zone where the assigned density is one unit per 80 acres. Table 2-1 summarizes the County's zoning by acre as of 2018.

Table 2-1. Land Use in Kittitas County

Zone	Acres	% of Total Land Use
Commercial Agriculture	289,547.4	19.5%
Commercial Forest	800,376.7	54.0%
Rural Recreation	10,513.5	0.7%
Mineral Lands	5,690.7	0.4%
Rural Residential	29,956.6	2.0%
LAMIRD – Limited Areas of More Intense Rural Development	1,168.3	0.1%
Urban	15,224.6	1.0%
Rural Working	329,330.1	22.2%
Total	1,481,807.8	100.0%

* Data as of September 2018.

Forests cover approximately 54 percent of the County, primarily at the higher elevations of the County in the west and north. Agricultural and urban development is in the lower elevations along river valleys and account for approximately 20 percent of the County's land use. An exception to this pattern is recreational development near Snoqualmie Pass. Recreational, retirement, and second or summer homes have developed near Cle Elum and Roslyn. This type of development is rapidly increasing in that part of the County. A County land use map is provided in Figure 2-1.

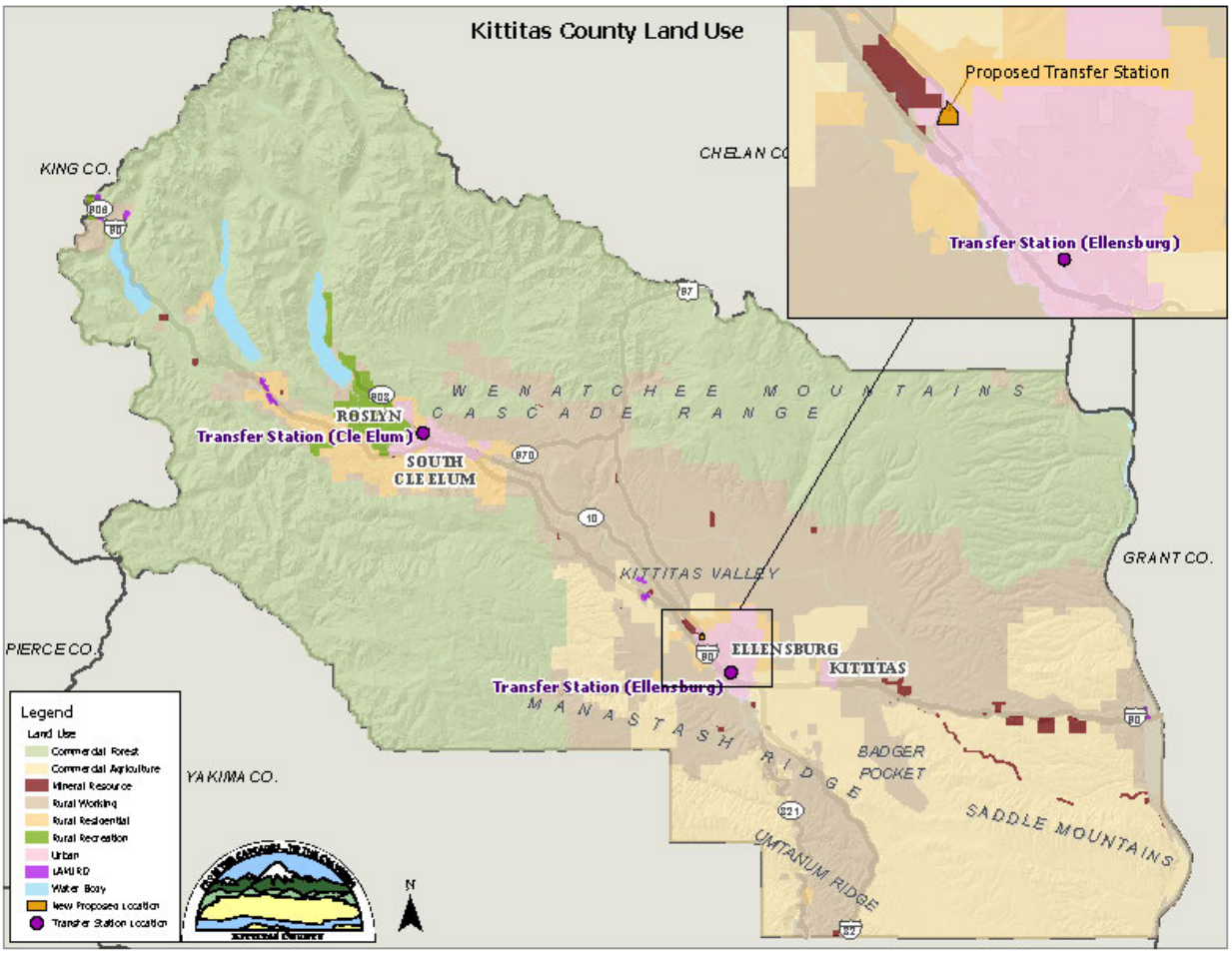

Figure 2-1. Kittitas County Land Use – 2018

2.5 Industry and Employment

Accommodation and Food Services is the largest employment category in Kittitas County while Health Care and Retail Trade are the largest contributors to payroll[3]. The 2012 Economic Census indicates Retail and Wholesale trade represent over 60 percent of business done in the County. Major employers in the County include Central Washington University, Ellensburg School District, Kittitas County government, the Kittitas Valley Community Hospital, Shoemaker Manufacturing, and Twin City Foods, Inc.

2.6 Population

2.6.1 Population Estimates

The State of Washington Office of Financial Management (OFM) prepares annual population estimates. Table 2-2 summarizes the OFM population estimates from 2000 to 2010 and shows the dramatic population growth rate of 23 percent seen in the 2000s has shifted to a high but less dramatic growth rate of 11 percent for 2018. In 2018, the County population is estimated to be 45,600, with 46 percent of the population residing in the unincorporated areas.[4]

Table 2-2. County and City Population Estimates and Growth Rates: 2000-2018[a]

Jurisdiction	2000 Census	2010 Census	2000-2010 Growth Rate	2018 Population Estimate	2010-2018 Estimated Growth Rate
County Total	33,362	40,915	22.6%	45,600	11.5%
Unincorporated	13,614	18,063	32.7%	21,120	16.9%
Incorporated	19,748	22,852	15.7%	24,480	7.1%
Cle Elum	1,755	1,872	6.7%	1,875	0.2%
Ellensburg	15,414	18,174	17.9%	19,660	8.2%
Kittitas	1,105	1,381	25.0%	1,515	9.7%
Roslyn	1,017	893	-12.2%	900	0.8%
South Cle Elum	457	532	16.4%	530	-0.4%

[a] State of Washington Office of Financial Management, 2018. April 1 official population estimates.

2.6.2 Projected Growth

In addition to preparing population estimates, OFM develops projections of future population growth in accordance with the Washington State Growth Management Act. Three series are prepared for planning purposes. The “high” series projection estimates that the County’s population will reach 70,086 by the year 2040. These projections are used to estimate solid waste generation in the County during the planning period, which serves as a basis by which the policies, programs, and facilities that will be needed to ensure the safe handling of solid waste are determined. Figure 2-2 provides an intermediate and high-series population projection.

[3] American Fact Finder 2016 Business Patterns https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF.
[4] State of Washington Office of Financial Management, 2018. April 1 Official Population Estimates.

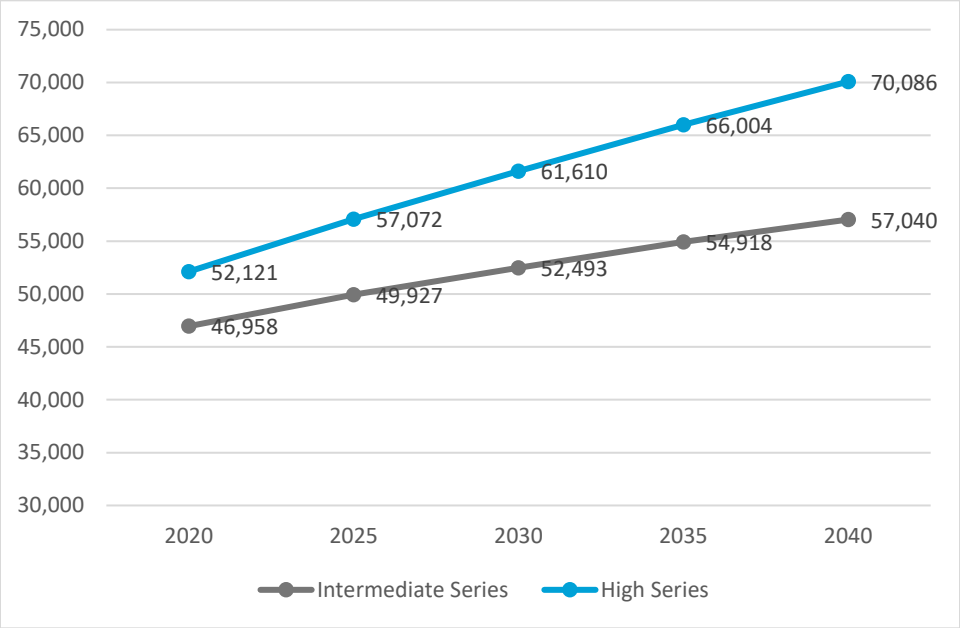

Figure 2-2. Kittitas County Population Projections 8[5], 2020- 2040

[5] State of Washington Office of Financial Management, 2012 Projections: County Growth Management Population Projections by Age and Sex: 2010-2040.

Chapter 3
Waste Generation and Characterization

3. Waste Generation and Characterization

An accurate analysis of the types and quantities of waste generated provides the necessary data for identifying existing and future solid waste system needs, and the policies, facilities, and programs to be implemented to meet those needs. This chapter analyzes Kittitas County's waste generation trends and uses historical and projected population data to produce a waste generation forecast.

For the purposes of this analysis, waste generation is defined as the sum of tons of solid waste disposed and diverted in Kittitas County. As used in this Plan, disposed solid waste is considered all solid waste placed in landfills or incinerated. Diverted waste includes waste that is recycled, composted, or otherwise diverted from disposal. The largest component of the waste stream is mixed municipal solid waste (MSW) and consists of waste typically generated by residences, offices, and other businesses and institutions. Other wastes include construction and demolition (C&D), moderate risk waste (MRW), and miscellaneous wastes, such as biomedical wastes, tires and automobiles, electronic wastes, and other types of wastes. Each category of miscellaneous waste has its own characteristics and handling needs. Miscellaneous waste and hazardous wastes produced by households, and by businesses in small quantities, are addressed separately in this Plan.

This chapter is organized as follows:

- **MSW & C&D Disposal** includes historical disposal and waste composition profiles for MSW and C&D waste.
- **Recycling and Diversion** quantifies the materials recycled and diverted, recycling capture rates, and recycling and diversion rates.
- **Waste Stream Projections** presents projected future waste stream quantities based on historic data.
- **Level-of-Service Requirements** describes the County's commitment to a minimum level of service for solid waste management and the projected requirement for 2030.

3.1 MSW and C&D Waste Disposal

MSW that is collected from residents by a private hauler or self-hauled by residents, businesses, and institutions, is taken to one of two transfer stations located within the County, the Ellensburg or Upper County Transfer Stations. All MSW generated in the County is transferred from these facilities to the Greater Wenatchee Regional Landfill in Douglas County. Details regarding the County's MSW collection and disposal infrastructure are included in Chapters 4 and 5 of this Plan.

There are two disposal options for C&D waste generated in Kittitas County: 1) residents and businesses self-haul C&D waste to the two transfer stations for a reduced disposal fee; and 2) Waste Management, licensed contractors, and other businesses with customer accounts dispose of C&D waste at Ryegrass Limited Purpose Landfill. In 2017, a total of 3,657 tons of C&D was collected at the transfer stations and sent to the Ryegrass Limited Purpose Landfill. Additional information about historic disposal rates and composition can be found in the 2010 SWMP.

3.1.1 Historical Disposal

Figure 3-1 presents quantities of MSW disposed since 2013. Shown in prior plans, County disposal climbed steadily from 2004 to 2007 from 25,000 tons disposed to a high of nearly 36,000 tons. Currently disposal has reached this high level again due to the ongoing population increases, despite increased waste reduction and recycling efforts.

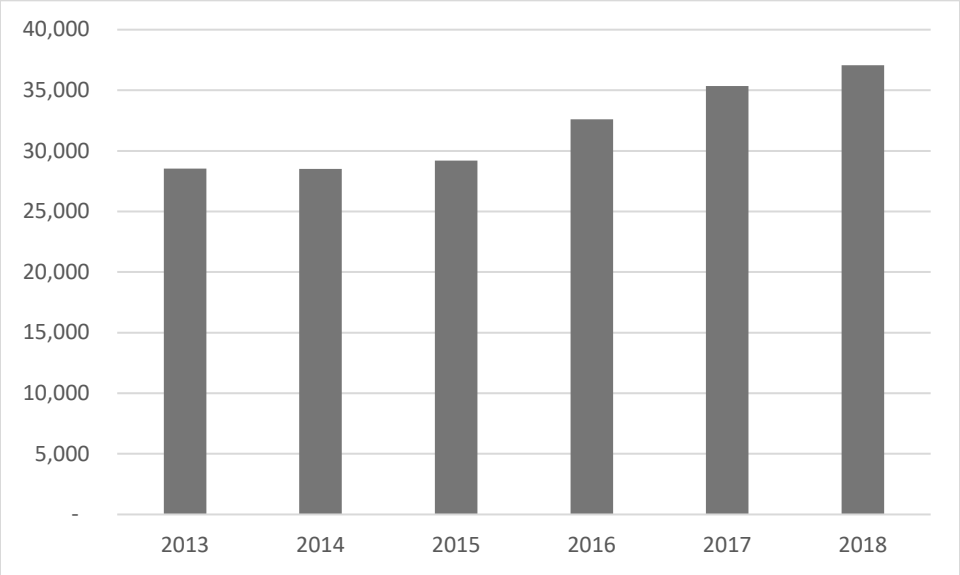

Figure 3-1. MSW Disposal Quantities, 2013-2018

3.1.2 MSW Composition Comparison of Kittitas County to State Study

Kittitas County last conducted a Waste Characterization Study in 2008. To provide another data point on the current waste composition, the 2008 data were compared to the findings of the recent Ecology 2015-2016 Washington Statewide Waste Characterization Study (Statewide WCS). The 2015-2016 Statewide WCS organizes Kittitas County into the Central Waste Generation Area (WGA) with six other counties. Sampling was conducted in Chelan and Grant counties. Chelan and Grant have population densities of 26 and 34 people per square mile respectively. Kittitas has a population density of 19 people per square mile. Their economies have slight variation. While Retail is the second largest employer for all three counties, Grant County's largest employer is Manufacturing; Chelan County's largest employer is Health Care, and Kittitas County's largest employer is Accommodation/Food Service.[6]

Figures 3-2 and 3-3 show the composition of the disposed waste stream and the percentage of total tons of material disposed in one year. As shown in Figures 3-2 and 3-3, the largest component of the disposed waste stream in the 2015-2016 Statewide WCS, Central WGA and 2008 Kittitas WCS is organics. The Statewide data differ from Kittitas in quantity of paper, plastics, and C&D. Based on the 2008 data, Kittitas County appears to divert more of its overall plastics (represented by a smaller number in the disposed waste stream) into recycling while the paper capture/recycle rates appears lower than in the Statewide WCS. Kittitas was no longer in a construction boom in 2008, but the amount of C&D waste disposed in 2008 was still much higher than the amount of C&D disposed Statewide.

[6] U.S. Economic Census Survey 2012

Figure 3-2. 2015-2016 State WCS, Central WGA Disposed Waste Composition (percent of total tons disposed)

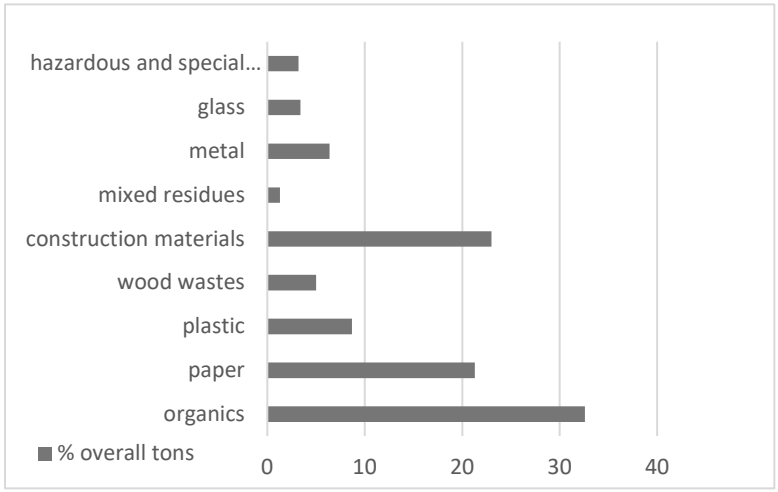

Figure 3-3. 2008 Kittitas WCS Disposed Waste Composition (percent of total tons disposed)

Looking further at organics, the largest component in both studies, shows that the largest category is food, followed by leaves and grass (see Figures 3-4 and 3-5).

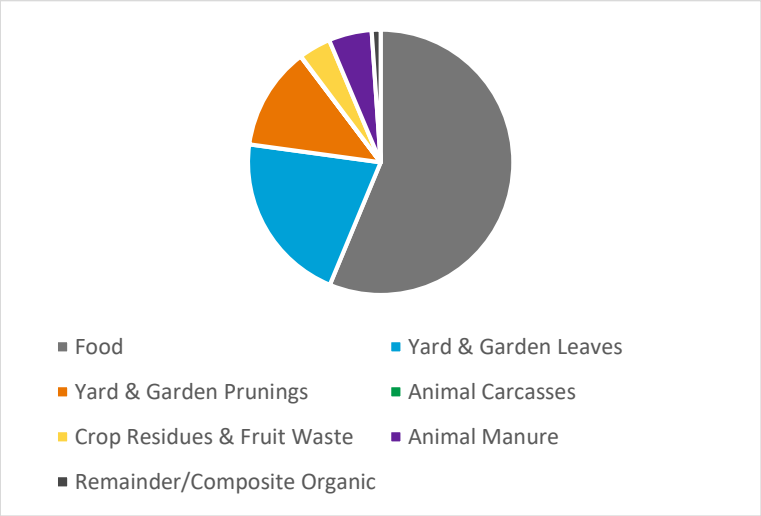

Figure 3-4. 2015-2016 Central WA Waste Characterization Organic Waste Components (percent of total tons)

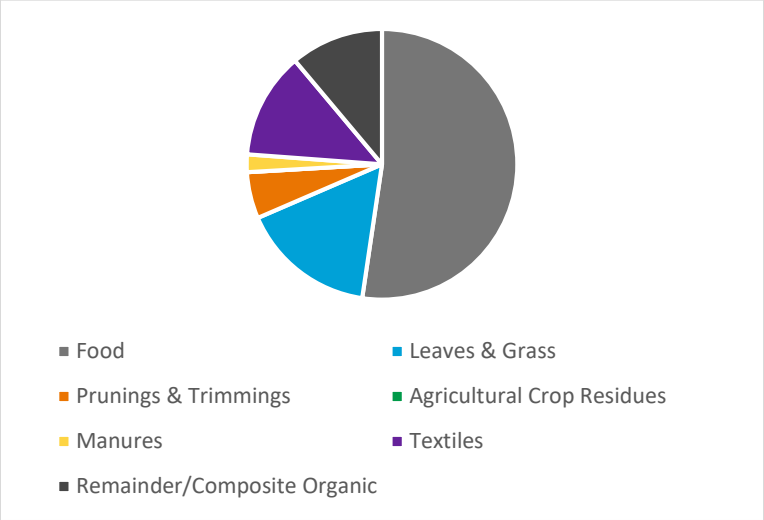

Figure 3-5. 2008 Kittitas Waste Characterization Organic Waste Components (percent of total tons)

Kittitas County does not currently divert food waste but composts yard waste (leaves, grass, prunings, and trimmings). There are not any current plans to collect food waste.

Both the Statewide WCS and the 2008 Kittitas WCS break the overall waste stream into 4 sectors:

- **Commercial**—defined as waste hauled by contracted or municipally operated vehicles in which 80 percent or more of the waste is from institutional, commercial, or industrial sources, and includes C&D materials.
- **Residential**—defined as waste hauled by contracted or municipally operated vehicles in which 80 percent or more of the waste is from single-family and/or multifamily residential sources.
- **Self-hauled Construction and Demolition (C&D)**—defined as waste hauled by vehicles not operated by a franchise or municipality and whose waste was generated because of construction or demolition activities.
- **Self-hauled Other**—defined as waste hauled by vehicles not operated by a franchise or municipality and whose waste was not generated because of construction or demolition activities.

Detailed tables for the Central Waste Generation Area can be found in the *2015-2015 Statewide WCS* and Kittitas' waste stream breakdowns for 2008 can be found in the *2010 Kittitas SWMP*. A summary of the highest contributors in each waste sector can be found in Table 3-1.

Table 3-1. Comparison of Waste Character in Four Waste Sectors

Sector	2015-2016 Statewide WCS - Central Waste Generation Area	2008 Kittitas Waste Characterization Study in the SWMP
Residential	• Organics 48.2% • Paper 17.4% • Plastics 9.2%	• Organics 45.1% • Paper 22.5% • Plastics 10.6%
Commercial	• Organics 17.3% • Wood wastes 16.7% (C&D additional 8.2%) • Plastics 14%	• Organics 38.6% • Paper 33.4% • Plastics 10%
Self-Haul C&D	• C&D 44.5% • Wood wastes 33.3% • Consumer products 9.1%	• Organics 19.5% • C&D 49.4% (of this 17.7% wood waste) • Metal 8.0%
Self-Haul Other	• Organics 27.7% • Wood wastes 14.7% • Consumer products 22.1%	

3.1.2.1 Comparison of Results

Both studies come to the same conclusion with regard to the largest component of the disposed waste stream (organics). Both studies also show that there are a large quantity of paper and plastics remaining in the disposed waste. Kittitas County has recycling/reuse programs for 3 of the top 5 waste products found in the Statewide WCS- organics, paper, plastics. This is validation that the County has focused on providing the right types of recycling/reuse services.

Assuming the percent of inedible food-vegetative and edible food-vegetative is similarly high in Kittitas, this could present either a reuse or diversion opportunity as market conditions allow. These products are not currently accepted at the Ellensburg Compost Facility and the new compost facility is being designed assuming that food waste is not accepted. A different processing option would need to be established.

3.2 Recycling and Diversion

This section presents recycling and diversion quantities and rates for Kittitas County in 2008.

3.2.1 Recycling and Diversion Definitions

Recycling and diversion are defined as follows.

- **Recycling** means "transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport." (WAC 173-350-100)[7]
- **Ecology** defines diversion as the recovery of "asphalt, concrete, and other construction, demolition, and land clearing debris" through uses "other than landfill disposal."[8]

[7] Solid Waste Handling Standards, Definition. http://apps.leg.wa.gov/WAC/default.aspx?cite=173-350-100.

[8] Washington State Department of Ecology's Beyond Waste Solid Waste Recycling webpage: http://www.ecy.wa.gov/beyondwaste/sixteen_initiatives/solid_waste_recycling.html.

3.2.2 Recycling Quantities and Rate

Recycled tonnages are based on responses to Ecology's Annual Washington State Recycling Survey as listed in Table 3-2. These tonnages do not include recyclables collected by the WUTC hauler in the cities to avoid double-counting.

Table 3-2. 2018 Recycling Quantities

Material	Tons
Newspaper	100
Cardboard	605
Mixed Waste Paper	83
Container Glass	294
PET Plastics	41
HDPE Plastics	16
Aluminum Cans	22
Steel Cans	19
Appliances (white goods)	235
Fluorescents (CFL, 4-foot, 8-foot)	1
Antifreeze	13
Used Oil	63
Tires	166
Vehicle Batteries	13
Household Batteries	3
Yard Debris	2,635
Total	**4,309**

The **recycling rate** is the amount of recycling, as a percentage, of the total waste generated and is calculated as follows.

$$Recycling\ Rate\ (\%) = \frac{Recycling}{Waste\ Disposal + Recycling} = \frac{4{,}543\ tons}{35{,}352\ tons + 4{,}543\ tons}\ 11.4\%$$

As shown above, the 2017 recycling rate for Kittitas County was 11.4 percent. This is a significant decrease from the 27.8 percent from 2008. Areas that had significantly less recycling include: cardboard, ferrous metal, nonferrous metal, cooking oil, and used oil.

3.3 Waste Stream Projections

Waste stream projections were estimated by calculating the annual population increase between 2020 and 2040 using the intermediate population projections in Figure 2-2. This equates to 1 percent per year. This was then applied to the actual waste generation tonnages using 2017 data. Table 3-3 reflects the total projected waste generation over the planning period.

Table 3-3. Kittitas County Solid Waste Projections

Year	MSW	CDL	Ryegrass CDL	Yard Waste	Total
2017	35,352	3,655	27,052	2,487	68,547
2018	35,706	3,692	27,323	2,512	69,232
2019	36,063	3,729	27,596	2,537	69,924
2020	36,424	3,766	27,872	2,562	70,624
2021	36,788	3,804	28,151	2,588	71,330
2022	37,156	3,842	28,432	2,614	72,043
2023	37,527	3,880	28,716	2,640	72,764
2024	37,903	3,919	29,004	2,666	73,491
2025	38,282	3,958	29,294	2,693	74,226
2026	38,664	3,998	29,586	2,720	74,968
2027	39,051	4,038	29,882	2,747	75,718
2028	39,442	4,078	30,181	2,775	76,475
2029	39,836	4,119	30,483	2,802	77,240
2030	40,234	4,160	30,788	2,830	78,012
2031	40,637	4,201	31,096	2,859	78,793
2032	41,043	4,244	31,407	2,887	79,580
2033	41,453	4,286	31,721	2,916	80,376
2034	41,868	4,329	32,038	2,945	81,180
2035	42,287	4,372	32,358	2,975	81,992
2036	42,710	4,416	32,682	3,005	82,812
2037	43,137	4,460	33,009	3,035	83,640
2038	43,568	4,505	33,339	3,065	84,476
2039	44,004	4,550	33,672	3,096	85,321
2040	44,444	4,595	34,009	3,127	86,174

3.4 Level of Service

The minimum level of service for County services, including solid waste, is included in Ordinance 1999-01 (Appendix C).

To maintain the current level of service, the County will need to increase solid waste services to meet future waste stream projections. The population projections for Kittitas County predict a growth of over 10,082 people between 2020 and 2040 which is a lot of residents to plan for, but less than the estimated 16,000 people in the 2010 Plan. To maintain the adopted level of service, Kittitas County would need to provide waste management programs for an additional 15,551 tons generated annually by 2040.[9]

[9] Population projections were obtained from the State of Washington's Office of Financial Management at http://www.ofm.wa.gov/pop/gma/projections12/GMA_2017_county_pop_projections.pdf. The intermediate estimates were used for this analysis.

Chapter 4
Waste Reduction, Recycling, and Composting

4. Waste Reduction, Recycling, and Composting

The recommended options and associated implementation actions for waste reduction, recycling, and compost are summarized in Table 4-1.

Table 4-1. Waste Reduction, Recycling, and Composting Summary of Implementation Actions

Option	Summary of Action
Waste Reduction	
Waste Reduction Policies	Track progress of the procurement policy.
Public Education and Outreach	Continue to implement electronic, print and presentation recycling outreach elements including MRW. Consider preparing videos to discuss various solid waste related topics. Videos will be posted to the County website.
Commercial Technical Assistance	Continue to offer more technical assistance and provide a case study of high-performing businesses.
Institutional and Nonprofit Assistance	Support community activities and local organizations to expand their programs through sponsorships and presentations. As new schools are planned, get involved in predesign efforts to make sure schools set up with equipment that supports waste reduction.
Purchasing	Develop procurement policies for agencies, ensure the success of the plastic ban bag, and promote smart purchasing options.
Recycling	
Collection	Work with haulers and cities to provide recycling services that support the viability of those programs and are economically feasible based on market conditions.
Commercial Programs	Provide technical assistance to large businesses. Target agricultural activities. Develop a recognition program to increase recycling.
Large Venue and Special Event Recycling	Continue reviewing event plans and develop best management practices for event planners.
Self-Haul	Provide recycling services that support the viability of those programs and are economically feasible based on market conditions.
Rate Structure	Maintain the PAYT structure. Evaluate if rate changes are necessary to adequately cover the cost of recycling.
Recycling Incentives	Assist organizations in applying for grants. Encourage use of the recycling trailer.
Evaluation and Monitoring	Conduct annual assessment of progress meeting the goals and objectives of the Plan.
Identify Funding and Other Nonmonetary Resources	Identify and pursue funding and nonmonetary resources for developing and implementing recycling programs and promotion.
Formal Working Relationships	Encourage the establishment of formal working relationships between the County and other agencies, institutions, and organizations.
Sustainable Community	Promote complementary programs like green building and food waste reduction.
Evaluate Expansion of Programs	Evaluate the expansion of programs to target specific waste generators; evaluate curbside recycling.
Public Outreach and Education	Continue existing outreach and expand program resources online.
Composting	
Composting Public Education and Outreach	Continue to develop, distribute, and post composting education materials. Expand the Master Composter program and offer additional seminars.
Compost Facility	Develop new Compost Facility at the new transfer station that is being developed.

Table 4-1. Waste Reduction, Recycling, and Composting Summary of Implementation Actions

Option	Summary of Action
Vermicomposting	Continue composting workshops and recruit small-scale pilot composting projects.
Residential Yard Waste Collection Programs	Continue existing green waste collection programs and evaluate expanding curbside service.
Commercial Collection of Organics	Conduct a feasibility study to evaluate collection of preconsumer food waste.
Marketing of Finished Compost Products	Evaluate the marketing of finished compost.
Tiered Rate Structure for Organics	Review the green waste tipping fee and implement a higher charge for contaminated green waste.

4.1 Introduction

Beginning in 1989 with the adoption of Chapter 70.95 RCW (the Waste Not Washington Act), County governments in Washington have been required to include waste reduction and recycling elements in their Solid Waste Management Plans. The Waste Not Washington Act set a statewide goal of 50 percent recycling and composting rate, which was met in 2011. RCW 70.95 expects each community to contribute to the following statewide goal and set priorities for the collection, handling, and management of solid waste:

1) Waste Reduction
2) Recycling, with source separation of recyclable materials as the preferred method
3) Energy recovery, incineration, or landfilling of separated waste
4) Energy recovery, incineration, or landfilling of mixed waste

In addition to helping Kittitas County meet the State's recycling goal, waste reduction and recycling provides the following short and long-term benefits locally:

- Reduces the need for additional garbage processing facilities, thereby protecting local water, soil, and air quality, as well as preserving agricultural lands and forest resources within the County
- Lowers the volume and thus the cost of waste collection and long-haul/landfill operations providing economic benefits to the public and the County
- Provides recycling industry employment opportunities in the community

The goal of this chapter is to identify specific opportunities to achieve the objectives defined in Chapter 1 of this Plan, which will help the County meet the requirements of the Waste Not Washington Act. This chapter outlines existing conditions/practices for waste reduction, recycling, and composting programs; needs and opportunities; and recommendations and implementation. The chapter is organized into three major subsections, as follows:

- Waste Reduction
- Recycling
- Composting and Yard Waste

4.2 Waste Reduction

4.2.1 Background

Waste reduction is the State's top priority for managing solid waste. Ecology defines it as reducing the amount or toxicity of waste generated or reusing materials. It involves reuse of materials, repair and restoration of broken items, elimination of excess packaging, use of durable products instead of disposable items, onsite waste management (e.g., composting), and other efficient uses of resources.

Waste reduction can be the most effective, economical, and environmentally sound way to manage waste. Kittitas County is distant from most recyclables markets which, in conjunction with current low-

market prices for many commodities, reduces or eliminates the potential for revenues from the sale of recyclables. Waste reduction also avoids the need to develop and finance systems to collect, process, market, manufacture, and/or dispose of recyclables and garbage. Because waste reduction is such an efficient and economical tool, the County would benefit from implementing broad-based waste reduction programs and encouraging city governments to plan complementary programs.

There are four basic methods for waste reduction:

1) Reduce consumption by using product alternatives that generate less waste.
2) Reuse products for their original or compatible purposes.
3) Increase the durability or lifetime of products.
4) Decrease the amount of material used to produce each product or reduce product packaging.

When developing a waste reduction program, the County should be aware that waste reduction is generally not as well documented or understood as recycling and requires extensive education.

Additionally, some waste reduction tactics, especially those involving product and packaging waste, are controlled by economic, political, and educational forces beyond the County's control. Several outreach programs targeted at waste reduction have already been implemented in Kittitas County.

4.2.2 Existing Conditions

Waste reduction is supported in Kittitas County through various programs and offerings. Many promotional materials and outreach programs exist to spread awareness of waste reduction and recycling. This section includes a listing of material reuse programs and current education and outreach efforts.

4.2.3 Material Reuse Programs

Material donation and reuse opportunities currently available include:

- Numerous private and nonprofit businesses operate secondhand material outlets throughout the County.
- Websites such as www.craigslist.org and www.freecycle.org and numerous social media platforms provide an internet-based forum to buy, sell, give-away, and exchange secondhand products locally.
- Kittitas County, Central Washington University (CWU), and cities sponsor public surplus sales of materials and equipment no longer needed by those agencies but still usable.
- The Solid Waste Department provides free, usable products, such as paint, for the public as they are retrieved from the Moderate Risk Waste Facility.

4.2.4 Public Outreach and Education

Kittitas County has numerous outreach and education programs. Table 4-2 shows the programs that are in place, including target sectors, and highlights of each program.

Table 4-2. Kittitas County Waste Reduction and Recycling Public Outreach

Program	Target Sector	Highlights of the Program
Backyard Composting	Residential	• Master Composter seminar held once per year; in exchange for the free training, participants agree to volunteer for 15 hours • Worm composting classes for the community, including children's program./ • Pamphlets, books, videos, and displays are also available
Website	Residential, Commercial	Information provided on the County website includes: • SWMP Update and supporting documents • Waste reduction tips • Recycled-content purchasing websites

Table 4-2. Kittitas County Waste Reduction and Recycling Public Outreach

Program	Target Sector	Highlights of the Program
		• Recycling options and information • Promotion of the Master Composting Program • Hazardous and special waste services • Calendar of Green Events • Transfer station locations and fee schedule
School Presentations	Schools	• Promote waste reduction and recycling. • Tours of solid waste facilities are provided upon request.
Promotional Materials	All	• Disseminate information via brochures, posters, flyers, and newspaper and radio ads and news interviews. • Direct mail including annual Recycling Guide and notices in quarterly bills.
Community Events	Residential	Provide local waste reduction and recycling information and activities at events, including: • Kittitas County Environmental Education Network • Kittitas County Fair • Earth Day/Arbor Day Celebration at CWU • Farmer's Markets • KXLE Home, Business & Garden EXPO • Master Composter and Gardener Classes • Compost Class • Get Intimate with the Shrub Steppe Event • Yakima River Clean Up • Christmas Tree Recycling
Advise and Assist	Government, Agencies, Institutions, Commercial, Nonprofit	• Procurement options and alternatives • Reduce, Reuse, Recycle options • Disaster debris management • Hazardous Waste handling
Household Hazardous Waste	Residents and small-quantity generators	• Customer interaction and brochures outlining the types of waste accepted by our MRW facility. • Assist generators in identifying opportunities to reduce waste, purchase recycled content products, locate appropriate recycling services through site visits, telephone contacts, and workshops as appropriate. • Provide "Reuse" cart at our office to offer unused products free for others to use.

4.2.5 Waste Reduction Needs and Opportunities

Waste reduction could be further encouraged in Kittitas County by addressing the following needs:

- Residents continue to request information regarding alternatives to toxic products, methods for proper disposal, and the implications of improper disposal
- Incentives are needed to boost food composting and lawn mulching because the cost of composting bins or mulching mowers are cost prohibitive. Organics make up 30 percent of the residential waste stream.
- Existing contacts and collaborators could be leveraged for more impact. For example, the Master Composter program could be expanded to cover composting, waste reduction, and other solid waste topics.
- Businesses need proactive outreach on waste reduction and proper hazardous waste handling because they are not reaching out to Solid Waste directly.
- Numerous web-based materials exchange/reuse sites already exist but need promotion.
- Educational and promotional materials are not sufficiently linking the concepts of greenhouse gases and climate change to solid waste management.

- Consumers are not utilizing guidelines and calculators to estimate the required quantity of product to complete a task (e.g., painting a structure, fertilizing a yard).

4.2.6 Waste Reduction Recommended Options and Implementation Actions

The following options for improving waste reduction are recommended. Each option and the associated implementation actions are discussed below.

4.2.6.1 Waste Reduction Policies

The County will continue to follow its procurement policy that encourages the County to purchase products made from recycled-content materials and should encourages other government agencies to incorporate similar source reduction efforts. The County should document progress in the implementation of this policy with metrics to demonstrate waste reduction accomplishments.

4.2.6.2 Public Education and Outreach

The County could work with community partners to further develop a waste reduction and recycling public education and outreach program that targets specific audiences. Activities to encourage waste reduction and recycling could include the following:

Electronic

- Provide brochures, flyers, web links, and other resources for waste reduction and reuse on the County's website.
- Use social media to connect with the community on waste reduction-reuse-recycling topics and events and support the use of related forums.
- Send an e-newsletter to subscribers on a regular basis with tips on waste reduction and recycling, and household hazardous waste (HHW) management as well as promoting upcoming events like the Master Composter program.
- Create and post original video content to promote waste reduction techniques, yard waste separation, and secured loads.
- Provide television and radio PSAs that are broadcast through cable or city TV stations and public radio stations.

Print

- Update "Where, When, and How to Recycle in Kittitas County" at least once per year.
- Provide real estate companies with new move-in and move-out procedures for residents.
- Prepare brochures and flyers for waste reduction and reuse at the Solid Waste Office. Highlight waste reduction ideas such as selling unwanted goods, donating to and purchasing good from second-hand vendors, lawn mulching, etc.
- Submit articles to the newspaper or other media to provide information on reduction and reuse opportunities in the county.

Presentations

- Conduct teacher workshops to introduce an environmental curriculum.
- Conduct Hazard-Free Home workshops including proper chemical disposal (e.g. pesticides, herbicides, fertilizers, cleaners) and promote use of MRW facilities.
- Train farmers on Integrated Pest Management Strategies and proper pesticide disposal.
- Staff information booths at local events.

- Staff presentations at local clubs and gatherings, community events, County fairs, and other events (e.g., Ellensburg Rodeo).
- Conduct debris management planning presentations for residents and institutions facing a disaster.

4.2.6.3 Commercial Technical Assistance

Offer technical assistance and provide resources to businesses to incorporate waste reduction strategies, such as those listed below:

- Assess supply chain and material usage at local, large commercial, industrial, and agricultural sites to identify opportunities for increased waste reduction. Write a case-study of a high-performing company to highlight in outreach efforts.
- Explore opportunities for two-way packaging.
- Steer businesses toward reusables because compostable products cannot be processed locally.
- Focus on reducing paper usage (e.g., defaulting to duplex printing).

4.2.6.4 Institutional and Nonprofit Assistance

- Support community activities that promote waste reduction.
- Support local organizations in their efforts.
- Expand school waste reduction, recycling contamination reduction, and the use of reusable water bottles and fill stations, or the switch from disposable trays to reusable trays. Work with environmental clubs to develop successful programs. As new schools are being planned and developed or existing schools are renovated, consider getting the County and/or Waste Management, Inc. involved in the predesign review to plan and budget for the appropriate interior solid waste containers (recycling and trash) that are compatible with the exterior equipment and collection vehicles.
- Increase information booth hosting and presentations at local clubs and gatherings, community events, County fairs, and other events (e.g., the Ellensburg Rodeo).

4.2.6.5 Purchasing

On a broader basis, work with agencies, retailers, and consumers to develop procurement policies as well as outreach and assistance programs to promote smart consumer purchasing options.

Procurement

- Assist cities and County agencies in adopting and implementing procurement policies that require the purchase of recycled- content products, with content specifications and minimum purchasing goals for recycled products.
- Revise the existing Resolution 2000-102 to include a preference for resource-efficient and durable goods.
- Attend a training on sustainable purchasing to set goals to identify evaluate and purchase economical an effective sustainable products and services. Procurement policies developed will meet or exceed the provisions of Chapter 43.19A RCW.

Consumer Purchasing Options

- Provide information on ways consumers can reduce their waste through smart purchasing practices, such as using reusable bags instead of paper or plastic (building off the existing bag ban), buying in bulk to reduce packaging waste, buying products made with recyclable packaging, and buying or renting durable goods instead of disposable.
- Provide information on ways consumers can choose less toxic products, reducing the need for special handling.

- Provide outreach and technical assistance to help retailers feature less toxic and less wasteful products.

4.3 Recycling

Recycling is the second highest priority in strategies to manage materials in the waste stream. Chapter 70.95 RCW defines recycling as transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling, then, can be any technique that turns waste materials into useful products. This section addresses current recycling conditions in Kittitas County and provides recommendations for future actions based on the needs of the County.

Based on responses to Ecology's Annual Washington State Recycling Survey statewide recycling survey conducted by Ecology, the recycling rate in Kittitas County was ~11 percent in 2017. This rate only includes materials that come through Kittitas County solid waste facilities. It does not include the recycling that is done through private collection sites or vendors (e.g. high-grade paper, electronics) located within the County.

Kittitas County SWAC has set an overall recycling goal of 50 percent for the County. While the SWAC recognizes that Kittitas County may not reach this goal for some time due to its lower population density, the committee felt it was a goal the County should strive to meet in the long term. This section outlines Existing Conditions, needs, and options for achieving the 50 percent recycling goal.

4.3.1 Existing Conditions

In Kittitas County, recycling consists primarily of drop-off locations except curbside recycling and greenwaste collection in the City of Ellensburg. Drop-off opportunities are offered at the two County transfer stations. This section includes a listing of materials currently recycled, a designation of urban and rural areas served, and current public and private recycling opportunities.

4.3.2 Identification of Recyclable Materials

According to Chapter 173-350 WAC, a list of designated recyclable materials must be included in the SWMP. Criteria used to determine recyclables include potential for significant waste stream diversion, state and local recycling goals, local market conditions, and continuity in materials collected. The materials designated on the following page are categorized into three tiers. Urban and rural residential recycling programs are then based on the collection of these designated recyclables. Each of these tiers are defined below.

Tier 1: Materials feasible (i.e., current market, ease of collection, size of waste stream) for current regular recycling programs.

Tier 2: Materials that can be recycled, but for which there are limitations in collecting or marketing on a regular basis. These materials may be collected for recycling on an irregular basis, seasonally, at special events, or at selected locations as feasible or necessary.

Tier 3: Materials for which recycling may become feasible in the future.

Table 4-3 lists the materials currently in each of the three tiers of recyclables for Kittitas County. This list is used in this section to identify needs for collection, drop-off, and processing programs in the County.

New contamination standards and drastic changes in recycled materials markets have resulted in reduced markets and increased costs for recycled materials. As such the County will continue to monitor market conditions and may shift items from one Tier to another as a result.

New market opportunities may be created as new technologies develop, as virgin commodity prices fluctuate, and/or as new environmental concerns arise. For example, converting organic materials for

biodiesel production may become an economically feasible recycling opportunity. As such, this list should be considered dynamic and open to modification during the term of the SWMP. Any proposed changes to the designated recyclables list must be made to the Solid Waste Director and presented to the SWAC for review. The SWAC will then make a recommendation to modify the list and the item brought forth to the County Commission for review and approval. If approved, the list will be updated and submitted to Ecology. This process should not be considered an amendment to the SWMP and does not require commission action.

Table 4-3. Tiered Designation of Recyclable Materials

Tier 1: Routine Acceptance	Tier 2: Limited Acceptance	Tier 3: Potentially Recyclable
Aluminum	Ink Cartridges	Plastic Film including shopping bags
Corrugated Cardboard	Cell Phones	Expanded Polystyrene
Magazines	Textiles	Construction/Demolition Debris including Wood Waste
Newspaper	Glass containers	
Mixed Waste Paper	High Grade Paper	
Plastic Bottles (PET, HDPE)		
Tinned Cans		
Ferrous Metals		
Nonferrous Metals		
Yard Debris		
Motor Oil		
Vehicle Batteries		
Nonvehicle Batteries		
Tires		
Antifreeze		

This list is subject to change. Locations that accept these materials are listed on the County website.

4.3.3 Urban/Rural Service Areas

The Waste Not Washington Act includes amendments to Chapter 70.95 RCW with provisions to develop criteria for designating areas as urban or rural. In urban areas, recyclables must be collected from single and multi-family residences. Rural areas should have drop-off recycling or buy-back centers. The Act recommends considering several criteria including anticipated population growth, the presence of other urban services, and density of commercial and industrial properties as well as geographic boundaries and transportation corridors.

To ensure that this SWMP is consistent with the Act as well as other planning documents within the County, the SWAC utilizes the urban/rural designations adopted in the County's Growth Management Plan contained in the County's 2016 *Comprehensive Plan*.

4.3.4 City and County Recycling Programs

Recycling opportunities are available in Kittitas County through curbside collection service, drop-off locations, and other facilities. An updated list of city and County recycling programs is provided in brochures and the County website. The County promotes awareness of its recycling programs through education and outreach, as described in Chapter 4.3.12.

4.3.5 Curbside Collection of Recyclables

In Ellensburg, curbside recycling service is available on a subscription basis. Ellensburg recycling is collected in a single-stream system on a bi-weekly basis. Every garbage subscriber may participate in the curbside recycling program at no extra charge. Although challenging recycling market conditions put additional strain on making this economically sustainable. Table 4-4 shows the categories and types of materials currently collected in the curbside collection program. Reduced markets and increased costs to recycle may impact the material types that are collected per the curbside collection program and this list should also be considered dynamic and open to modification during the term of the SWMP.

Table 4-4. Materials Collected in Ellensburg Curbside Collection Program

Material Category	Material Type
Paper	Newspaper
	Cardboard
	Magazines
Metal	Tin Cans
	Aluminum Cans
Plastic	PETE
	HDPE

4.3.6 Drop- off at Transfer Stations

4.3.6.1 Recyclables

The County currently has drop boxes for residents at each of its transfer stations for the collection of aluminum cans, tin cans, newspapers, magazines, container glass, corrugated cardboard, HDPE plastic milk jugs, and PETE soda bottles. These boxes are monitored and serviced by Waste Management.

Additionally, ferrous and nonferrous metals, tires, and appliances are accepted for a fee. Accepted appliances include clothes washers and dryers, dishwashers, ranges, refrigerators, freezers, and other similar large household appliances. The County may contract for the processing of refrigerators, freezers, and air conditioners. Refrigerant is recovered for recycling and compressor oil is recovered for secure disposal and/or treatment. The appliances are then processed with other nonrefrigerant containing white goods into bales and sold as scrap.

4.3.7 Private Recyclers

Private businesses provide many recycling opportunities to Kittitas County residents and businesses. The Solid Waste website contains the most current list of these opportunities. However, the recycling market is everchanging and particularly volatile and as a result, businesses come and go.

4.3.7.1 Waste Management Commercial Recycling Collection

Waste Management offers, for a fee, collection of corrugated cardboard to businesses in the County except in Cle Elum.

4.3.7.2 Kittitas Valley Recycling

Kittitas Valley Recycling collects aluminum cans, ferrous and nonferrous metals, and electronics covered under the eCycle Washington program for free. Additionally, Kittitas Valley Recycling accepts lead-acid vehicle batteries, household batteries, fluorescent tubes, and compact fluorescent light bulbs and electronics not covered under the eCycle Washington program for a fee.

4.3.8 Private Material-Specific Drop-off Locations

Several businesses in Kittitas County specialize in recycling select material types:

4.3.8.1 Electronics

E-Cycle Washington provides free recycling of computers, monitors, laptops, and televisions to residents, charitable organizations, small businesses, and small governments. Goodwill, and Kittitas Valley Recycling each accept computers, CPUs (towers), laptops, computer monitors and televisions for free.

4.3.8.2 Household Battery, Ink Cartridge, and Cell Phone Collection

Kittitas County Solid Waste Office and Cle Elum Transfer Station accept all household batteries, some ink cartridges and cell phones.

4.3.8.3 Metal Recycling

There are currently two companies that collect both ferrous and nonferrous metals for free, including aluminum, brass, and copper. Aluminum, brass, and copper can be dropped-off for recycling, and iron can be collected for a fee or bought on a case-by-case basis.

4.3.8.4 Textiles

The Goodwill recycles textiles that are not of high enough quality to be sold in the stores.

4.3.8.5 Waste Vegetable Oil

Kittitas County accepts waste cooking oil cooking at its two transfer stations from households and restaurants where it is recycled to make biodiesel.

4.3.9 Recycling Trailer

The County currently owns a trailer for collection of recyclables at special events. This trailer is available to all cities and towns within the County at no charge.

4.3.10 Kittitas County Staffing

County staff includes a recycling coordinator whose duties include management of the moderate risk waste facilities and programs, implementation of compost/yard waste programs, and education and implementation of programs for recycling of marketable commodities. This staff person also serves as a liaison on recycling issues for recycling companies, community groups, schools, businesses, and industry. The position is partially funded by a Coordinated Prevention Grant from Ecology.

4.3.11 Recycling Needs and Opportunities

Despite current recycling opportunities in the County, there continues to be an opportunity to educate the public about the environmentally appropriate and fiscally responsible management of materials. Recycling is not “free” – it is embedded in the cost of garbage; although often costs more than handling the garbage itself. To increase the capture of certain materials, the following needs were found:

- Increase paper recycling because paper accounts for approximately 17 to 23 percent of residential MSW and 11 to 39 percent of commercial MSW (2008 Kittitas County Waste Characterization Study [Solid Waste, 2008] and 2015-2016 Washington Statewide Waste Characterization Study [Ecology, 2018]).
- Increase composting because compostable materials from both the residential and commercial waste streams comprise about 17 to 48 percent of each substream’s disposed waste (2015-2016 Washington Waste Characterization Study [Ecology, 2018].

- Increase opportunities for business recycling and technical assistance because collection of recycling from businesses is limited to corrugated cardboard.
- Curbside collection is only available to residents of Ellensburg.
- Drop-off locations do not accept office or mixed paper or plastics beyond PETE and HDPE plastic bottles.

4.3.12 Recycling Recommended Options and Implementation Actions

The following options for improving recycling are recommended. Each option and the associated implementation actions are discussed below.

4.3.12.1 Collection

- Work with haulers and cities to provide recycling services that support the viability of those programs and are economically feasible based on market conditions.
- Expand residential single-stream curbside collection of recyclables to the remaining incorporated cities within Kittitas County by passing an ordinance to require recycling.
- Consider adding preconsumer vegetable food waste to yard waste collection County-wide.

4.3.12.2 Commercial Programs

- Recruit and provide technical assistance to large businesses in Kittitas County to increase recycling. The purpose of providing technical assistance is to set up new recycling programs in larger businesses and work with the haulers or recyclers to efficiently implement these new programs. After a business is recruited, it would receive a waste audit and at least one onsite visit. During the onsite visit, the program staff person would develop waste reduction and recycling recommendations.
- Develop a business recognition program for recycling, composting, and waste reduction for exemplary waste reduction, composting, and recycling activities. Consider modeling the program on the EnviroStars program, which was created in King County and has spread to other Washington counties.
- Target agricultural activities to promote recycling of agricultural-related waste including film plastic, pesticide containers, and compostable.

4.3.12.3 Large Venue and Special Event Recycling

- In Ellensburg, provide beverage container recycling at special events. As required by state law (Chapter 70.93.093 RCW), communities with curbside recycling must provide recycling “at every official gathering and at every sports facility by the vendors who sell beverages in single-use aluminum, glass, or plastic bottles or cans.”
- Create a form to communicate best practices for event organizers during receptacle rental. Consider providing beverage container receptacles for events outside Ellensburg.

4.3.12.4 Self-Haul

- Provide recycling services that support the viability of those programs and are economically feasible based on market conditions. Evaluate expanding materials accepted at transfer station recycling drop-offs annually.
- Continue processing white goods (i.e. refrigerators, freezers, and air conditioners) prior to recycling. Processing entails evacuating coolant from each item, which requires special handling.

4.3.12.5 Rate Structure

- Assess the feasibility of a Variable Can Rate, or Pay-As-You-Throw (PAYT), in remaining incorporated areas (Ellensburg already adopted this structure). PAYT is a volume-based fee structure

intended to provide a lower-cost alternative to customers who downsize their garbage container by recycling and composting. PAYT can provide a financial incentive to reduce waste.

- Maintain the PAYT fee structure in Ellensburg and evaluate if rate changes are necessary to adequately cover the cost of recycling.

4.3.12.6 Recycling Incentives

- Assist nonprofit organizations in applying for Public Participation Grants (PPG) from Ecology. These grants are designed to support organizations that focus on recycling of solid waste as well as moderate risk waste. These businesses can then, in turn, be patronized by the County to "complete the loop."
- Encourage the use of the County's recycling trailer, which has been available for use at large events at no charge.

4.3.12.7 Evaluation and Monitoring

To assess progress in meeting the goals and objectives of the Plan, the SWAC will evaluate the status of all Recycling and Waste Reduction programs annually and report their findings to the Board of County Commissioners, along with any recommendations for changes or additions. The annual assessment should address the following, plus any other areas the SWAC chooses to include:

- Status of recyclable materials list.
- Evaluation of what is and isn't marketable and identify opportunities to develop markets for recycled materials.
- Progress toward waste reduction and recycling goals.
- Assessment of public outreach and education programs.
- Assessment of recycling collection and marketing programs.
- Establish an accurate assessment of the County's recycling rate.
- Evaluate the success of waste reduction and recycling programs and allow for necessary adjustments.
- Identify gaps and needs in implementing the waste reduction and recycling element of the SWMP.

4.3.12.8 Identify Funding and Other Nonmonetary Resources

- With support and assistance from SWAC, identify and pursue existing and potential funding and nonmonetary resources for developing and implementing recycling programs and promotion. These resources may be local, County or city support, state or federal grant programs, contributions or donations from private entities, in-kind contributions, or any other resources, including volunteer activities.
- Pursue state and federal grants including but not limited to the U.S. Environmental Protection Agency (EPA) and State Department of Ecology's Litter Grants and C&D Reuse Program.

4.3.12.9 Formal Working Relationships

- Encourage the establishment of formal working relationships between the County and other agencies, institutions, and organizations via Memorandums of Understanding, letters of acknowledgment, or other appropriate mechanisms.

4.3.12.10 Sustainable Community

Stakeholders can contribute to sustainable communities through promotion of a number of programs:

- Encourage all capital projects to meet minimum green building standards, such as energy efficiency, minimum recycled-content, efficient use of water, formal recycling programs, and green design elements.
- Green building techniques can be used to minimize the impact on the solid waste system due to development projects. The County may elect to require certain green building elements be included in certain projects, including energy efficiency, waste reduction and recycling, and water conservation systems. At a minimum, the County may promote green building techniques be used voluntarily in development projects.
- To promote a sustainable community, the County may evaluate the efficacy of developing an educational facility to demonstrate green building techniques and systems.
- The County will continue to evaluate the need for new waste prevention programs that focus on certain materials or products.
- Provide outreach to food establishments on packaging options to reduce the amount of nonrecyclable products used because compostable products cannot be processed locally.

4.3.12.11 Evaluate Expansion of Programs

- Evaluate the expansion of existing programs to target specific waste generators, including: schools, special events, multi-family dwellings, and select business types like agriculture.
- Evaluate the expansion curbside recycling service.

4.3.12.12 Public Outreach and Education

- Continue the existing outreach and education programs described in Table 4-4, using available resources and materials to promote recycling and waste reduction.
- Work with the WUTC hauler to provide recycling guides and brochures online and in print with general recommendations for the commercial and residential/curbside customers, in concert with other sections of this chapter. Determine the best way to share information (for example, look into the potential of providing links to each other's websites).
- Provide public education regarding proper recycling procedures including staffing volunteers at the residential drop-off sites to assist with recyclable contamination (e.g. recyclables in plastic bags).
- Provide public education regarding the economic benefit of clean, source-separated recyclables and green waste. In addition, transfer station personnel can monitor loads delivered by certificated and contract haulers and provide education on proper recycling practices.
- Educate retailers regarding the use of expanded polystyrene (EPS) containers and plastic bags for packaging material to encourage discontinuation of their use. The education should include available alternatives to EPS, such as using paper cups instead of Styrofoam.

4.4 Composting and Yard Waste

4.4.1 Background

As a waste reduction and recycling strategy, composting is one of the highest priorities for managing solid waste, as established by Chapter 70.95 RCW. Composting transforms organic wastes into valuable products, such as soil amendments and mulch. From the 2008 WCS, almost 33 percent of overall MSW in Kittitas County is made up of organics, of which approximately 52 percent is food waste and approximately 22 percent is yard waste. This section describes current composting opportunities, composting needs, and options to increase composting in the County.

4.4.2 Existing Conditions

4.4.2.1 Composting Facility

In July 2009, the County began operation of a facility to convert yard waste, agricultural byproducts, and wood waste into compost. The purpose of this facility is to divert organic wastes from disposal and/or burning and to use these materials to produce high quality compost for sale as a soil amendment (Operations Plan for Kittitas County Composting Facility, 2008). It is currently located next to the Ellensburg Transfer Station on land leased from the City. The County is in the process of planning for and designing a new compost facility that will be co-located with the new Ellensburg Transfer Station.

The composting facility is open to the public for drop-off Monday-Saturday from 8:00 a.m. to 4:00 p.m. all year; closed on all major holidays.

The facility produces compost that meets the Seal of Testing Assurance (STA) as established by the U.S. Composting Council. At this time, the facility is only permitted to process Type 1 (vegetative) & Type 2 (manures) feedstocks:

- Landscaping and yard trimmings.
- Wood wastes (natural woody debris including land clearing stumps less than 12” and brush, and clean, unpainted, and untreated dimensional wood).
- Straw and bedding with associated manures (primarily from nearby fairgrounds and small farmers).
- Residuals, in accordance with WAC 314-55-097.

There are no current plans to expand the feedstock list at this facility or the new facility. If future changes are needed, some material types can be added without requiring a permit modification.

Operations personnel visually inspect truck beds as they cross the scale, as well as during unloading activities, to ensure no unacceptable materials are unloaded. Haulers are directed to keep the unacceptable materials in their vehicles or to reload them and to remove them from the site for proper disposal. Feedstocks are inspected a final time as the material is being processed. In the event unacceptable materials are found in the feedstock areas, these materials are removed from the feedstock piles and disposed of in a dumpster onsite for proper disposal at the adjacent transfer facility.

The highest volumes received are between the months of March and August. According to permit documents and the State of Washington Ecology’s 2017 Annual Composting Facility Report, the facility accepts and processes up to 6,000 tons of feedstock per year (2,486 tons in 2017).

Compost produced is sold to city/County residents at nominal fee of $60/ton self-haul only to offset the cost of production. The material handling stages include: Receiving; Bulking; Mixing and Moisture Conditioning; Active Composting in Windrows; Curing; Finishing; and Product Sales and Distribution.

The composting facility currently uses a Turned Windrow method of composting. The new compost facility is being designed for aerated static pile composting, which is expected to change the operation plan, speed up the process, and utilize space more efficiently.

The Operations Plan will be reviewed and revised if needed on a yearly basis in conjunction with the solid waste handling permit renewal to remain in compliance with the current permit.

4.4.2.2 Curbside Collection of Yard Waste

In Ellensburg, curbside yard waste collection is available on a subscription basis. Yard waste is collected on a weekly basis from April to October, and a monthly basis from November through March. Curbside yard waste collection is available for a fee.

No programs exist for the collection and composting of food waste.

4.4.2.3 Yard Waste Drop-Off

Clean yard waste may be dropped off by County residents and businesses at the Cle Elum transfer station and at the Ellensburg composting facility. Self-haul customers that segregate clean yard waste qualify for a reduced disposal fee at the transfer station and composting facility.

4.4.2.4 Composting Workshops

The Kittitas County Solid Waste Department holds backyard composting workshops for residents each year to reduce the amount of yard trimmings that are processed or disposed in the MSW stream. These workshops educate the public on the benefits of composting while emphasizing the importance of waste reduction. The County expanded this program to include the Master Composter program, which certifies participants as Master Composters and asks them to volunteer their time to educate the public at community activity booths, at schools, or by helping maintain a compost demonstration site at locations in both upper and lower Kittitas County.

4.4.3 Composting Needs and Opportunities

The County should address the following needs to capture more organic material as a resource rather than a waste.

- Completion of the new compost facility co-located at the new transfer station that will replace Ellensburg transfer station. The new compost facility will use the aerated static pile composting methodology.
- A private-sector collector of food waste and compostable paper because they are not included in the County's organics programs.
- Yard waste collection service in outlying cities and urban growth areas.
- In the future, the County may enact policies and measures regarding import of organic waste from other apple maggot quarantine areas.

4.4.4 Composting Recommended Options and Implementation Actions

The following options for improving composting are recommended. Each option and the associated implementation actions are discussed below.

4.4.4.1 Composting Public Education and Outreach

Continue to develop and distribute educational material outlining the current composting program and its benefits including contributions to greenhouse gas reductions. Examples of outreach include, but are not limited to:

- Promote home composting as a mechanism to divert food waste from the home.
- Inform the public about grasscycling and composting options through educational materials, displays, workshops, and demonstration sites.
- Train volunteers in the "Master Composter" program for outreach to fellow residents.
- Provide coupons to offset purchase price of compost bins at local stores or support a discounted bin distribution event (only if funding/grants are available).
- Offer worm composting workshops for elementary school students.
- Expand Master Composter Workshops to provide in-depth information on home composting methods. The amount of training provided could be increased from 15 hours to 40 hours, and the volunteer service requirement to teach other Kittitas County residents should be increased. Different methods for home composting of food scraps should include worm bin composting, green cone composting and other commercially available or homemade designs that are adequately pest-resistant.

4.4.4.2 Compost Facility

- Complete design, build, and begin operating the new compost facility utilizing aerated static pile composting.
- Encourage the development of privately-run compost facilities in the County that could accept a wider range of materials than the County facility.

4.4.4.3 Vermicomposting

- Continue to include worm composting as a topic in composting workshops.
- Recruit local schools or facilities to implement small-scale pilot composting projects.
- Evaluate the potential for large-scale commercial vermicomposting facility in-County.

4.4.4.4 Residential Yard Waste Programs

- Continue existing green waste collection programs, both curbside and drop-off.
- Evaluate the potential of increasing curbside service to more customers in the other cities and unincorporated areas of the County.
- Promote how and why to segregate yard waste on the county website and through other promotional materials in order to divert organics from the waste stream and comply with apple maggot quarantine rules.

4.4.4.5 Commercial Collection of Organics

Conduct a feasibility study to evaluate collection and private processing of preconsumer food waste. If deemed feasible and a private processor can be established, initiate preconsumer food waste collection for targeted industries, including restaurants, grocery stores, schools, hospitals, and food processing operations. The composting facility's current permit allows for the inclusion of preconsumer vegetable trimmings from grocery stores without requiring a modification to the permit.

4.4.4.6 Marketing of Finished Compost Products

Evaluate the marketing of finished compost created at the facility as an additional revenue source. Focus on potential markets in central Washington including the rapidly growing wine industry.

4.4.4.7 Tiered Rate Structure for Organics

- Review the current reduced transfer station tipping fee for green waste to ensure that it provides an adequate incentive for source separation of green waste and clean wood waste.
- Implement a stricter policy regarding delivery of contaminated green waste to the transfer stations. Contaminated green waste would be charged the higher garbage rate and haulers would need to be educated on proper source separation.

4.4.4.8 Yard Waste Disposal Ban

Draft an ordinance for to enact a disposal ban on clean, compostable yard waste. Such bans are found in several states.

Chapter 5
Solid Waste Collection

5. Solid Waste Collection

The recommended options and associated implementation actions for solid waste collection are summarized in Table 5-1.

Table 5-1 Solid Waste Collection Summary of Implementation Actions

Option	Summary of Action
Routing of Collected Waste Through County Facilities	Continue to route all MSW to the County.
Curbside Recycling Collection	Evaluate curbside program outside served areas.
Review Collection Contracts	Periodically review hauler contracts to confirm obligations are met. Review complaints to confirm resolution is met and fees are paid.
Funding Sources	Identify and procure additional funding sources to meet minimum level of service requirements.

5.1 Introduction

This chapter provides a discussion of garbage collection in Kittitas County, including background information on how solid waste collection is regulated, the legal authority that counties and municipalities have in managing collection services for garbage and recyclables, and existing conditions for these activities. The chapter concludes with a discussion of the key issues surrounding collection and presents options for meeting existing and future collection needs in the County.

5.2 Background

The Washington Utilities and Transportation Commission (WUTC), the County, and the municipalities regulate garbage collection in Kittitas County. The regulatory authority and jurisdiction of each of these entities is described below.

5.2.1 WUTC Authority

The WUTC supervises and regulates solid waste collection companies. WUTC authority (Chapter 81.77 RCW and Chapter 480-70 WAC) is limited to private collection companies and does not extend to municipal collection operated by municipalities or their contractors. The Commission requires reports, establishes rates, and regulates service areas and safety practices.

A private solid waste collection company must apply to the WUTC for a certificate of public convenience and necessity to operate in the unincorporated areas of a County or in incorporated areas that choose not to regulate garbage collection. The WUTC grants certificates within a designated service area to an applicant based on cost data, documented need for the service, and, if the district is already served by a certificate holder, the ability or inability of the existing certificate holder to provide service to the satisfaction of the WUTC. The Commission requires annual reports showing the garbage collection company's gross operating revenue. Certificates may have terms and conditions attached and may be revoked or amended after a hearing held by the WUTC.

Commission regulation of solid waste collection companies does not include collecting or transporting of recyclable materials from a drop box or recycling buy-back center. It also does not include collecting or transporting recyclable materials by or on behalf of a commercial or industrial generator of recyclable materials to a recycler for use or reclamation (Chapter 81.77.010(8) RCW). Transportation of these materials is regulated under Chapter 81.80 RCW that governs the regulation of motor freight carriers.

5.2.2 County Authority

The rights of the County, in terms of solid waste collection, includes the establishment of solid waste collection districts for the mandatory collection of solid waste (Chapter 36.58.100 RCW). However, solid waste collection districts cannot include incorporated areas without the consent of the legislative authority of the city or town. To form a solid waste collection district, public hearings must be held and the County legislative authority must determine that mandatory collection is in the public interest. County provision of collection services can be implemented only if the WUTC notifies the County that no qualified haulers are available for a district. Under mandatory collection, a hauler may request that the County collect fees from delinquent customers.

In Kittitas County, all unincorporated areas are covered by a single WUTC certificate holder; there are no solid waste collection districts. Although County authority to collect garbage in the unincorporated areas is limited, counties have the legal authority to assess fees on collection services provided in those areas. Chapter 36.58.045 RCW authorizes counties to assess such fees to fund administration and planning expenses associated with solid waste management.

5.2.3 Municipal Authority

Cities and towns have several options for managing solid waste collection under state law, including:

- The city may choose not to manage or regulate its own garbage collection services. Collection services may then be provided by the certificate hauler(s) with authority for that area under the regulation of WUTC.
- The city may require a private company to obtain a garbage collection license from the city and to conform to all city collection guidelines.
- The city may award contracts to private companies for garbage collection in all or part of the city. The contract hauler does not need to hold a WUTC certificate for that area. Usually contracts are awarded on a competitive basis to the lowest bidder. All requirements contained in RCW 35.01.160 apply when contracting for solid waste collection services.
- The city may decide to manage and maintain its own municipal collection system for all or part of its jurisdiction.
- The WUTC would not have jurisdiction over the last two options (Chapter 81.77.020 RCW). State law also allows municipalities to require residents and businesses to subscribe to designated garbage collection services.
- In 2009, Ecology adopted rules (173-345 WAC) affecting transporters of recyclable materials and recycling facilities. The rule requires transporters of recyclable material to register with Ecology, transport recyclable materials to material recovery facilities and locations where recycling occurs and keep records of all activities for two years. In addition, this new rule requires material recovery facilities and recycling facilities to notify Ecology 30 days before the facilities start operations.

None of the municipalities in the County maintain a municipal collection operation; all currently contract for services.

5.3 Existing Collection Services

5.3.1 Unincorporated Kittitas County

Garbage collection service in the unincorporated portions of Kittitas County is voluntary. All areas of the County are under a certificate granted by the WUTC. Rates for these areas are approved by the WUTC. One hauler is certificated by the WUTC for the County: Waste Management of Washington d.b.a. Waste Management of Ellensburg (G-237) (local address: 607 N. Railroad Ave. Ellensburg, WA 98926). A copy of the service area map is included as Appendix D.

5.3.2 Municipalities

Each municipality has the right to regulate its own solid waste collection services. The following arrangements are in place for the municipalities of Kittitas County:

- The City of Cle Elum contracts for mandatory curbside collection of garbage within its incorporated area. Commercial can and dumpster services also are provided.
- The City of Ellensburg contracts for collection services within its incorporated area, but collection is not mandatory. Curbside recycling is included in the service fee. Curbside yard waste collection is available for an additional fee.
- All other municipalities in the County are served by Waste Management of Ellensburg with voluntary service under the WUTC certificate described in Chapter 5.3.1. Private recyclers can only collect from within these areas.

A summary of the rates charged for residential garbage collection in the two contract cities is provided in Table 5-2.

Table 5-2. Garbage Collection Rates

Jurisdiction	Monthly Rates				
	20-gal	35-gal	64-gal	96-gal	Low-income Senior
Ellensburg	$12.74	$14.87	$23.56	$32.61	
Cle Elum		$21.47	$21.47 2-carts $42.93	$25.10	35-gal: $10.14 64-gal: $13.81 96-gal: $16.61

http://cityofcleelum.com/city-services/utilities/rates/

http://wmnorthwest.com/ellensburg/service.html

5.3.3 Existing Programs for Self-Hauled Waste

Residents that choose to self-haul their waste utilize either the Cle Elum Transfer Station or the Ellensburg Transfer Station.

5.3.4 Collection of Recyclables

State legislation allows counties to contract for the collection of source-separated recyclable materials from residences within unincorporated areas. Under this provision, counties can manage, regulate and establish the price of curbside recycling collection services. However, this does not mean the counties are authorized to operate their own solid waste collection systems as municipalities may. If the counties do not elect to contract for the collection of source separated recyclable materials from residences, the WUTC must be notified in writing no later than ninety days following the approval of the solid waste management plan's waste reduction and recycling element. Upon notification, the WUTC would have the responsibility for implementing any mandated curbside recycling or yard waste programs and determining their service levels, as addressed in the waste reduction and recycling element of the solid waste management plan.

Municipalities have the authority to provide or contract for residential curbside recycling services within their boundaries (Chapter 35.21.120 RCW). Additionally, they have the authority to manage, regulate, and fix the price of these services. Municipalities designated as urban are required to provide curbside collection of recyclables, or an equivalent program [Chapter 70.95.090(7)(b)(i) RCW]. Municipalities designated as rural may choose to meet minimum service level requirements either independently or in cooperation with the County.

Counties have the authority to contract with private vendors to provide recycling services to residences. Counties that choose this option assign service areas, establish and enforce service standards, and set rates. The County can consider contracting for residential recycling collection in unincorporated areas where a hauler fails to provide residential recycling established by the minimum service level. In Kittitas County, the only recycling contract with Waste Management of Ellensburg exists in the City of Ellensburg. This is further detailed in Chapter 4.3 of this Plan.

5.3.5 Collection of Organics

In Ellensburg, curbside yard waste collection is available on a subscription basis. Yard waste is collected on a weekly basis from April to October, and on a monthly basis from November through March. Curbside yard waste collection is available for a fee.

Currently, no programs exist for the collection and composting of food waste.

5.4 Solid Waste Collection Needs and Opportunities

Requirements for future solid waste collection will depend upon population growth rates. As required in Chapter 70.95.090(5)(d) RCW, solid waste collection needs must be projected for the next six years. Estimated current population and housing densities for the County incorporated areas are provided in Table 5-3. Forecasted growth in population for Kittitas County for the years 2010 through 2030 was provided on Figure 2-2.

Table 5-3. Estimated Population and Housing Densities for Incorporated Areas, 2018[a]

Jurisdiction	Land Area (sq mi)	Population	Population Density (pop/sq mi)	Housing Units	Housing Density (houses/sq mi)
Cle Elum	3.22	1,875	582	1,105	343
Ellensburg	7.05	19,660	2,789	8,436	1,197
Kittitas	0.62	1,515	2,444	628	1,013
Roslyn	4.30	900	209	653	152
South Cle Elum	0.38	530	1,395	268	705

State of Washington Office of Financial Management, “April 1, 2018 Population of Cities, Towns and Counties”

State of Washington Office of Financial Management “Postcensal Estimates of Housing United April 1, 2018 to April 1, 2018”

Requirements for future collection services will depend on population growth rates. In 2018, the population of unincorporated Kittitas County was estimated at 21,120 and incorporated Kittitas County was estimated at 24,480 (Washington State Office of Financial Management [OFM], 2018). Estimates prepared by OFM (intermediate series) project the total population to be 49,927 by the year 2025. This is an increase of 4,327 people, or approximately 9 percent increase. This level of growth will most likely require additional collection routes.

5.5 Recommended Options and Implementation Actions

The following options for improving collection are recommended. Each option and the associated implementation actions are discussed below.

5.5.1 Routing of Collected Waste through County Facilities

Continue to require, or to arrange for, all collected MSW to be routed through the Kittitas County-owned transfer stations, or private transfer stations in the County, and/or assure collection of program fees for all MSW generated within the County.

5.5.2 Curbside Recycling Collection

The County should evaluate providing curbside recycling (collection of source-separated recyclables) from residences outside City limits. The County could, by ordinance, award a contract to collect source separated recyclable materials from residences within unincorporated areas. The County has authority to manage, regulate, and fix the price of the source separated recyclable collection service.

Waste Management's contract with the developer of the Suncadia project in Upper County requires curbside recycling collection once the development contains 100 permanent residents. As new developments in Upper County are built, evaluate the possibility of establishing a similar requirement so that the new developments can also benefit from a curbside recycling program.

5.5.3 Review Collection Contracts

Periodically review collection contracts to ensure that services being provided are consistent with contractual obligations of the hauler. This review may include complaint and missed pickup resolution procedures, evaluating if service vehicles are adequate for season and terrain, recourse for noncompliance (i.e., liquidated damages), and fees paid in compliance with contract.

5.5.4 Funding Sources

Identify and procure additional funding sources to meet minimum level of service requirements.

Chapter 6
Transfer and Disposal

6. Transfer and Disposal

The recommended options and associated implementation actions for solid waste collection are summarized in Table 6-1.

Table 6-1. Transfer and Disposal Summary of Implementation Actions

Option	Summary of Action
Transfer	
Replace Ellensburg Transfer Station	Complete the design, permitting and construction phase of the Ellensburg Transfer Station Replacement project.
Use of Transfer Stations	Continue to route all MSW through facilities within the County and ensure collection of program fees.
Disposal	
Long-Term Disposal Opportunities	Evaluate disposal opportunities like waste-to-energy (WTE) and rail transport to other landfills or WTE.
Contractual Arrangements	Evaluate landfills with lower tipping rates or long-term pricing; evaluate the escalation rate for the transfer stations to manage future budgets.
Alternative Disposal Technologies	
Future Consideration and Feasibility	Review the feasibility of developing a WTE facility in the County.
Alternative Energy Technologies	Track advancements in alternative technologies.

6.1 Transfer Stations

Waste transfer stations play an important role in a waste management system, serving as a link between local waste collection programs and the final disposal facility. The primary reason for using a transfer station is to reduce the cost of transporting waste to disposal facilities.

Consolidating smaller loads from collection vehicles into larger transfer vehicles enables collection crews to spend less time traveling to and from distant disposal sites and more time collecting waste. Transfer stations reduce overall transportation costs, air emissions, energy use, truck traffic, and road wear and tear.

Solid waste from commercial accounts and households in Kittitas County is presently hauled to either of two County-owned transfer stations: Ellensburg and Upper County (Cle Elum).

6.1.1 Ellensburg Transfer Station

Located off Industrial Way, the existing Ellensburg Transfer Station property is leased from the City of Ellensburg. The main building of the transfer station is approximately 7,500 square feet, with a tipping floor of approximately 6,800 square feet. The facility is designed with a top-loading chute and a drive-through lower transfer trailer bay.

The existing Ellensburg transfer station has location and size constraints. Located in a floodplain, the facility closes during significant rainfall or spring runoff events. The facility is also undersized for the number of customers using the facility resulting in long queuing times and potentially unsafe conditions within the small unloading and processing areas.

Kittitas Solid Waste Department is currently in the planning and permitting phases of constructing a new transfer station to address the safety, capacity and flooding issues that will meet the long-term needs of

the County. This new facility will replace the existing Ellensburg transfer station and will include a transfer building, composting area, MRW building, and recycling depot as well as various administrative, parking, and other required elements. The County has purchased a property for this new facility. The new property is large enough to accommodate other functions or potential sale of a portion of the site. The location of the proposed new Ellensburg site is shown on Appendix E, located on US 97/Old Highway 10 in northwest Ellensburg.

The anticipated schedule for completion of this new facility is as follows:

- Permitting – 2019
- Design – 2020
- Construction – 2021-2022, but dependent on financing

6.1.2 Upper County Transfer Station (also known as the Cle Elum Transfer Station)

Located between the cities of Roslyn and Cle Elum in the western portion of the County, the Upper County Transfer Station was designed and built in 2003 and includes a 7,300 square foot tipping floor. The station is on 10 acres of County-owned property.

The County operates the scalehouses where loads are weighed, and fees are collected. Transfer station operations and hauling activities are provided by a private company under contract to the County. Waste collected at the transfer stations is hauled approximately 80 miles north of the City of Ellensburg to the Greater Wenatchee Landfill located in Douglas County, Washington.

Recent activity at the transfer stations is provided in Table 6-2.

Table 6-2. Summary of Deliveries to County Transfer Stations

Deliveries	2013	2014	2015	2016	2017	2018
Tons MSW delivered to Ellensburg Transfer Station	22,391	21,823	26.941	24,075	25,768	26,386
Tons MSW delivered to Upper County Transfer Station (Cle Elum)	6,146	6,681	26,251	8,516	9,696	10,678
# customers delivering waste to Ellensburg Transfer Station (vehicles)	52,871	53,136	68,143	57,494	59,019	60,275
# customers delivering waste to Upper County Transfer Station	25,615	26,089	1,623	30,992	34,308	37,337

Tipping fees charged at the transfer stations are summarized in Table 6-3.

Table 6-3. Transfer Station Tipping Fees 2017

Material	Tipping Fee
Municipal solid waste	$103.35 per ton $6.03 minimum
Yard waste	$37.86 per ton
Construction/demolition waste At Ryegrass Landfill at the Ellensburg Transfer Station At Ellensburg Transfer Station	 $7.00 per yard $50.15 per ton $4.00 minimum
Construction/demolition waste at the Upper County Transfer Station At Cle Elum Transfer Station	$61.51 per ton $4.00 minimum
Appliances with CFC Refrigerants	$12.00 each, plus weight
Liquid Waste	$0.15 per gallon

Tires	
Passenger w/o Garbage	$200 per ton
Passenger with Garbage	$2.00 per tire
Truck Tires	$5.75 per tire
Implement/Tractor	$15.00 per tire
Heavy Equipment	$57.50 per tire
Street sweeping waste	$51.75 per ton
Compost	$60.00 per ton under 10 tons $50.00 per ton over 10 tons $30.00 per ton over 100 ton/year
Compost Socks	$2.50 per ft $3.50 per ft DOT Spec
Additional Cards for Charge Customers	$5.00 each
Insufficient Fund Customers	$20.00 each for transaction not paid by the end of the business day

Notes:
Resolution 2017-152 effective October 1, 2017
Fee schedule does not include Refuse or Sales tax.

6.1.3 Transfer Needs and Opportunities

As the County continues to grow, improvements and upgrades will be required at the transfer stations to continue to meet the needs of the County in the most cost-effective manner.

6.1.4 Transfer Recommended Options and Implementation Actions

The following options for improving solid waste transfer are recommended. Each option and the associated implementation actions are discussed below.

6.1.4.1 Replace Ellensburg Transfer Station

Complete the design, permitting, and construction phase of the new Ellensburg Transfer Station to meet the capacity needs of the growing population and remedy the flooding and safety issues at the current site.

6.1.4.2 Use of Transfer Stations

The County, through its transfer stations operations contract, should continue to provide for all collected MSW to be routed through the County-owned transfer stations, or private transfer stations in the County, and/or assure collection of program fees for all MSW generated within the County, including acceptance of self-hauled material.

6.2 Landfill Disposal

Landfilling is the disposal method whereby solid waste is permanently placed in or on land. Solid waste landfills in the State of Washington are regulated by local health departments and Ecology through minimum statewide standards for all municipal solid waste landfill (Chapter 173-351 WAC). This section provides information on landfill regulations, local facilities, and present capacity.

6.2.1 Landfill Regulations

On October 9, 1991, EPA promulgated the Solid Waste Disposal Facility Criteria, Final Rule (40 CFR Parts 257 and 258). These standards, issued under authority of the Resource Conservation and Recovery Act (RCRA) of 1976, set forth location restrictions, requirements for facility design and operations, groundwater monitoring, corrective action measures, and landfill closure standards. Under law, Congress has assigned primary responsibility for managing solid waste to state and local governments. States are required to incorporate federal standards into current state waste permitting programs. The most significant costs to implement the new federal standards are associated with design requirements, groundwater monitoring, corrective action, and facility closure/post closure costs.

Ecology responded to the new federal standards in November of 1993 with its revised municipal solid waste landfill (Chapter 173-351 WAC). In general, the minimum functional standard for municipal solid waste landfills must be at least as strict, in every way, as the federal standards. However, because the federal standards do not establish rules for nonmunicipal solid waste landfills (i.e., demolition and woodwaste landfills), regulatory requirements for these landfills were developed by the state (Chapter 173-350-400 and -410 WAC).

6.2.2 Landfill Disposal Inventory for Kittitas County

Table 6-4 provides an inventory of disposal locations and tonnages in Kittitas County for the last available 5 years.

Table 6-4. Disposal Inventory for Kittitas County (tons)

Disposal Site	2011			2012			2013			2014			2015				
	MSW	Other	Total	MSW	Other	Total	MSW	Other	Total	MSW	Other	Total	MSW	Other	Total	MSW	
Caton Limited Purpose Landfill		560	560		75	75		538	538		7,748	7,748		11,782	11,782		
Graham Road Recycling & Disposal			2		13	13		6	6		1	1		13	13		
Greater Wenatchee Regional Landfill	28,570	1,065	29,635	27,463	7,864	35,327	28,995	0	28,995	28,997	523	29,520	29,478	3,917	33,395	32,323	
Kittitas County Limited Purpose Landfill			3,154			0			0			0			0		
Roosevelt Regional Landfill MSW			6			0		0	0		700	700		178	178		
Ryegrass Limited Purpose Landfill			0		17,568	17,568		20,717	20,717		25,703	25,703		28,214	28,214		
Total	28,570	1,625	33,357	27,463	25,520	52,983	28,995	21,261	50,256	28,997	34,675	63,672	29,478	44,176	73,654	32,323	

Note: “Other” includes: demolition, industrial, inert, wood, ash, sewage sludge, asbestos, petroleum contaminated soils, other contaminated soils, tires, medical waste, and other.

Source: Washington Department of Ecology, Solid Waste Disposal Data by County (1994 - 2015).

6.3 Waste Import/Waste Export

6.3.1 Waste Import

"Waste import" refers to the transfer of waste into Kittitas County from other areas. The County owns and operates the Ryegrass Landfill, which has been permitted as a Limited Purpose Landfill that accepts inert, demolition, debris waste. According to state records, this landfill does not accept waste from other counties; therefore, there currently isn't any waste imported into Kittitas County.

6.3.2 Waste Export

"Waste export" refers in this section to the transfer of waste from Kittitas County to a landfill located outside the area. There are no active municipal solid waste landfills in Kittitas County. The County's municipal solid waste is transferred from the Ellensburg Transfer Station and the Upper County Transfer Station to the Greater Wenatchee Landfill, in Douglas County, Washington.

Kittitas County is one of the counties within Washington state that is in a quarantine area (as defined by the Washington State Department of Agriculture (WSDA), WAC 16-470, Quarantine – Agriculture Pests (i.e., apple maggot quarantine rules [RCW 17.24]). Solid waste and organic waste from this area cannot be transported out of the quarantine area without a special permit. WSDA recently amended WAC 16-470-124, Special Permits for Solid Waste and Organic Waste Transport and Disposition, effective January 1, 2017. WAC 16-470-124 now includes MSW, yard debris, organic feedstocks, organic materials, and agricultural wastes as regulated commodities.

RCW 70.95 was amended in 2016 to reflect these requirements and to further prevent the spread of agricultural plant pathogens and pests. In addition to requiring Special Permits (as described above) for transporting regulated commodities, WSDA must now review SWMP, the SWAC must include an agricultural representative, and solid waste permits must be submitted by local health departments to WSDA for compost facilities in a nonquarantine area, when they will receive organic waste from a quarantine area.

The Greater Wenatchee Landfill (owned by Waste Management of Washington) has a Special Permit for transport issued to Waste Management that allows municipal solid waste from quarantine areas to be transported to it. As of 2018, all MSW in the County requiring disposal goes to this landfill.

Landfills that have historically been used by Kittitas County for municipal and non-MSW disposal include:

Greater Wenatchee Regional Landfill: The majority of MSW from Kittitas County is currently sent to this landfill. This landfill is owned by Waste Management of Washington in Douglas County, Washington. It was opened in 1960 and has 96 years of remaining life projected. (Waste Management, 2019).

Columbia Ridge Landfill: The Columbia Ridge Landfill is a regional landfill that is owned and operated by Waste Management, Inc. in Arlington, Oregon.

Roosevelt Regional Landfill: The Roosevelt Regional Landfill is owned by Republic and located in a remote area of Klickitat County in South Central Washington.

Graham Road Limited Purpose Landfill: The Graham Road Facility is owned and operated by Waste Management of Washington, Inc., and is located in Spokane County.

Caton Limited Purpose Landfill: The Caton Limited Purpose Landfill is a privately-owned facility in Naches, Washington.

6.3.3 Landfill Disposal Needs and Opportunities

Given current technology and disposal patterns, landfills are and will remain a necessary and important component of waste management. Source reduction and recycling can divert significant portions of the waste stream, but not all components of the waste stream are recyclable. Therefore, Kittitas County will be required to continue to secure out-of-County disposal capacity or create additional capacity within the County. For now, the Greater Wenatchee Landfill has capacity well beyond the timeframe addressed by this plan.

6.3.4 Landfill Disposal Recommended Options and Implementation Actions

The following options for landfill disposal are recommended. Each option and the associated implementation actions are discussed below.

6.3.4.1 Long-Term Disposal Opportunities

Evaluate other long-term disposal opportunities, such as:

- Contracting with a landfill operator
- Contracting with a WTE facility or conversion technology operator
- Evaluating the possibility of rail-haul

6.3.4.2 Contractual Arrangements

Investigate contractual arrangements with other landfills to maximize benefit to the County. Renegotiating contracts can result in:

- Lower tipping fees (disposal costs).
- Established tipping fee escalation rate, which will help with future budgeting.
- Can provide the County with more stable, long-term pricing (i.e. 5-year, with renewals).

6.4 Alternative Disposal Technologies

This section provides an overview of some of the emerging technologies that are being implemented in various locations throughout the world as alternatives to landfill disposal. These technologies convert post-recycling residual solid waste into useful products and chemicals, including ethanol and biodiesel, and energy. The technologies may be thermal, chemical or biological. These technologies have been used successfully to manage MSW in Europe and Asia, but not all have progressed to commercial development in the United States.

Some of these technologies are relatively new, while others have been known for many years. Their application to the solid waste industry is, however, more recent and not as well developed.

Some of the anticipated benefits include the ability to manage excess biomass and organic wastes, ability to maintain local control over disposal, ability to locally produce renewable energy and green fuels, and promotion of energy independence from foreign oil.

Table 6-5 provides a very general comparative overview of these technologies.

Table 6-5. General Overview of Conversion Technologies

Process	Preprocessing	By-Product	Product	Commercial Readiness for Solid Waste
Pyrolysis	High	Char/Ash/Tar/Oil	Syngas	Yes
Gasification	Medium	Ash/Slag	Syngas	Yes

Anaerobic Digestion	Medium/High	Filtrate Water	Biogas, Compost	Yes
Hydrolysis	High	Wastewater, Ash	Ethanol	No
Aerobic Digestion	Medium/High	None	Compost	Yes
Plasma Gasification	Claims Low	Slag/Blowdown	Syngas	No

There are currently a number of municipalities considering alternative disposal technologies. For purposes of this Plan, a list of projects under consideration is not included as this list will remain dynamic during the planning period. An updated list of projects can be provided separately from this Plan.

6.4.1 Alternative Disposal Technologies Needs and Opportunities

The risks associated with conversion technologies can be substantial. As such, these technologies are not recommended at this time for Kittitas County. However, the County may want to track the progress of pilot studies and those plants that have been or will soon be operating. Technologies that may be particularly of interest to the County would be anaerobic digestion and hydrolysis. These technologies have been proven to be successful in the processing of municipal solid waste and organics, and particularly in the case of biosolids.

The following criteria can be used by the County in the future to assess a particular conversion technology:

- **Degree and Scale of Operating Experience:** Some technologies have only been proven in pilot or laboratory operations, or with raw materials other than municipal solid waste. Other technologies have only been commercially operated in small facilities and the scale up to larger sized plants may result in unforeseen problems.
- **Reliability to Dispose of Municipal Solid Waste:** The technology selected must be able to dispose of solid waste in a reliable manner without frequent downtime resulting in diversion of such waste to landfills.
- **Energy and Material Market Compatibility:** The technology must be capable of recovering energy and materials for which markets are available.
- **Environmental Acceptance:** The technology must meet all permitted environmental requirements established by regulatory agencies.
- **Cost to the County:** The technology must dispose of the County's solid waste at a price the County can afford and be comparable in cost and benefits to alternative means of disposal.

6.4.2 Alternative Disposal Recommended Options and Implementation Actions

The following options for considering alternative disposal are recommended. Each option and the associated implementation actions are discussed below.

6.4.2.1 Future Consideration and Feasibility

Maintain energy recovery and incineration as an option for study and consideration if future needs and conditions support its use.

Review the feasibility of developing a WTE facility in the County. This review would include appropriate technologies for further consideration, based on potential feedstock; advantages and disadvantages of those technologies compared to landfilling; ability to maintain local control over disposal; ability to locally produce renewable energy and green fuels; capital and operational costs; by-product characteristics and uses; impacts on diversion goals; environmental considerations; social considerations; permitting requirements; land ownership; cultural resources; and site selection.

6.4.2.2 Alternative Energy Technologies

Track advancements in alternative technologies and support the review of feasibility for energy recovery in the future. These include biofuel, anaerobic digestion, and pyrolysis.

Chapter 7
Special Waste

7. Special Waste

The recommended options and associated implementation actions for special waste are summarized in Table 7-1.

Table 7-1. Special Waste Summary of Implementation Actions

Option	Summary of Action
C&D	
Recovery of C&D Debris	Evaluate the recovery of debris at Ryegrass and the two transfer stations with private recyclers.
Materials Exchange Program	Continue working with nonprofit organizations to promote materials exchange and reuse stores for C&D material.
Evaluate Flow Control Measures	Write a flow control ordinance to keep all solid waste within the County.
Agricultural Waste	
Evaluate Opportunities for Beneficial Reuse of Biomass	Maintain biomass as an option; review feasibility of developing biomass facilities in the County.
Agricultural Pests and Other Nuisances	Operate within the apple maggot quarantine rules. Enforce commercial and residential onsite solid waste storage.
Tires	
Public Education Programs for Tires	Provide the public lists of facilities that accept tires with the web and Apps; target education of companies with commercial fleets.
Evaluate Diversion Options for Tires	Evaluate whether tire diversion options are viable.
Continue Current Tire Ban	Continue to promote the tire ban from landfills.
Biomedical Waste	
Public Education of Residential Medical Waste	Develop and distribute education materials for correct management of residential medical waste
Monitoring MSW for Biomedical Waste	Encourage the Health Department to monitor the MSW program.
Pharmaceutical Waste	Evaluate options for drop-off sites. Support private efforts for take-back programs.
Veterinary Waste	
Large Animal Disposal	Support development of programs for large animal disposal alternatives.
Education and Outreach - Large Animal	Provide information on County disposal options including proper composting techniques onsite.
Petroleum-Contaminated Soils	
In-County PCS Site	Support the development a site that can convert remediated soil to daily cover.
Street Sweepings Management	Evaluate management of street sweepings to become remediated and then used as daily cover.
Feasibility Study for PCS Management	Conduct a feasibility study about the options to handle PCS effectively.
Import PCS	Explore the import of treated PCS for daily cover at Ryegrass.
Asbestos	

Table 7-1. Special Waste Summary of Implementation Actions

Option	Summary of Action
Public Education on Asbestos Containing Materials	Allow current private solid waste hauler to inform the public on proper handling of ACM.
Liquid Waste	
Catch Basin Liquids	Evaluate the feasibility of constructing a new lagoon.
Electronics	
Monitor and Evaluate E-Waste Program	Submit annual Satisfaction Report summarizing program.
E-Waste Education	Promote the drop-off locations educational materials from the E-Cycle Toolkit.

7.1 Introduction

This chapter discusses the various waste types generated in Kittitas County that are categorized, processed, handled, or otherwise addressed separately or differently than the wastes that are addressed in the other sections of this plan. Waste types examined in this section include: construction and demolition debris, agricultural waste; asbestos; biomedical waste; petroleum contaminated soils; electronics; and tires. Each strategy for the management and handling of these miscellaneous waste types is designed to be consistent with policies and programs for other waste types, as well as with the general solid waste management goals expressed in this Plan.

The analysis of each miscellaneous waste type includes a description of existing practices, needs, and options.

7.1.1 Background

Under the Washington State Dangerous Waste Regulations (WAC 173-303-073), certain hazardous wastes may be classified as “special wastes” if they pose a relatively low risk to human health and the environment. These special wastes are exempt from some of the provisions of the Dangerous Waste Regulations and may be handled with a level of protection that is intermediate between regulated hazardous waste and nonhazardous waste. Under certain conditions, these special wastes may be handled through municipal solid waste transfer stations and landfills.

To qualify as “special waste” under the Dangerous Waste Regulations, the waste must be in a solid form only and must not be regulated by the EPA as a hazardous waste. Certain corrosive or low-toxicity wastes (for instance, ash from operations involving wood burning) may qualify as special wastes. Special wastes are typically not accepted at municipal solid waste facilities. For example, when landfilled, asbestos requires special permitting provisions.

7.1.2 Existing Conditions

Under Washington State law, any generator wishing to manage hazardous wastes as special wastes should consult with Ecology and, as appropriate, solicit the services of qualified waste management contractors for handling and managing the wastes. Hazardous wastes are not accepted at municipal solid waste facilities unless they are household hazardous waste or from small waste generators, and in those cases, the waste is collected at the Kittitas County Moderate Risk Waste Facility.

7.2 Construction and Demolition Debris

7.2.1 Background

Construction and demolition (C&D) waste is defined in the Washington Administrative Code (WAC 480-70-041) as follows:

> *"Construction debris" or "construction waste" means solid waste resulting from the building or renovation of buildings, roads, and other man-made structures.*
>
> *Construction debris includes, but is not limited to, materials such as plasterboard, cement, dirt, wood, and brush.*
>
> *"Demolition waste" or "demolition debris" means solid waste resulting from the demolition or razing of buildings, roads, and other man-made structures. Demolition waste includes, but is not limited to, concrete, brick, bituminous concrete, wood and masonry, composition roofing and roofing paper, steel, and minor amounts of other metals like copper.*

7.2.2 Existing Conditions

In Kittitas County, C&D waste is disposed at the two transfer stations and at Ryegrass Landfill, a limited purpose landfill. The Washington Administrative Code (WAC 173-350-100) defines limited purpose landfills as follows:

> *"Limited purpose landfill" means a landfill which is not regulated or permitted by other state or federal environmental regulations that receives solid wastes limited by type or source. Limited purpose landfills include, but are not limited to, landfills that receive segregated industrial solid waste, construction, demolition and land clearing debris, wood waste, ash (other than special incinerator ash), and dredged material.*

Due to the leveling of the economy after the 2007 peak and 2008 crash and its effect on new construction in the Kittitas Valley, C&D disposal by the County has stayed relatively steady until the recent jump; ranging from 5,124 tons in 2015 to 8,189 tons in 2017 and then decreasing slightly to 6,883 tons in 2018. This is in contrast to the peak C&D disposal of over 9,000 tons in 2007. Additional evidence of this leveling and the associated decrease in C&D waste generation is reflected in the number of building permits issued by Kittitas County. The average number of building permits issued per year has remained relatively steady since 2013.

7.2.3 Disposal

7.2.3.1 Disposal at Transfer Stations

Construction and demolition debris from both the northern part of Kittitas County and the Ellensburg area is handled in the same way. Residents of unincorporated Kittitas County and incorporated cities bring C&D waste directly to the Cle Elm or Ellensburg transfer stations. If the C&D debris contains no putrescible materials, the customer is charged a reduced fee. The “clean” C&D waste is then hauled by the transfer station operations contractor to Ryegrass Limited Purpose Landfill for final disposal.

7.2.3.2 Disposal at Ryegrass Landfill

Licensed contractors and other businesses with customer accounts haul C&D waste directly to Ryegrass Landfill. The landfill does not accept cash customers. The transfer station operations contractor and contracted/certificated haulers (such as Waste Management) also haul C&D waste directly to Ryegrass. Ryegrass Landfill accepts the following C&D materials for disposal:

- Asphalt
- Bath tubs
- Bricks
- Concrete
- Culverts
- Doors
- Fencing material
- Insulation

- Metal piping
- PVC and Other Plastics
- Roofing material
- Sheet rock
- Sinks
- Tables
- Tile
- Toilets
- Windows
- Wiring
- Wood beams
- Wood debris from housing
- Wood pallets
- Mixed C&D Debris

7.2.3.3 Disposal at Anderson Rock and Demolition Pit

Anderson Rock and Demolition Pit is a privately-owned facility located in Yakima County north and west of the City of Yakima. Although the disposal site is located approximately 35 miles from the City of Ellensburg, low tipping fees provide an incentive for some commercial construction firms working within the County to travel that distance to dispose of waste at this facility and circumvent the County solid waste transfer system infrastructure. Beginning in 2006, this site has seen an increase in material delivered from County sources.

7.2.3.4 Recycling and Diversion

Currently no C&D processing or recycling facilities are located in Kittitas County.

7.2.4 Needs

Based on the 2008 waste characterization data, mixed C&D debris composes about 18 percent of Kittitas County's total disposed waste. The recoverable portions of the C&D waste stream were composed of clean wood (42.3 percent), metals (2.6 percent), and other recyclable C&D (19.9 percent). Much of the C&D debris that arrives at the two County transfer stations is from self- haul loads, which contain 15 to 20 percent of clean wood and other recyclable C&D materials, on average.

To capitalize on this significant opportunity to divert materials from landfill disposal, the County could:

- Increase the capacity for segregating recoverable and mixed C&D loads at both transfer stations and at Ryegrass Landfill, focusing on the self-haul sector.
- Develop the capability or enter into partnerships to process mixed C&D loads.
- Provide for or support materials exchange and reuse opportunities for construction materials.
- Provide greater financial incentives for separating C&D debris from mixed putrescible solid waste.

7.2.5 C&D Recommended Options and Implementation Actions.

The following options for improving C&D management are recommended. Each option and the associated implementation actions are discussed below.

7.2.5.1 Recovery of C&D Debris

Evaluate the feasibility of recovering C&D debris at Ryegrass Landfill and at the two transfer stations, potentially through a contract with private recyclers. Targeted materials would include recoverable wood, metals, concrete/asphalt and other inert materials, gypsum board, composition shingles, and potentially reusable items.

7.2.5.2 Materials Exchange Program

Continue to work with nonprofit organizations, such as Iron Straw, Northwest Ecobuilding Guild, Habitat for Humanity, and any others that are established to promote a materials exchange program or reuse store for C&D materials.

7.2.5.3 Evaluate Flow Control Measures

A flow control ordinance would require all solid waste generated in unincorporated areas and within the corporate limits of cities and towns of Kittitas County to be disposed of at a Kittitas County solid waste facility. Enforcement of the ordinance could be through local law enforcement.

7.3 Agricultural Waste

Agricultural wastes are by-products of farming and ranching that include crop harvesting waste and manure. As shown in the land use map provided as Figure 2-1, most of the commercial agriculture in Kittitas County is practiced in the lower part of the County.

7.3.1 Existing Conditions

According to the 2012 Census of Agriculture, the number of farms in Kittitas County leveled from 1,038 farms in 2007 to 1,006 in 2012.[10] The total farm acreage continues to decrease from 230,646 acres in 2002 to 183,124 in 2012. The average farm size has decreased 27 percent since 2002 averaging 182 acres in 201.

A rural waste characterization study conducted for Ecology attempted to quantify and characterize the types of waste disposed, recycled, or reused for four agricultural groups (field crops, orchards, vegetables, and livestock). The study found that less than 1 percent of the waste generated by these agricultural groups was landfilled. The primary means of handling waste generated by agriculture was through beneficial use, such as replenishment of soil nutrients.

Given the rural nature of Kittitas County, the potential exists for the generation of significant amounts of biomass that could be used in the production of one of the above-mentioned products. In 2005, a biomass inventory and bioenergy assessment was completed for Washington State. The goal of the study was to inventory Washington's bioresources as a first essential step to implement the state's Beyond Waste strategy for reduction of organic residuals in solid waste. This inventory also is seen as a first step toward a sustainable energy policy and vision within the state.[11]

The project geographically identified 45 potential biomass sources in Washington at a County level. The biomass inventory was then converted to potential energy production using anaerobic digestion (for nonwoody plants) and simple combustion (for woody plants) as representative conversion technologies. Electrical energy production was the calculated product for this study; however, the report notes the need for additional study for other products such as fuels and chemical byproducts.

The study results show that Kittitas County has an annual production of almost 75,000 tons of underutilized dry biomass (primarily barley straw and cattle manure) that via combustion and anaerobic digestion over 50 million kWh of electrical energy. Kittitas County could further investigate the generation and availability of these feedstocks, and the potential for beneficial reuse of biomass within the County.

[10] 2012 Census of Agriculture, Kittitas County, United States Department of Agriculture, Washington Agricultural Statistics Service.

[11] Washington State University and Washington State Department of Ecology, Biomass Inventory and Bioenergy Assessment: An Evaluation of Organic Material Resources for Bioenergy Production in Washington State, December 2005. Revised 2011.

7.3.2 Agricultural Waste Needs and Opportunities

There are options for beneficial reuse of biomass within the County and investigating the feasibility of developing a facility for the production of biofuels, biopower, or bioproducts. Biomass is any sort of vegetation - trees; grasses; and plant parts such as leaves, stems, and twigs. During photosynthesis, plants combine carbon dioxide from the air with water to form carbohydrates, which form the building blocks of biomass. Biomass can produce electricity, heat, liquid fuels, gaseous fuels, and a variety of useful chemicals, including those currently manufactured from fossil fuels. Currently, biomass can be used for:

- Biofuels: Liquid fuels for transportation, such as ethanol and biodiesel.
- Biopower: The use of biomass feedstocks instead of conventional fossil fuels (natural gas or coal) to generate electricity or industrial process heat and steam. Biomass is burned and the resultant heat is used to turn water into steam, which is then used to turn turbines that are connected to electric generators.
- Bioproduct: A chemical, material, or other product derived from renewable biomass resources.

7.3.3 Agricultural Waste Recommended Option and Implementation Action

The following options for improving agricultural waste management are recommended. Each option and the associated implementation actions are discussed below.

7.3.3.1 Evaluate Opportunities for Beneficial Reuse of Biomass

Maintain biomass use as an option for study and consideration if future needs and conditions support its use and monitor other projects within the state.

Review the feasibility of developing biomass facilities in the County, if under consideration. This review would include appropriate technologies for further consideration, based on potential feedstock; advantages and disadvantages of those technologies compared to landfilling; ability to maintain local control over disposal; ability to locally produce renewable energy and green fuels; capital and operational costs; by-product characteristics and uses; impacts on diversion goals; environmental considerations; social considerations; permitting requirements; land ownership; cultural resources; and site selection.

7.3.4 Other Nuisances

Public Health Department has the responsibility to enforce commercial and residential onsite solid waste storage code (e.g. designated areas for garbage disposal 8.20.010 RCW; litter receptacles 70.93.090) and can share enforcement responsibilities to other agencies with police powers to enforce littering rules (RCW 70.93.050) This multi-agency collaboration is necessary to reduce the occurrences of rodents and health and safety nuisances.

7.4 Tires

The term “tires” refers to tires from automobiles, trucks, tractors, or any other use. They are formed from rubber and usually reinforced with cords of nylon, fiberglass, or steel. Tires do not include the metal wheel to which they are usually fastened.

Refuse tires are an inevitable by-product of normal vehicle use. A tire becomes refuse when it wears out and is not retreaded or reused. With its useful life over, it must be stored (temporarily) or disposed of. Tire dealerships remove most old tires in the process of selling new ones. Individuals may also accumulate old tires. When vehicles are junked, the tires on the vehicle, spares, and snow tires may be stored by the owner or the wrecking yard.

General statutory nuisance regulations and the Solid Waste Handling Standards (Chapter 173- 350 WAC) provide standards for the regulation and storage of tires. The state requirements call for tires to be

stacked in piles a maximum of 10 feet high, with each pile having a maximum area of 5,000 square feet. A clear space of 40 feet between piles allows fire truck access. There is also a requirement that the pile be fenced to prevent indiscriminate dumping and vandalism.

The Solid Waste Management and Reduction and Recycling Act (Chapter 70.95.500 RCW, et seq.) addresses the storage and handling of tires. The law requires haulers (more than five tires) to obtain a license and post a $10,000 bond, and storage pile owners (800 or more tires) to obtain a solid waste handling permit and obtain a financial assurance mechanism for closure of the site. Penalties for unlicensed haulers and site owners are a misdemeanor charge with a maximum one- year in jail and a $5,000 fine.

Scrap tires can be used in productive and environmentally safe applications. The three most common uses are:

- Civil Engineering Applications: Scrap tire material replaces some other material currently used in construction, such as lightweight fill materials that include expanded shale or polystyrene insulation blocks, drainage aggregate, or even soil or clean fill. Some of the applications include: sub grade fill and embankments, backfill for wall and bridge abutments, sub grade insulation for roads, and septic system drain fields.
- Ground Rubber Applications: Tires are processed to a small particle size and the finished product, crumb rubber, can be used in a variety of applications, from loose fill (e.g., playground cover) to molded products to rubberized asphalt.
- Tire Derived Fuel: Scrap tires are used as fuel because of their high heating value.Using scrap tires is not recycling but is considered a beneficial use. Typical tire derived fuel users include the cement industry, the pulp and paper industry, electric utilities, and certain industrial boilers.

7.4.1 Existing Conditions

In 2018, the County collected and recycled just over 166 tons of tires (as reported in Ecology's Annual Washington State Recycling Survey). The County's transfer stations accept tires for a fee. The tires are shipped to a vendor and recycled. The assigned fee schedule for various types of tires is found in the Transfer Station Tipping Fee Schedule in Section 6.1 (Table 6-3).

Additionally, passenger and various other tires may be taken to local participating tire retailers throughout the County for legal disposal. Most tire retailers contract with a tire collector for transport away from their site and legal disposal/recycling. Most tires are transported out of the County or state.

7.4.2 Tires Needs and Opportunities

The illegal disposal of tires represents a significant impact to public health and safety and the environment. Chapter 70.95.510 RCW authorizes the levy of one dollar per new replacement vehicle tire with the goal of fully cleaning up unauthorized waste tire piles in Washington.

Tires will continue to be accepted at the transfer stations for offsite disposal at a permitted facility. All tires generated within the County should be transported for disposal at a licensed, permitted disposal site, or for reuse or recycling at a fully licensed, permitted processing facility.

7.4.3 Tires Recommended Options and Implementation Actions

7.4.3.1 Public Education Programs for Tires

- In addition to public disposal options, provide the public with a list of local private facilities throughout the County that accept old tires for a small fee, to eliminate illegal dumping or tire piles. Consumers may also be educated on tire maintenance, tire repair, and lifecycle costs to encourage purchase of longer-life tires.

- Provide tire recycling data on the County website and existing recycling Apps like RecycleNation or WM Mobile.
- Target for educational materials are companies that operate commercial fleets.

7.4.3.2 Evaluate Diversion Options for Tires

Evaluate the County's scrap tire stockpile for use as construction fill, ground rubber, or WTE.

7.4.3.3 Continue Current Tire Ban

Tires are banned from landfills and it may be necessary to reevaluate the County's program, should it become necessary. If additional needs and/or opportunities arise, the SWAC will evaluate options for managing waste tires and make a recommendation to the Board of County Commissioners. Upon approval by the Board, this recommendation may become part of this Plan.

7.5 Biomedical Wastes

Medical treatment and research facilities generate a wide range of special wastes that require handling and disposal. Because of the variety of waste streams, several different regulatory agencies at the local, regional, state, and federal level have regulations pertaining to best management practices and apply their own definitions to waste types. For the purpose of this Plan, biomedical waste means, and is limited to the following types of waste in accordance with Chapter 70.95K.010 RCW:

- **Animal Waste:** Waste animal carcasses, body parts, and bedding of animals that are known to be infected with or that have been inoculated with, human pathogenic microorganisms infectious to humans.
- **Biosafety Level 4 Disease Waste:** Waste contaminated with blood, excretions, exudates, or secretions from humans or animals which are isolated to protect others from highly communicable infectious diseases that are identified as pathogenic organisms assigned to biosafety Level 4 by the Centers of Disease Control, National Institute of Health, Biosafety in Microbiological and Biomedical Laboratories, current edition.
- **Cultures and Stocks:** Wastes infectious to humans, includes specimen cultures, cultures and stocks of etiologic agents, wastes from production of biologicals and serums, discarded live and attenuated vaccines, and laboratory waste that has come into contact with cultures and stocks of etiologic agents or blood specimens. Such waste includes but is not limited to culture dishes, blood specimen tubes, and devices used to transfer, inoculate, and mix cultures.
- **Human Blood and Blood Products:** Discarded waste human blood and blood components, and materials containing free-flowing blood and blood products.
- **Pathological Waste:** Waste human source biopsy materials, tissues, and anatomical parts that emanate from surgery, obstetrical procedures, and autopsy. "Pathological waste" does not include teeth, human corpses, remains, and anatomical parts that are intended for interment or cremation.
- **Sharps Waste:** All hypodermic needles, syringes with needles attached, IV tubing with needles attached, scalpel blades, and lancets that have been removed from the original sterile package.

The handling, transport, treatment, and disposal of infectious waste are regulated in some fashion by the following entities:

- U.S. Environmental Protection Agency
- Washington Department of Ecology
- Washington Department of Health
- Washington Department of Transportation
- Washington Utilities and Transportation Commission
- Kittitas Health Department
- National Hospital Certification Association

Under the Medical Waste Tracking Act of 1988 (MWTA), the EPA gives states the responsibility of permitting infectious waste treatment technologies. Treatment technologies must be consistent with the requirements of Title V of the Federal Clean Air Amendments.

Washington State agencies most directly involved in this process are Ecology, the Department of Health, and the WUTC. Ecology administers permits for the following biomedical wastes treatment alternatives:

- Incineration.
- Autoclaving.
- Chemical disinfection.
- Microwaving.
- Macrowaving (for offsite treatment only).
- Gas vapor and irradiation sterilization.

7.5.1 Existing Conditions

One franchise hauler, Stericycle, has a certificate granted by the WUTC (certificate G-244) to collect biomedical throughout the state. The collection service is provided on an on-call and regular basis.

The State of Washington has developed a product stewardship program for pharmaceuticals. Currently there is a guidance document under development regarding syringe and used needle collection. The Health Department has authority to enforce this activity.

7.5.2 Biomedical Waste Needs and Opportunities

While medical and disposal facilities and emergency responders are informed about proper management of biomedical wastes, residential household generators may not be informed about proper management for sharps or pharmaceuticals. Pharmaceutical wastes present both wastewater and solid waste management issues. Often, residents flush unwanted pharmaceuticals down toilets or pour them down drains, leading to potential contamination of surface waters, ground waters, and biosolids. Proper disposal is also an issue for solid waste collection workers who must handle the waste.

7.5.3 Biomedical Waste Recommended Options and Implementation Actions.

The following options for improving biomedical waste management are recommended. Each option and the associated implementation actions are discussed below.

7.5.3.1 Public Education of Residential Medical Waste

Educational materials have been developed by the County regarding proper disposal of sharps, which includes information about how to properly store and dispose of them. Information should be developed and distributed explaining the environmental and health consequences of disposing of pharmaceuticals through the wastewater system. Outreach and education should be coordinated with the Health Department regarding the proper disposal of sharps and pharmaceuticals. Brochures at medical clinics and pharmacies would help educate the public about proper disposal.

- Work with home healthcare professionals, clinics, and hospitals to jointly provide information regarding the proper disposal of medical waste and County Ordinance 1999- 01.
- Implement a wider distribution of information already published by Solid Waste Programs to include clinics, hospitals, doctor’s offices, pharmacies and nursing homes.

7.5.3.2 Monitoring of Solid Waste Programs for Biomedical Waste

The Health Department should continue to monitor those working within the solid waste program, in addition to the waste stream itself to ascertain if there is a problem with current practices, and if so, work with Solid Waste for a solution.

7.5.3.3 Pharmaceutical Waste

- Evaluate options for managing pharmaceutical waste and packaging, including establishing drop-off sites and promoting mail-back options.
- Support private efforts to take-back medical waste, including hospital and law enforcement programs.

7.6 Veterinary Wastes

7.6.1 Background

Veterinary wastes pose some of the same hazards in the waste stream as untreated medical wastes pose. Like medical offices, untreated surgical wastes, specimen cultures, syringes, and blades can enter the waste stream from veterinary offices. Such wastes, when incinerated or properly sterilized by autoclave or chemical methods, are considered treated wastes and do not fall within the definition of biomedical or biohazards wastes.

The large farming, cattle, bison and sheep ranches within the County require more than the normal need of veterinarians. Because of this it is important to address this waste stream separately.

7.6.2 Existing Conditions

Disposal practices for veterinary waste, including sharps and dead small animals, generally is similar to those of medical facilities. There is a need to support viable options for the proper handling of large animal carcasses, as there is currently no facility to handle them inside of the County. The County currently provides technical assistance to explain proper disposal of large animals; however, owing to the high water table in much of the County, burial of large animals is difficult.

7.6.3 Veterinary Waste Needs and Opportunities

There is a need for ongoing support of viable options regarding the proper handling and disposal of large animal carcasses, as there is currently no County facility to handle them.

Although the current system is adequate to meet the County's needs at this time; there may be circumstances that could require an exploration by SWAC of additional or other options for dealing with veterinary wastes. If such analysis or exploration is required, the SWAC will evaluate and recommend alternatives for inclusion in this Plan to the Board of County Commissioners, and thus may be eligible for funding.

7.6.4 Veterinary Waste Recommended Options and Implementation Actions

The following options for improving veterinary waste management are recommended. Each option and the associated implementation actions are discussed below.

7.6.4.1 Large Animal Disposal

Support viable statewide, neighboring County, and privately developed programs for long-term alternatives for large animal disposal.

7.6.4.2 Education and Outreach - Large Animal

- Provide information to the public on options within the County for the legal removal and/or disposal of large animals, such as current contact information for rendering and burial service companies.
- Since disposal on private property is no longer permitted (KCHD 1999-01, p. 19), onsite composting is a viable alternative. The County may provide information on proper composting techniques to minimize the impact to environmental health and groundwater.

7.7 Petroleum-Contaminated Soils

Petroleum-contaminated soils (PCS) are soils that have been contaminated by a petroleum product through leaks from petroleum product storage tanks or spills. Some PCS can be contaminated with lead, benzene, solvents, and PCBs and therefore may be considered hazardous. This section discusses only nonhazardous PCS.

PCS requires clean up when hydrocarbon contamination levels exceed those specified in Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (WAC 173-340). Under the MTCA, there are separate cleanup levels for industrial verses nonindustrial zoned land along with maximum allowable levels for each individual constituent. PCS above MTCA cleanup levels can be treated in-situ, in place, or excavated and treated onsite or at an approved treatment facility.

7.7.1 Existing Conditions

PCS generated in Kittitas County may be disposed of in several ways. One option is for the generator to remediate and dispose of the soil on site. Another option is to haul the PCS to the Graham Road facility in Spokane, the Roosevelt Landfill in Klickitat County, or the Greater Wenatchee Regional Landfill in Douglas County. The amount of PCS disposed annually varies widely, primarily dependent on the number of projects that include remediation of sites such as gasoline stations. Historically the Ellensburg transfer station has taken in and managed some PCS generated by the County. This practice will end in 2023 with the move to the new transfer station location.

7.7.2 Petroleum Contaminated Soil Needs and Opportunities

Proper disposal of PCS is largely the responsibility of the generator. Generators have several options, including treating their soils onsite, disposing of them at a regional treatment center, or disposing of them at a permitted landfill. The generator must select a method approved by Ecology and will use cost to make the final selection of disposal method. Generators with PCS designated as dangerous wastes must find other methods of appropriately disposing of their wastes that complies with all local, state, and federal regulations.

Volumes of PCS that are generated and require disposal are highly variable and dependent on the number and size of remedial activities taking place. However, most efforts to remove and upgrade aging gasoline or fuel tanks have been accomplished and volumes of PCS originating from these activities are expected to decrease.

7.7.3 Petroleum Contaminated Soil Recommended Options and Implementation Actions

The following options for improving petroleum contaminated waste management are recommended. Each option and the associated implementation actions are discussed below.

7.7.3.1 In-County PCS Site

Support the development of a site within the County to which soil can be taken for remediation into a useful product. The remediated soil can then be used as daily cover at the Ryegrass Landfill CDL facility.

7.7.3.2 Potentially Contaminated Street Sweepings Management

Evaluate management solutions for street sweeping debris to be remediated, which can be used as cover at the Ryegrass CDL facility, after proper testing.

7.7.3.3 Feasibility Study for PCS Management

Study the feasibility of options to effectively handle PCS, based on available funding.

7.7.3.4 Import PCS

Explore options related to importing PCS that, once treated, would be used as cover material at the Ryegrass Landfill. This option would be considered upon approval by the Board of County Commissioners.

7.8 Asbestos

Asbestos waste is any waste that contains more than 1 percent asbestos by weight (40 CFR Part 763, Appendix A, Subpart F). A Waste Shipment Record that meets EPA guidelines must accompany all asbestos-containing waste. In a November 1990 amendment, the National Emission Standards for Hazardous Air Pollutants established record-keeping and operational requirements for disposal facilities accepting asbestos waste.

Asbestos containing materials (ACM) can only be disposed of in approved waste disposal sites and must be sealed in leak-tight containers while wet or put into leak-tight wrappings. Labels are required on all ACM containers and must contain name and location of generation. Transport vehicles must be marked and accompanied by a waste shipment record to be provided to the disposal site owner or operator upon receipt. Asbestos contractors are licensed by the Washington State Department of Labor and Industries.

7.8.1 Existing Conditions

Municipal solid waste landfills can accept nonfriable asbestos wastes if acceptance and disposal procedures comply with federal, state, and local regulations. Asbestos waste generators can haul their waste to either the Columbia Ridge Landfill, the Roosevelt Regional Landfill, the Greater Wenatchee Regional Landfill, or the Graham Road facility for disposal. All of these sites have approved programs for asbestos waste disposal. In 2008, approximately 217 tons of asbestos was disposed from Kittitas County, the majority of this waste was sent to Columbia Ridge.

7.8.2 Asbestos Needs and Opportunities

Asbestos containing materials can be disposed of in solid waste landfills if they are encapsulated, packaged, and covered for disposal in accordance with the local, state, and federal asbestos regulations described previously. Acceptance of asbestos at a landfill facility requires special handling of the material, additional paper work, and additional training of personnel. These requirements increase asbestos waste disposal costs. Current disposal options for asbestos are adequate, so no additional options were evaluated.

7.8.3 Asbestos Recommended Options and Implementation Actions

The following options for asbestos are recommended. Each option and the associated implementation actions are discussed below.

7.8.3.1 Public Education on ACM

Allow current private solid waste hauler to inform the public on proper handling of ACM.

7.9 Liquid Wastes

7.9.1 Background

In 1995, two 300,000-gallon liquid waste evaporation lagoons (LWELs) were built on a portion of the Ryegrass Landfill property owned by Kittitas County Solid Waste. That year Kittitas County Solid Waste began accepting liquid waste (septage) from residents and businesses within the County who were not serviced by city-owned treatment plants or lagoons.

7.9.2 Existing Conditions

The current LWELs are constructed in accordance with WAC 173-350 Solid Waste Handling Standards, which reflects that a thirty-mil reinforced artificial liner, placed on top of a structurally stable foundation to support the liner be utilized. The lagoons are designed to be used in tandem. Only one lagoon at a time is used, when that lagoon has reached capacity, the contents evaporate while the second lagoon is put into use. According to the Operations Plan, sludge is dried to a semiliquid state, mixed with lime to stabilize the pH, and then land-applied at the Ryegrass facility in accordance with the permit. The County LWELs are owned and operated by Kittitas County Solid Waste.

Under the current permit, liquid wastes entering the LWEL from any possible source of moderate risk or hazardous wastes must be tested for such constituents prior to acceptance at the LWEL. Records, including source of the wastes, amount in gallons and date accepted are kept by Kittitas County Solid Waste.

In 1997, a Wastewater Discharge Permit was issued by Ecology's Central Regional Office Water Quality Section which "grandfathered" in the County's current LWEL.

There is also a wastewater lagoon that accepts only leachate from the transfer station, Pautzke bait leachate, and other approved liquid waste. The closed landfill at Ryegrass has one leachate lagoon and has the capacity to expand. The County is working with Ecology to modify its wastewater discharge permit and use the lagoon associated with the closed landfill as a septage lagoon, providing the County another 500,000 gallons of storage capacity.

7.9.3 Liquid Waste Needs and Opportunities

Considering the current population trends and the current rate of generation of liquid waste, the need for additional lagoons is well substantiated. The amount of liquid waste going into the lagoons currently exceeds the capacity. There is a need for additional, larger liquid waste lagoons to keep up with the current demand. Another screen is needed for the second pond to assure recognizables do not surface.

The City has built a decant facility to handle the liquid from catch basins that is contaminated with petroleum hydrocarbons, as well as street sweeping runoff.

7.9.4 Liquid Waste Option and Implementation Actions

The following options for improving liquid waste management are recommended. Each option and the associated implementation actions are discussed below.

7.9.4.1 Catch Basin Liquids

Evaluate the feasibility of a new lagoon to handle liquid from catch basins. This facility would decant the liquids to a new pond; the solids could go to a PCS facility for processing and disposal.

7.10 Electronic Waste

Electronic waste refers to discarded computers, monitors, printers, fax machines, cell phones, electronic cables, and other electronic products. In 2006, the Washington State Legislature passed Engrossed Substitute Senate Bill 6428, which established the Washington State Electronics Product Recycling Law. The law requires manufacturers of electronic products sold in Washington State to finance and implement electronics collection, transportation, and recycling programs in Washington State. This program is available to households, small governments, small businesses, and charities. Ecology oversees this program. Electronic products that are covered in the legislation include cathode ray tube (CRT) and flat panel computer monitors having a viewable area greater than 4 inches when measured diagonally, desktop computers, laptops, and portable computers.

7.10.1 Existing Conditions

Implemented in January 2009, E-Cycle Washington provides free recycling of computers, monitors, laptops, and televisions to residents, charitable organizations, small businesses, and small governments. The Washington Materials Management and Financing Authority (WMMFA) sets up and runs the recycling program on behalf of the 200-member manufacturers that sell their computers and TVs in Washington State. The WMMFA has negotiated with collection sites throughout the state to provide recycling services. Collection sites are required, at a minimum, in every County and every city with a population of 10,000 or more.

Currently, Goodwill Ellensburg Store and Kittitas Valley Recycling Ellensburg each accept covered electronics for free. Although not covered by E-Cycle Washington, other electronics and peripherals are collected at Kittitas Valley Recycling.

7.10.2 Electronic Waste Needs

Local governments do not need to set up collection sites or pay for the recycling program. Recycling plans submitted by the WMMFA include collection service throughout the County.

7.10.3 Electronic Waste Recommended Options and Implementation Actions

The following options for electronic waste are recommended. Each option and the associated implementation actions are discussed below.

7.10.3.1 Monitor and Evaluate E-Waste Program

The County should continue to monitor the current E-Cycle program for effectiveness. by submitting An annual "Satisfaction Report" with the following information is due to Ecology on March 1:

- Accessibility and convenience of services and how they are working in their community.
- What services aren't working and why.
- Suggestions for improvements to services plans provide.
- Description of public outreach and education.
- Any other relevant information.

Ecology will use information in these reports when evaluating recycling plan service levels and revisions.

7.10.3.2 E-Waste Education

Local governments are required by Ecology to provide their citizens with information about the E-Cycle program through existing educational methods typically used by local government. This includes listing locations and hours of operation of local collection sites and services. Other information is available in Ecology’s Local Government Toolkit.

This public education program will promote the existing drop-off locations in Kittitas, Ellensburg, and Cle Elum that are part of the state program.

Chapter 8
Moderate Risk Waste

8. Moderate Risk Waste

The recommended options and associated implementation actions for moderate risk waste are summarized in Table 8-1.

Table 8-1. Moderate Risk Waste Summary of Implementation Actions

Option	Summary of Action
MRW Facilities	Expand existing MRW facilities to accommodate more waste types. Increase participation by hosting regular business hours.
Commercial Outreach, Education, and Technical Assistance	Implement outreach education and technical assistance to commercial entities.
Funding for MRW Programs	Seek additional funding sources from the State as well as increasing handling and disposal fees.

8.1 Introduction and Background

This section constitutes the 2020 Moderate Risk Waste/Local Hazardous Waste Management (MRW Plan) for Kittitas County. This Plan replaces the previous plan, prepared in 2010.

The purpose of this plan is to improve the management of moderate risk wastes in Kittitas County, thereby promoting better regional protection of human health and the environment. The document will direct and guide the management of these wastes over the 20-year planning period, from 2020 to 2040. The recommendations included in this Plan are based on existing conditions and forecasts of future conditions in the County.

In Kittitas County, the local governments have worked together to produce a MRW Plan for the County. Participants include Kittitas County, the cities of Kittitas, Cle Elum, Ellensburg, Roslyn, and the town of South Cle Elum. The Kittitas County Solid Waste department was responsible for overseeing all aspects of the plan's development. Solid Waste will also implement specific plan recommendations and coordinate the involvement of other agencies.

8.2 Analysis of Current Conditions

8.2.1 Moderate Risk Waste

Moderate risk wastes are hazardous wastes produced by households, and by businesses and institutions in small quantities. Commercial and institutional generators of hazardous waste are conditionally exempt from full regulation under the Hazardous Waste Management Act, provided that they do not produce or accumulate hazardous waste above specified quantities defined by Ecology (quantity exclusion limits). These "small-quantity generators" produce hazardous wastes in quantities that do not exceed the following State regulatory limits:

- 220 pounds (100 kg) of dangerous waste per month or per batch.
- 2.2 pounds (1 kg) of acute or extremely hazardous waste per month or per batch.

In addition, to maintain its status as a small-quantity generator, a business or institution may not accumulate more than 2,200 pounds of dangerous waste or more than 2.2 pounds of acute or extremely hazardous waste at one time.

Drop boxes located at the Upper County Transfer Station in Cle Elum and at the Moderate Risk Waste Facility in Ellensburg are used to collect used motor oil, antifreeze, lead-acid vehicle batteries, and household batteries for recycling. Residents are instructed to collect all waste in a box, and to categorize the waste as much as possible (for example, solvents, thinners, mineral spirits together in one box, paints in another box, and garden products in another). Residents are further instructed not to mix products, and to keep the products in their original containers or to label products that are not in their original containers. When residents arrive at the facility, a waste specialist directs them into the HHW facility, and unloads the waste from the resident's vehicle.

The Kittitas County Moderate Risk Waste Facility (MRWF) offers an opportunity for local businesses to dispose of their hazardous wastes for a fee to cover disposal cost. This opportunity is offered to preregistered businesses that are classified under the Small-Quantity Generator status. Hazardous wastes generated from Regulated Businesses (businesses that exceed the above definition) cannot be accepted. Business owners classified as small-quantity generators must contact Solid Waste to schedule an appointment for the waste specialist to inventory the waste, estimate the disposal cost, and complete the requisite paperwork. Following the inventory, the business brings the waste to the MRW facility, where it is unloaded by a solid waste specialist.

Usage information for the Moderate Risk Waste Facilities is provided in Table 8-2.

Table 8-2. Moderate Risk Waste Facilities Usage

Year	Number of Users	Material Collected			
		Batteries (tons)	Oil (gallons)	Antifreeze (gallons)	Total HHW (pounds)
2014	436	14.9	10,901	1,481	63,942
2015	358	9.6	9,818	1,453	49,766
2016	1454	27.5	14,380	1,114	0,981
2017	549	11.9	16,615	2,083	42,269
2018	738	15.5	15,858	3,175	57,068

In addition to the MRW facility, batteries are accepted at Jerrol's Book and Supply, 111 E. University Way and the Main Office of Kittitas County Solid Waste, 925 Industrial Way in Ellensburg.

The Solid Waste Department is responsible for collecting the batteries from these collection sites, storing, and labeling them for shipment to a treatment storage and disposal firm contracted by the County.

Waste oil can be recycled at two self-serve recycling tanks:

- **Solid Waste Department**
  925 Industrial Way Ellensburg, WA
  Monday - Saturday, 8:00 am - 4:00 pm
- **Cle Elum Transfer Station**
  50 - #5 Mine Road Cle Elum, WA
  Tuesday - Saturday, 8:00 am - 1:00 pm and 1:30 pm - 4:00 pm

8.2.2 Hazardous Waste

Businesses or institutions producing or accumulating hazardous waste above the quantity exclusion limits are required to meet a stringent set of regulations when storing, handling, and disposing of their hazardous wastes. In addition, these fully regulated hazardous waste generators must comply with extensive waste tracking and reporting requirements. Small- quantity generators must meet certain requirements for identifying and managing their hazardous wastes but are exempt from portions of the waste tracking and reporting requirements.

Within the County's jurisdictions, certain zones are eligible for the management of hazardous waste. Eligible zones and uses are as follows:

- Cle Elum
  - Conditional Use in Industrial District (listed as chemical storage and treatment, not hazardous)
- Ellensburg
  - Conditional Use in Tourist Commercial Zone (onsite storage and treatment)
  - Conditional Use in Commercial Highway Zone (onsite storage and treatment)
  - Conditional Use in Central Commercial (CBD) Zone (onsite storage and treatment)
  - Conditional Use in Central Commercial 2 Zone (onsite storage and treatment)
  - Conditional Use in Light Industrial Zone (onsite and offsite storage and treatment)
  - Conditional Use in Heavy Industrial Zone (onsite and offsite storage and treatment)
- Kittitas
  - Accessory Use in Industrial Zone (onsite storage, treatment, sales, and distribution)
- Roslyn
  - None
- South Cle Elum
  - None
- Unincorporated County
  - Conditional Use in Light Industrial Zone
  - Conditional Use in General Industrial Zone

8.2.2.1 Dangerous Waste Generators

Businesses in the County that have an EPA/State identification number issued under Chapter 173-303-WAC, are included in Table 8-3.

Table 8-3. Regulated Waste Generators

Generator ID	Company Name	Location
WAH000032789	Arco AM PM Thorp	Thorp
WAD980835631	Central Washington University	Ellensburg
WAH000017335	Chem Safe Environmental Inc	Kittitas
WAH000008169	Chem Safe Environmental Inc Transporter	Kittitas
WA0000712489	Chevron #95012	Ellensburg
WAD988489738	CHEVRON #95179	Ellensburg
WAH000000778	Circle K Stores #2701136	Ellensburg
WAD988510285	D & M Motors & Towing	Ellensburg
WAH000035491	Kittitas County Hospital District 2	Cle Elum
WAH000036214	Kittitas Valley Community Hospital	Ellensburg
WAR000006486	PSE Kittitas Service Center	Thorp
WAH000014415	Rental Service Corporation #559	Ellensburg
WA0001013267	Rite Aid #5299	Ellensburg
WA0000712968	Sportland Yamaha	Cle Elum
WAD988503561	Texaco Station #120695	Ellensburg
WAD019201771	University Auto Center	Ellensburg
WA0000380246	UPS Ellensburg	Ellensburg
WA0000189589	US DOE BPA Schultz Maintenance HQ	Ellensburg
WAH000008342	WA AGR Kittitas 2	Ellensburg
WAH000017954	WA AGR Kittitas 3	Ellensburg
WAR000002352	WA Parks Lake Easton State Park	Easton
WAD004865382	Ward Rugh Inc	Ellensburg
WAD980738256	Waste Management of Ellensburg	Ellensburg

8.2.2.2 Hazardous Waste Sites

Ecology publishes the Hazardous Sites List as required by WAC 173-340-330. The list is updated twice per year. It includes all sites that have been assessed and ranked using the Washington Ranking Method. Also listed are National Priorities List (NPL) sites. The list of Kittitas County as of September 2018 contains 73 active sites (Table 8-4).

A Site Hazard Assessment provides Ecology with basic information about a site. Ecology then uses the Washington Ranking Method to estimate the potential threat the site poses, if not cleaned up, to human health and the environment. The estimate is based on the amount of contaminants, how toxic they are, and how easily they can come in contact with people and the environment. Sites are ranked relative to each other on a scale of one to five. A rank of one represents the highest level of concern relative to other sites, and a rank of five the lowest. Hazard ranking helps Ecology target where to spend cleanup funds. However, a site's actual impact on human health and the environment, public concern, a need for an immediate response, and available cleanup staff and funding also affect which sites get first priority for cleanup. A site may be removed from the list only if the site is cleaned up. In some cases, long-term

monitoring and periodic reviews may be required to ensure the cleanup is adequate to protect the public and the environment.

Table 8-4. Hazardous Waste Sites

Facility Site Id	Cleanup Site Name	City	Rank	Site Status
14856	1042 Riverbottom Rd	Ellensburg		Cleanup Started
387	115 Mini Mart	Kittitas	3	Awaiting Cleanup
59966578	7 Eleven Store 2301 17053L	Ellensburg		Awaiting Cleanup
6245152	Alderman Chevrolet Inc	Ellensburg		Cleanup Started
7678948	B & G Service	Cle Elum	3	Cleanup Started
22267	Beverly Trestle	Beverly Junction		Cleanup Started
386	Big B Mini Mart	Ellensburg	3	Cleanup Started
388	Bingo Fuel Stop	Thorp	2	Cleanup Complete-Active O&M/Monitoring
85894558	Bonjorni Site	Ellensburg		Cleanup Started
15269	Cascade Pallet Co	Ellensburg		Awaiting Cleanup
64886528	CB General Store & Services	Easton	5	Cleanup Started
58926155	Chem Safe Environmental Inc	Kittitas		Cleanup Started
45657711	Chevron 95012	Ellensburg		Cleanup Started
31439188	Chevron 95179	Ellensburg		Cleanup Started
23959	City Heights Development	Cle Elum		Awaiting Cleanup
390	Cle Elum City	Cle Elum	3	Awaiting Cleanup
398	Cle Elum Short Stop	Cle Elum		Cleanup Started
21371	CWU Hertz Music Hall	Ellensburg		Cleanup Started
21589197	CWU Jongeward Services Building	Ellensburg	2	Cleanup Started
44136577	CWU New Science Building	Ellensburg		Cleanup Started
81891257	Devere & Sons Distributing	Ellensburg		Awaiting Cleanup
398	Devere Bulk Plant	Cle Elum	5	Cleanup Started
1857797	Dolge Property	Ellensburg		Awaiting Cleanup
58966935	Eastside Automotive	Ellensburg		Cleanup Started
66382145	Ellensburg City Shop	Ellensburg		Cleanup Started
77737583	Ellensburg City W 8th Ave ROW	Ellensburg		Awaiting Cleanup
8473478	Faltus & Thomas Properties	Ellensburg	5	Awaiting Cleanup
46428734	Floyd Wippel Property	Ellensburg		Awaiting Cleanup
394	Flying J Truck Stop Broadway	Ellensburg	4	Cleanup Started
385	Fred Meyer	Ellensburg		Cleanup Started
28665374	Fred Meyer Inc Ellensburg	Ellensburg		Awaiting Cleanup
77544628	FUDS ELLENSBURG AAF	Ellensburg		Awaiting Cleanup

Table 8-4. Hazardous Waste Sites

Facility Site Id	Cleanup Site Name	City	Rank	Site Status
24266265	Gillon Chevron	Cle Elum		Awaiting Cleanup
9234466	H Clerf Road Spill	Ellensburg		Awaiting Cleanup
16970	KAG Truck Spill	Cle Elum		Cleanup Started
3892	Kens Auto Wash II	Ellensburg	2	Cleanup Started
66863128	Kens Texaco Inc	Ellensburg		Cleanup Started
61983379	Kittitas County Lower County Shop	Ellensburg		Awaiting Cleanup
91094	Kittitas Trap & Skeet Club	Ellensburg		Cleanup Started
18466	Lee & Eastes Hwy 970 Fuel Spill	Cle Elum		Cleanup Started
19293	Lee & Eastes Tanker Spill	Cle Elum		Cleanup Started
18911356	Loves Travel Center Stormwater Swale	Ellensburg		Awaiting Cleanup
27815219	Mackners Transport	Ellensburg		Cleanup Started
71731	Matheson Truck Spill	Easton		Cleanup Started
83957889	Midstate Cooperative	Ellensburg		Cleanup Started
6922571	Mikes Rental Machinery Inc	Ellensburg		Cleanup Started
16572457	Millpond Manor Mobile Home Park	Ellensburg		Awaiting Cleanup
19856	NPRR Ellensburg Roundhouse & Yard	Ellensburg		Awaiting Cleanup
17868929	Okanogan Seattle Transport Company Inc	Ellensburg		Cleanup Started
18911356	Pilot Travel Center 389	Ellensburg		Cleanup Started
12800	Principle Metals	Ellensburg		Awaiting Cleanup
12487	PSE Woldale Substation	Ellensburg		Cleanup Started
1304926	Red Bridge Rd Property	Cle Elum		Cleanup Started
36179472	Rogers Trucking	Ellensburg		Awaiting Cleanup
382	RYEGRASS LANDFILL	Ellensburg	4	Cleanup Started
92387155	Simpsons Texaco	Cle Elum	5	Cleanup Started
12832256	Smith Kem Ellensburg Inc	Ellensburg	3	Awaiting Cleanup
8180284	Snoqualmie Pass Borehole Pit	Snoqualmie Pass		Awaiting Cleanup
77133953	SPORTLAND MINI MART	Cle Elum	3	Cleanup Started
23577	Summit Inn	Snoqualmie Pass		Cleanup Started
86291644	Texaco Station 120695	Ellensburg		Cleanup Started
69682344	Toads Express Mart & Deli 113	Ellensburg		Cleanup Started
23328158	TV Cable Trench TPH	Ellensburg		Awaiting Cleanup
46818261	University Auto Center Facility	Ellensburg		Cleanup Started

Table 8-4. Hazardous Waste Sites

Facility Site Id	Cleanup Site Name	City	Rank	Site Status
43736529	WA DNR Ellensburg	Ellensburg		Cleanup Started
990	WA DOT Travelers Rest Safety Rest Area	Snoqualmie Pass		Cleanup Started
7747943	WA Parks South Cle Elum RR Depot	South Cle Elum		Awaiting Cleanup
22944	WalMart I90 MP 100 Spill	Ellensburg		Awaiting Cleanup
47245321	Ward Rugh Inc	Ellensburg	2	Cleanup Started
77336637	Whiteman Tire Inc	Ellensburg		Awaiting Cleanup
86458196	Wiggins Estate Restaurant	Cle Elum		Cleanup Started
96296376	Wirts Service	Kittitas		Cleanup Started
94674577	Zacklift International	Cle Elum		Awaiting Cleanup

Contaminated Sites in Kittitas County, Washington as of September 2018 downloaded from https://fortress.wa.gov/ecy/tcpwebreporting/report.aspx

8.2.2.3 Transporters and Facilities

All transporters of hazardous waste require a common carrier permit issued by WUTC under RCW 81.80. Hazardous waste transportation companies that are registered with Ecology which can service businesses in Kittitas County are included in Table 8-5. This is a partial list and does not constitute a recommendation. There are no treatment facilities in the County. Chem-Safe Environmental, located in Kittitas, provides site cleanup, hazardous waste remediation, and disposal services to business and institutions.

Table 8-5. Hazardous Waste Transporters

Name	Location
ARCOM Oil	Tacoma
Able Cleanup Technologies	Spokane
Big Sky Industrial	Spokane
Bulk Service Transport	Spokane
Chem-Safe Environmental	Kittitas
Emerald Services	Seattle
Phoenix Environmental Services	Tacoma
PSC	Seattle
Regional Disposal (RABANCO)	Seattle

8.3 Legal Authority for Program

8.3.1 State Authority

Ecology derives its regulatory authority from the Hazardous Waste Management Act Chapter 70-105.020 through 145 RCW, the Dangerous Waste Regulations (Chapter 173-303, Washington Administrative code [WAC]) and the Solid Waste handling Standards (Chapter 173- 350 WAC). The Beyond Waste Plan, published in 2004, establishes five initiatives as starting points for reducing wastes and toxic substances

in Washington. Initiative #2 is Reducing Small-Volume hazardous materials and wastes. The goal of this initiative

> *"…is to accelerate progress toward eliminating the risks associated with products containing hazardous substances."*

Specifically, the initiative encompasses products and substances commonly used in households and in relatively small quantities by businesses.

In 2009, Ecology updated the MRW Planning Guidelines, and in 2010, Ecology updated the Guidelines for the Preparation of Solid Waste Management Plans. Included in the new guidelines are new requirements for a combined Solid Waste and MRW Plan. This section has been prepared to meet the requirements for a combined Solid Waste and MRW Plan.

8.3.2 Local Authority

Local governments are required by the Hazardous Waste Management Act to address moderate risk waste management in their jurisdictions. In 1991, Chapter 70.951.020 RCW was added requiring local governments to amend their local hazardous waste plans to include the Used Oil Recycling Act, for the management of used oil as part of MRW management. Local governments have specific authority to adopt ordinances and regulations under RCW 70.95.160 to manage MRW and implement the plan. In addition, jurisdictional health districts may choose to use Chapters 70.05.060 and .070 RCW when appropriate.

The Kittitas County Public Health Department works with the public, cities, County, and state agencies to develop and implement plans for the safe storage, collection, transportation, and final disposal of solid waste. The Public Health Department works to assure compliance with Chapters and 70.105 RCW, and WAC Chapters 173-303, 173-304, 173-340, and the Kittitas County Board of Health Ordinance Number 1999-01, Solid Waste Regulations. The Public Health Department also permits solid waste handling facilities, including the landfill, transfer station, moderate risk waste facility and materials recovery facilities. The department also issues orders of abatement to facilities or individuals dumping waste illegally, and licenses private contractors to pump and haul septic tank wastes.

8.3.3 Waste Acceptance Control Program

The Kittitas County Health Ordinance includes a waste screening requirement. In accordance with the ordinance, all solid waste must be designated as required by WAC 173-303-070 to prevent the disposal of dangerous waste at a facility not permitted to accept dangerous waste. All solid waste which is designated as dangerous waste must be managed in a manner consistent with these regulations and Chapter 173-303 WAC.

The screening process may involve analytical testing, a disclosure of the waste constituents and waste generation process, and other additional information necessary to determine if the waste is dangerous. The Health Officer may establish a schedule for compliance as part of the screening process. Based on the results of the required screening, the Health Officer may require the generator or transporter to direct the waste to a facility permitted to handle such waste.

8.3.4 Mandatory Disposal

The County Health Ordinance stipulates the following:

> *The owner, operator or occupant of any premise, business establishment or industry shall be responsible for the satisfactory and legal handling and/or disposal of all solid waste generated by them or accumulated on the property. Single-family residences and single-family farms are prohibited from dumping or depositing solid waste onto or under the surface of land owned or leased by them.*

In addition to the quantity exclusion limits contained in WAC 173-303- 070(8), MRW, used oil, and hazardous substances shall not be accumulated in quantities that, in the opinion of the Health Officer, present a demonstrable threat to public health or the environment. Small-quantity generators shall not accumulate wastes in excess of the Quantity Exclusion Limit for the wastes generated by their business per WAC 173-303-070, 070- 100, and 170(1). Large Quantity (Regulated) Generators shall not accumulate wastes on site in excess of their monthly accumulation limit for waste in accordance with WAC 173-303- 200(1)(c), (1)(d). Used oil shall not be accumulated in quantities in excess of 300 gallons at any one site, home or business. The Health Officer at his discretion may restrict the amount of used oil accumulated if potential public health and safety are at risk.

8.4 Financing

Kittitas County's MRW program is funded from several sources, including revenue from the recycling of some materials, and grant funding. Costs for the program include labor and operations. Costs exceed funding. The County continues to attempt to identify additional revenue sources to offset the costs of the program, including from Ecology and EPA.

The 2017 costs and revenue for the Kittitas County MRW program are presented in Table 8-6.

Table 8-6. MRW Program Costs and Revenue (2017)

Activity	$
Costs	
Disposal and Supplies	$ 49,339
Labor and education	$ 81,897
Total Costs	$ 131,236
Revenues	
Recycling (Used Oil, Batteries, Electronics)	$ 56,734
Total Revenue	**$ 56,734**

8.5 Governance

The legal authority for decisions regarding the implementation of the MRW plan is the responsibility of the Kittitas County Solid Waste Department.

8.6 Program Philosophy

The following are the goals and objectives of the Kittitas County MRW program

- Protect the natural resources and public health in Kittitas County by eliminating the discharge of moderate risk wastes into solid waste systems, wastewater treatment systems, and the environment through indiscriminate disposal.
- Manage moderate risk waste in a manner that promotes, in order of priority: waste reduction; recycling; physical, chemical and biological treatment; incineration; solidification and stabilization; and landfill.
- Increase public awareness of the importance of proper disposal and available alternatives to disposal of moderate risk wastes.
- Improve opportunities for the safe disposal of moderate risk wastes by citizens and businesses within Kittitas County.
- Reduce the health threats presented to workers coming in contact with MRW that may be disposed in the solid waste stream or in wastewater treatment systems.

- Coordinate improved systems for MRW management with existing and planned systems for waste reduction, recycling, and other programs for solid waste management within Kittitas County.
- Encourage cooperation and coordination among all levels of government, citizens and the private sector in managing MRW.
- Emphasize local responsibility for solving problems associated with MRW, rather than relying upon the state or federal government to provide solutions.
- Comply with the requirement of the RCW and WAC requirements for MRW and hazardous waste.

8.7 MRW Recommended Options and Implementation Actions

The County is considering a number of options for household hazardous waste collection, public education, and business technical assistance, as described below:

8.7.1 MRW Facilities

- Expand the existing MRW facilities to accommodate more waste types and extended hours of operation.
- Evaluate the feasibility of assigning regular business hours to the MRW facility in Ellensburg and Cle Elum and remove “appointment only” status to increase participation in MRW recycling.

8.7.2 Commercial Outreach, Education, and Technical Assistance

The commercial program will include a set of outreach, education, and assistance components integrated with Waste Reduction Programs.

8.7.3 Funding for MRW Programs

The County will explore additional funding sources through Ecology, as well as other potential revenue sources, such as charging for proper handling or disposal.

8.7.4 Small Business Collection Assistance

The County will continue the existing program of offering businesses the opportunity to bring their wastes to the MRW facility for proper handling and disposal.

8.8 Process for Updating Implementation Plan

The County and SWAC will review the MRW Plan on a regular basis to identify any necessary changes to the goals, objectives, and implementation plan. Changes may be deemed necessary due to changes in State law, conditions in the County, budgets, and/or other issues. If changes are identified, the County and SWAC will work together to develop the changes, for review and approval by the County and local jurisdictions.

8.9 Implementation Plan

The implementation schedule for 2020 MRW/local hazardous waste management planning is included in Chapter 10.4, Implementation Schedule.

The County’s budget for the implementation of the MRW Plan is included in Chapter 10.5, Implementation Budget Six-Year Capital and Operational Financing. Actual budgets to carry out the Plan will vary from year to year as specific programs are defined, and will depend on the availability of grant funding and budget approved by local governments.

Chapter 9
Administration and Enforcement

9. Administration and Enforcement

The recommended options and associated implementation actions for administration and enforcement are summarized in Table 9-1.

Table 9-1. Administration and Enforcement Summary of Implementation Actions

Option	Summary of Action
Staffing and Resources	Utilize a cooperative approach to staffing and program evaluation with the SWAC.
Administration Funding	Explore additional grant funding.
Other Long-Term Needs	Consider other policies between Plan updates.
New Regulations and Ordinance Requirements	Update other policies when regulations change between Plan updates.
Permit Procedures, Policies, and Fee Structures	County Health Department to continue to implement relevant policies, procedures, and fees for solid waste facilities.
Permit Review	SWAC to review all new solid waste facility permit requests.
Emergency Debris Management Plan	Connect SWMP with Emergency Debris Management Plan

9.1 Introduction

The Washington State Solid Waste Management Act, Chapter 70.95 RCW, assigns local government the primary responsibility for managing solid waste, although State agencies have jurisdiction over solid waste issues as well. This chapter describes the administrative and enforcement structure for solid waste management in Kittitas County. Administration and enforcement responsibilities for solid waste management in Kittitas County are divided among several agencies and jurisdictions.

9.1.1 Kittitas County Solid Waste Department

Chapter 36.58 RCW authorizes Kittitas County to develop, own, and operate solid waste handling facilities in unincorporated areas of the County, or to accomplish these activities by contracting with private firms. The County also has the authority and responsibility to prepare comprehensive solid waste management plans for unincorporated areas and for jurisdictions that agree to participate with the County in the planning process.

The County has entered into interlocal agreements with all of the incorporated cities within the County for the purpose of establishing an integrated and coordinated solid waste management program. Interlocal Agreements are developed in accordance with Chapter 39.34 RCW, Interlocal Cooperation Act, for the purpose of permitting local governments to cooperate with one another in the performance of tasks, thus achieving economies of scale and reducing duplication of effort. An Interlocal Agreement is signed by the authorized officials of the local governments involved and specifies the services and/or facilities to be provided and any compensation between the local governments for such services and/or facilities. The Solid Waste Interlocal Agreement, entered into on March 19, 1979, is provided in Appendix A.

Kittitas County exercises its solid waste responsibilities through the Kittitas County Solid Waste Department. The Solid Waste Department has the responsibility for developing and implementing the solid waste management plan, formulating interlocal agreements, administering public education programs, and providing staff support for the SWAC.

An organization chart for the solid waste department is provided in Figure 9-1.

9.1.2 Incorporated Cities

Under Chapter 35.21.152 RCW, cities are allowed to develop, own, and operate solid waste handling systems and to provide for solid waste collection services within their jurisdictions. Cities and counties have the authority to establish solid waste programs, pass ordinances, and provide resources to monitor compliance and take corrective action where necessary. The cities are also responsible for enforcing local ordinances covering zoning, land use, illegal dumping, and littering. There are five incorporated cities and towns in Kittitas County. All of the cities and towns contract with a hauler for solid waste collection or use the existing franchise.

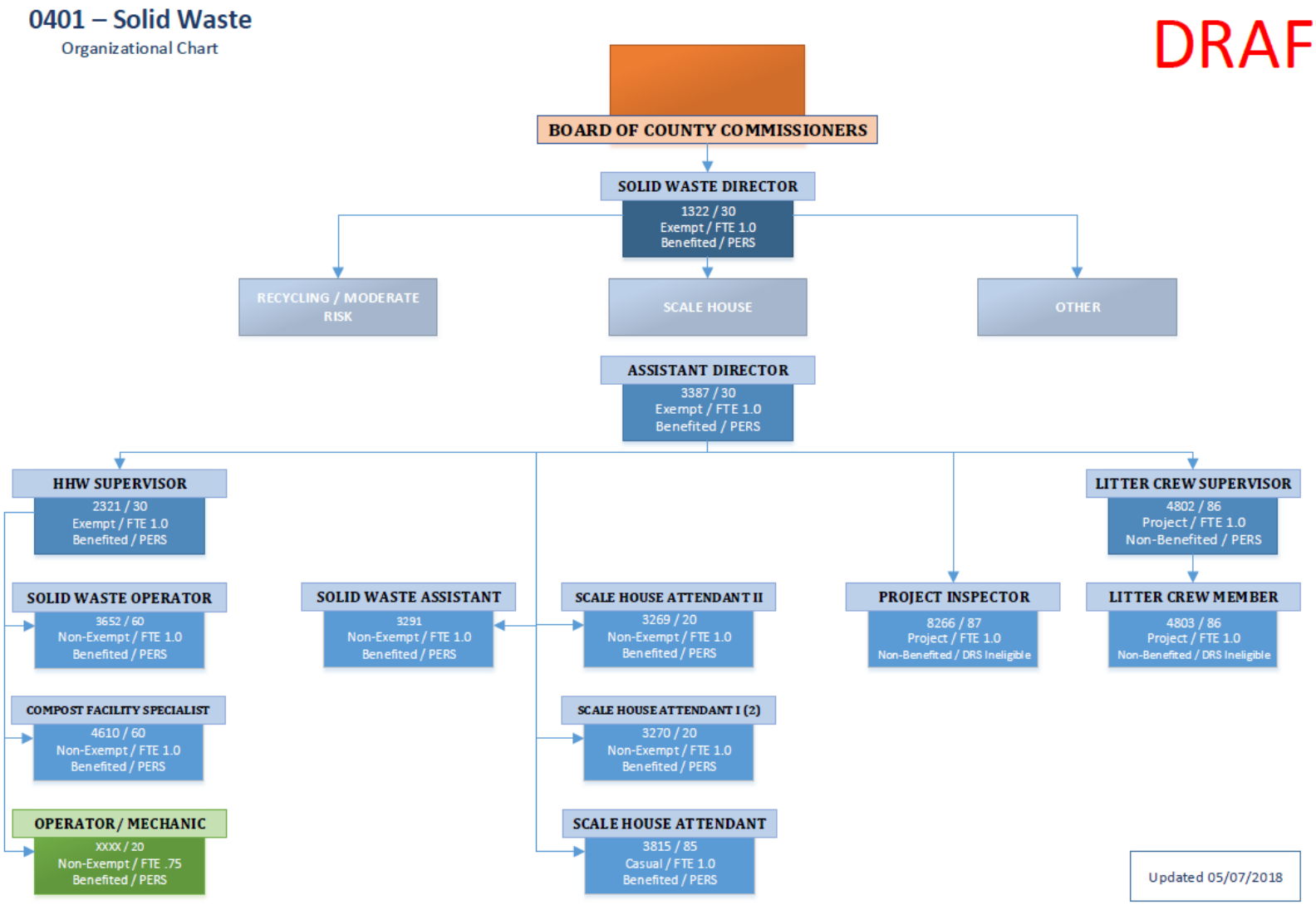

Figure 9-1. Kittitas County Solid Waste Department Organization Chart

9.1.2.1 Solid Waste Advisory Committee

The State requires that counties establish a Solid Waste Advisory Committee (SWAC) to assist in the development of programs and policies concerning solid waste handling and disposal (Chapter 70.95 RCW). The Kittitas County SWAC is an advisory board to the Kittitas County Board of Commissioners and makes recommendations to the Commissioners on matters relative to the development of solid waste handling programs and policies. One of its main functions is to provide a forum within the community for the expression of opinions regarding solid waste handling and disposal plans, ordinances, resolutions, and programs prior to adoption. The members of the SWAC represent citizens, public interest groups, business, the waste management industry, and local government. The SWAC has a significant role in developing and updating Kittitas County's Solid Waste Management Plan. A list of current members is provided in Appendix B and bylaws that will be adopted in 2019 are provided in Appendix B, as well. Each representative is appointed for an indefinite term. The SWAC met during the planning process and meeting minutes are kept at the Solid Waste Department office. The most recent copy of minutes in provided in Appendix B.

Additionally, representatives from the regulatory community attend SWAC meetings and provide guidance with respect to solid waste issues. Their roles are described in the following sections.

9.1.2.2 Kittitas County Public Health Department

An Environmental Health Representative of the Kittitas County Health Department (KCHD) currently serves on the SWAC. KCHD is the lead agency for permitting waste handling facilities in the County, and for enforcing violations of waste disposal ordinances. State law gives local health departments responsibility for:

> *"ordinances governing solid waste handling implementing the comprehensive solid waste management plan covering storage, collection, transportation, treatment, utilization, processing and final disposal including but not limited to the issuance of permits and establishment of minimum levels and types of service for any aspect of solid waste handling." (Chapter 70.95.160 RCW)*

In addition, RCW 70.95.160 states that:

> *"such…ordinances shall assure that solid waste storage and disposal facilities are located, maintained, and operated in a manner so as properly to protect the public health, prevent air and water pollution, are consistent with the priorities established in Chapter 70.95.010 RCW and avoid the creation of nuisances."*

Falling under the definition of "solid waste handling facilities" are landfills, wood and tire piles, construction and demolition debris sites, compost and recycling facilities, transfer stations, and landfills.

The Kittitas County Public Health Department works with the public, cities, County, and state agencies to develop and implement plans for the safe storage, collection, transportation, and final disposal of solid waste. The Public Health Department works to assure compliance with Chapter RCW and WAC 173-304 - Minimum Functional Standards for Solid Waste Facilities. The Department is responsible for the following:

- Permitting all new solid waste facilities operating in Kittitas County.
- Assure that permits are consistent with the Solid Waste Management Plan, local ordinances and appropriate Washington State and Federal regulations.
- Oversight of existing permitted facilities:
  - The Ryegrass Landfill
  - The Ellensburg Transfer Station
  - The Cle Elum/Upper County Transfer Station

- Responding to complaints regarding improper storage and disposal of solid waste.
- Investigating illegal dumping and nonpermitted dump sites.

9.1.2.3 Washington Department of Ecology

Ecology has the primary authority for solid waste at the state level and acts as an advisor to the SWAC. Ecology assists local governments in the planning process by reviewing, providing comments, and approving preliminary and final drafts of solid waste management plans. This review is to ensure that local plans conform to applicable state laws and regulations. In its Guidelines for the Development of Local Solid Waste Management Plans and Plan Revisions, Ecology offers recommendations on the preparation of solid waste management plans. Ecology also makes recommendations and comments on reviews of solid waste handling and disposal permits to ensure that the proposed site or facility conforms to applicable laws and regulations.

Although primary enforcement for solid waste management is through jurisdictional health departments, Ecology has a range of enforcement authorities under various statutes to address existing or potential sources of pollution, including those which result from improper solid waste handling and management. For instance, Ecology has broad authority to take enforcement actions under the State Water Pollution Control Act, the Hazardous Waste Management Act, and the Model Toxics Control Act. Collectively, these laws allow Ecology to issue orders and impose penalties for noncompliance. Under some circumstances, Ecology may also take direct action to remedy threats to public health and the environment and seek to recover costs from potentially liable parties.

In some instances, Ecology may assume the duties and responsibilities of jurisdictional health departments. Chapter 70.95.163 RCW authorizes local health departments to enter into an

agreement with Ecology to assume some, or all, of their solid waste regulatory responsibilities and authorities, such as biosolids and septage permitting and enforcement.

9.1.2.4 Washington Department of Agriculture

An Agriculture Representative of the KCHD currently serves on the SWAC. Chapter 70.95.095 states the WSDA is required to review the draft plan and shall advise the County during writing of the preliminary draft plan. Comments received by Agriculture are to be incorporated into the Plan. Concerns have been raised recently by WSDA about transporting mixed organics and garbage to eastern Washington and the potential for these practices to introduce apple maggots from quarantine areas to apple-growing areas. This is discussed further in Chapter 6.3.2.

9.1.2.5 Washington Utilities and Transportation Commission

A WUTC Representative reviews the Draft SWMP Update. The WUTC regulates solid waste collection activities under Chapter 81.77 RCW, through the issuance of certificates entitling private companies to provide solid waste collection services within specified geographic areas of the state. Chapter 70.95.096 RCW also grants the WUTC the authority to review solid waste management plans to assess solid waste collection cost impacts on rates charged by collection companies regulated under Chapter 81.77 RCW and to advise the County and Ecology of the probable effects of the Plan's recommendations on those rates.

The WUTC regulates the collection of solid waste in unincorporated areas of the County. The WUTC's enforcement mechanisms include fines and revocation of the right of private collectors to collect solid waste. The WUTC also enforces against companies that illegally collect solid waste without a certificate.

9.1.2.6 Emergency Contacts

In the event of an emergency, the following organizations may be contacted.

Organization	Phone Number
Fire Department	911
Kittitas County Haz Mat	911
Ambulance	911
Police	911
Police nonemergency	509-962-7280
Kitcom/Dispatch	509-925-8534
Bomb Squad	911
Department of Ecology Spill Response (24 hours)	800-253-5990
Kittitas County Sheriff	509-962-7525
Kittitas Valley Community Hospital	509-962-9841

The following persons are to be notified in any emergency situation.

Person	OFC Phone	Home Phone	Cell Number
Solid Waste Director	509-962-7070		509-929-0022
Solid Waste Specialist	509-962-7577		
Solid Waste Assistant Director	509-962-7514		509-856-7399
City Fire Marshall	509-962-7273		After hours: 509-962-7270

The following government agencies are to be notified in any emergency situation.

Organization	Phone Number	Note
Kittitas County Health Department	509-962-7698	Red Phone 509-899-3833
Poison Control Center	800-572-5842	
Washington State Department of Ecology	509-575-2490	
Environmental Protection Agency	206-553-1900	Call if explosives are found
Hazardous Substance Hotline	800-633-7585	Call for questions on chemicals

9.2 Enforcement

9.2.1 Regulations Pertinent to Solid Waste

- **RCW 35.21**. Cities & Towns Miscellaneous Provisions
- **RCW 36.58**. Solid Waste Disposal
- **RCW 70.93**. Waste Reduction, Recycling, and Model Litter Control Act
- **RCW 70.93.093**. Public Events Recycling Law
- **RCW 70.95**. Solid Waste Management - Reduction and Recycling
- **RCW 70.95A**. Pollution Control - Municipal Bonding Authority
- **RCW 70.95C**. Waste Reduction
- **WAC 173-345**. Registration of recyclable material transporters
- **WAC 173-350**. Solid Waste Handling Standards
- **WAC 173-351**. Criteria for Municipal Solid Waste Landfills
- **WAC 173-900**. Electronic Product Recycling Program

- Solid waste regulations adopted by local health authorities
- Local nuisance laws

9.2.2 Regulations Pertinent to Coordinated Prevention Grant (CPG) Funding

The rules that govern the CPG program are Chapters 173-312 WAC and 173-313 WAC. WAC 173-312-040(3) states:

> *". . . counties whose solid waste plans are adopted and approved by Ecology as required by Chapter 70.95 RCW are eligible to apply for coordinated prevention grants to help pay for the implementation of waste reduction and recycling projects in the most recently approved and adopted (solid waste) plan . . . "*

WAC 173-312-040(5) also states:

> *"Local governments with Department-approved local hazardous waste plans as required by Chapter 70.105 RCW are eligible to apply for coordinated prevention grants to help pay for the implementation of projects in the plan . . ."*

9.2.3 Permitting

Solid waste facility permits are required under Ordinance 1999-01, in accordance with Chapters 173-303, 173-350, and 173-351 WAC. Facilities are required to obtain solid waste handling permits from the Health Department. The County's covered load law is also included in Ordinance 1999-01.

The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. To determine if an EIS is necessary, an environmental checklist must be completed. For this planning document, a SEPA checklist has been completed and is included as Appendix G.

Applicants applying for new solid waste permits within Kittitas County will notify the KCHD. The applicant will submit a permit application (provided by KCHD) and a SEPA Application to KCHD, which in turn will forward such applications to the Kittitas County Solid Waste Department (Solid Waste).

Solid Waste will request a meeting of the SWAC to review the permit application for conformance to the Kittitas County Solid Waste Management Plan.

SWAC will review the documents for thoroughness in conforming to the Kittitas County Solid Waste Management Plan.

SWAC will return their findings to the Health Department who will consider and include those findings in their final decision. The Health Department will forward such findings and comments along with the SEPA and Application, on to the Kittitas County Board of Health.

Final approval or disapproval of the application shall rest with Kittitas County Health Department, which shall issue its approval/disapproval of the application within 90 days after its receipt pursuant to Chapter 70.95.180 RCW.

9.2.4 Illegal Dumping

The Health Department is responsible for undertaking investigations and enforcement action against littering and illegal dumping throughout the County.

The following ordinances are in effect to cover illegal dumping (both hazardous and nonhazardous wastes and substances):

KCC 8.20.010 Permitted areas. It is unlawful for any person to throw, drop, or to leave any discarded object, debris, or any waste, upon any public or private property in this County, or in any waste waters in this County, unless:

1. *Such property is designated by the federal government, state, County or city/town within Kittitas County for the disposal of garbage and refuse, and such person is authorized to use such property for such purpose.*

2. *Into a litter receptacle or container installed on such property by any governmental agencies described in subsection (1) of this section or installed with their consent.*

3. *He is the owner or a tenant in lawful possession of such property.*

KCC 8.20.020 Penalty for violation. Any person violating any of the provisions of this chapter shall be punished by a fine not more than one thousand dollars or by imprisonment in the County jail for a period not exceeding ninety days.

KCC 9.50.155 Dumping in water prohibited. No person shall pollute, or in any way contaminate by dumping or otherwise depositing therein any waste or refuse of any nature, kind or description, including human or bodily waste, in any stream, river, lake or other body of water running in, through, or adjacent to any Kittitas County park area.

Environmental Health first investigates calls from the general public regarding perceived illegal dumping. If such reports are substantiated, they are then given to the Kittitas County Code Enforcement Officer for enforcement action. Title 18 of the County Code identifies code enforcement, applicable penalties, and how proceeds from penalties are distributed.

It is also the County Code Enforcement Officer's responsibility to "enforce" the planning codes, building codes and the environmental health codes (illegal dumping) within the County. The Code Enforcement Officer is shared with Buildings, and Planning Departments and the Environmental Health Division of the Public Health Department.

9.3 Ordinances

Solid waste handling standards are regulated under WAC 173-350, adopted in January 2003. County Ordinance 1999-01 was adopted on July 15, 1999 (Appendix C). This ordinance does the following, through the authority of Chapters 70.05 and 70.95 RCW:

- On-Site Solid Waste Management Standards.
- Solid Waste Collection Service Standards.
- Solid Waste Handling Facility Standards.

9.3.1 Needs

Responsibilities for implementing the Solid Waste Management Plan are assigned to various local agencies. Since responsibilities for specific tasks are assigned to more than one agency, each of the jurisdictions needs to recognize the importance of carrying out all tasks in a manner that ensures efficient use of resources (by avoiding duplication of effort), avoids gaps in program activities, and avoids conflicts or inconsistencies.

Enforcement activities within Kittitas County generally are focused on compliance with permit conditions and regulatory standards, littering, and illegal dumping. Response often comes from law enforcement agencies for littering. One key issue is to ensure adequate staffing and funding for the agencies responsible for enforcement.

A second key enforcement issue pertains to illegal dumping. Washington's Model Litter Control and Recycling Act (Chapter 70.93 RCW) prohibits the deposit of garbage on any property not properly

designated as a disposal site. Revisions (Chapter 70.93.060 RCW) provide stiffer penalties for littering and illegal dumping in rural areas including classification as a misdemeanor, punishable by specific penalties. Illegal dumping can be addressed through enhanced enforcement activities and education.

9.3.2 Administration and Enforcement Recommended Options and Implementation Actions

The following options for improving administration and enforcement are recommended. Each option and the associated implementation actions are discussed below.

9.3.2.1 Staffing and Resources

The different agencies and jurisdictions responsible for solid waste management in Kittitas County make adequate staffing and interagency cooperation essential. This can be achieved through commitments on the part of each entity to participate on the advisory committee(s) and coordinate committee meetings between the County and municipalities to facilitate the exchange of information, and to provide adequate staff/resources to perform necessary functions. In addition, coordination can be achieved if technical staff works closely with their counterparts in the other jurisdictions performing similar or related functions.

A cooperative approach to program evaluation is also essential to ensure that the goals and objectives of solid waste management are being met, and to monitor changes that take place in solid waste generation and disposal. Once Kittitas County and the municipalities have adopted the Plan, mechanisms will need to be developed to ensure that the Plan is effectively implemented. One method for evaluating programs is to continue to utilize the SWAC to review the success of individual program components and the Plan as a whole. Methods of review could include tracking waste quantities, participation rates, expenses, income, and implementation problems. Reviews could occur periodically to make necessary adjustments once the Plan is implemented.

9.3.2.2 Administration Funding

As the County continues to grow, additional Solid Waste Department staffing and resources will be needed. Additional funding sources will need to be explored to finance the additional resources, including grant opportunities.

9.3.2.3 Other Long-Term Needs

If alternative solutions to the current needs become available, the SWAC will evaluate and make recommendations to the Board of County Commissioners. Upon approval by The Board of County Commissioners, this recommendation may become part of this plan.

9.3.2.4 New Regulations and Ordinance Requirements

The County Health Department should work with Solid Waste to review and monitor implementation of the updates to the Solid Waste Ordinance to reflect changes to the regulations.

9.3.2.5 Permit Procedures, Policies, and Fee Structures

The County Health Department should continue to implement permit procedures and policies and fee structures for all solid waste facilities and advertise such process and policies similar to the Food Handling Permits, Sewage Permits, etc.

9.3.2.6 Permit Review

SWAC should continue to be included in the review of all new solid waste facility permit requests within the County, although final approval shall continue to reside with the jurisdictional Health Department. Such requests, after review by the SWAC, will be forwarded to the Health Department with SWAC comments. This review will assure adherence to the Statewide Solid Waste Management Plan, Chapter 70.95 (165) and (180) RCW.

9.3.2.7 Connect SWMP with Emergency Debris Management Plan

Research and tie the Kittitas County Emergency Debris Management Plan to the SWMP to assign resources and quality for FEMA funding in the event of need. Solid Waste and SWAC will research how other jurisdictions are doing this.

9.3.3 DISCUSSION

Each of the options was assessed by SWAC members using the approved criteria. Once the ratings were completed, the options were screened for groupings or clusters to determine which options would be included in the Plan. The results of this activity are shown below.

Chapter 10
Implementation

10. Implementation

This section contains the proposed implementation strategy for the Plan. It includes: funding, the list of recommended action, implementation schedule, and proposed expenditures for each action.

Priorities, funding and expenses for this Plan are intended as guidelines which will and can be reassessed and revisited as developments occur. With this thought in mind, recommendations throughout this Plan reflect yearly reviews of programs and recommendations by the SWAC.

Implementation of the recommendations made in this Plan will take place on a continuous basis. The time required to implement recommendations vary from a few weeks or months for single events, to ongoing programs that take place over many years.

10.1 Funding

Priorities and funding in this plan cover six years (2020 - 2025). Actual budgets to carry out the recommendations will vary from year to year as specific programs are defined and will depend upon annual budgets approved by the Board of County Commissioners.

In Kittitas County there are two primary sources of funds for implementation of the solid waste programs: one source is derived from a portion of the tipping fees; the other source of funds is derived from grants obtained through Ecology. Table 10-1 details current revenues and is consistent with Table 4.1.3 of the Cost Assessment Questionnaire in Appendix F.

10.1.1 Grants

Chapter 70.95 RCW outlines the intent and requirements for funding derived from the Solid Waste Management Account and established with the State Treasury. It is from this account that funding is administered and appropriated by the Washington State Department of Ecology in the form of the Coordinated Prevention Grant (CPG). This funding is allocated to the County after application is made to the Department of Ecology and requires a 25 percent match on the part of Solid Waste Programs.

Funding available from the CPG has changed over the years, and will do so in the future, depending on legislative requirements. In the event grant funding is reduced or eliminated, programs that are funded by these grants will need to be reevaluated and either eliminated, curtailed, or if continued, funded using alternative methods, such as an increase in tipping fees or other revenue sources.

10.1.2 Tipping Fees

Tipping fees are the fees charged for waste hauled to the transfer stations. A portion of these fees are set aside for the grant matches, administrative costs, operation, maintenance, recycling costs, testing, equipment and fees to Environmental Health.

10.1.3 Other Methods of Funding

Chapter 36.58A RCW provides for the creation of Solid Waste Collection Districts in counties and cities within the State of Washington. The establishment of such districts can also be used to finance all aspects of solid waste disposal and disposal activities and is deemed the only certain way to establish a solid base of fees from which to operate in the future.

The only prerequisite for the establishment of Solid Waste Collection Districts in the County is an approved Solid Waste Management Plan. Although the statute does not say that the Plan must refer to Districts; inclusion of Districts in the Plan as a recommendation would assure that, should the County choose in the future to create Collection Districts, reviews of the ordinance by WUTC and others would be less costly and take place in a timelier fashion.

Table 10-1. Solid Waste Program Revenues, 2017

Revenue Source	Total
Tipping Fees	**$**
Garbage	3,740,239
CDL	321,144
Yard Waste	104,471
Liquid Waste Lagoons	179,281
Other Sources	**$**
Grant Funding	105,828
Recycling	56,734
Other Incomes	249,989
Total	**4,757,686**

10.2 Implementation Strategies

In order to implement the recommendations outlined within the Plan with the current staff, there will be a need to establish strong working relationships with the Central Washington University, the local waste haulers, recycling firms, nonprofit groups and organizations within the County; a need to maintain adequate funding levels, and to continue to fully utilize funding available through grants, most especially the CPG. SWAC recommendations also reflect the need to maintain adequate funding for implementation of all solid waste programs.

10.3 SWAC Recommended Actions

The SWAC has developed a set of recommended actions in keeping with the solid waste goals, policies and objectives outlined in this document. These recommendations form an integrated program of waste management for Kittitas County through the year 2026. An overview of the selected options is included in Table 10-2. An implementation schedule is included in Chapter 10.4 and the budget for program implementation is included in Chapter 10.5.

Table 10-2. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Waste Reduction				
Waste Reduction Policies	Track progress of the procurement policy.	x		4.2.6.1
Public Education and Outreach	Continue to implement electronic, print, and presentation recycling outreach elements including moderate risk waste (MRW). Consider preparing videos to discuss various solid waste related topics. Videos will be posted to the County website.	x		4.2.6.2
Commercial Technical Assistance	Continue to offer more technical assistance and provide a case study of high-performing businesses.	x		4.2.6.3
Institutional and Nonprofit Assistance	Support community activities and local organizations to expand their programs through sponsorships and presentations.	x		4.2.6.4
Purchasing	Develop procurement policies for agencies, ensure the success of the plastic ban bag, and promote smart purchasing options.	x		4.2.6.5

Table 10-2. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Recycling				
Collection	Work with haulers and cities to provide recycling services that support the viability of those programs and are economically feasible based on market conditions.	x		4.3.12.1
Commercial Programs	Provide technical assistance to large businesses. Target agricultural activities. Develop a recognition program to increase recycling.	x		4.3.12.2
Large Venue and Special Event Recycling	Continue reviewing event plans and develop best management practices for event planners.	x		4.3.12.3
Self-Haul	Provide recycling services that support the viability of those programs and are economically feasible based on market conditions.	x		4.3.12.4
Rate Structure	Maintain the PAYT structure. Evaluate if rate changes are necessary to adequately cover the cost of recycling.	x		4.3.12.5
Recycling Incentives	Assist organizations in applying for grants. Encourage use of the recycling trailer.	x		4.3.12.6
Evaluation and Monitoring	Conduct annual assessment of progress meeting the goals and objectives of the Plan.	x		4.3.12.7
Identify Funding and Other Nonmonetary Resources	Identify and pursue funding and nonmonetary resources for developing and implementing recycling programs and promotion.	x		4.3.12.8
Formal Working Relationships	Encourage the establishment of formal working relationships between the County and other agencies, institutions, and organizations.	x		4.3.12.9
Sustainable Community	Promote complementary programs like green building and food waste reduction.	x		4.3.12.10
Evaluate Expansion of Programs	Evaluate the expansion of programs to target specific waste generators; evaluate curbside recycling.	x		4.3.12.11
Public Outreach and Education	Continue existing outreach and expand program resources online.	x		4.3.12.12
Composting				
Composting Public Education and Outreach	Continue to develop, distribute, and post composting education materials. Expand the Master Composter program and offer additional workshops.	x		4.4.4.1
Compost Facility	Develop new Compost Facility at the new transfer station that is being developed.	x		4.4.4.2
Vermicomposting	Continue composting workshops and recruit small-scale pilot composting projects.	x		4.4.4.3
Residential Yard Waste Collection Programs	Continue existing green waste collection programs and evaluate expanding curbside service.	x		4.4.4.4
Commercial Collection of Organics	Conduct a feasibility study to evaluate collection of preconsumer food waste.	x		4.4.4.5
Marketing of Finished Compost Products	Evaluate the marketing of finished compost.	x		4.4.4.6

Table 10-2. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Tiered Rate Structure for Organics	Review the green waste tipping fee and implement a higher charge for contaminated green waste.	x		4.4.4.7
Solid Waste Collection				
Routing of Collected Waste Through County Facilities	Continue to route all municipal solid waste to the County.	x		5.5.1
Curbside Recycling Collection	Evaluate curbside program outside served areas.	x		5.5.2
Review Collection Contracts	Periodically review hauler contracts to confirm obligations are met. Review complaints to confirm resolution is met and fees are paid.	x		5.5.3
Funding Sources	Identify and procure additional funding sources to meet minimum level of service requirements.	x		5.5.5
Transfer Stations				
Replace Ellensburg Transfer Station	Complete the design, permitting, and construction phase of the Ellensburg Transfer Station Replacement project.		x – 2022	6.1.4.1
Use of Transfer Stations	Continue to route all municipal solid waste through facilities within the County and ensure collection of program fees.	x		6.1.4.2
Landfill Disposal				
Long-Term Disposal Opportunities	Evaluate disposal opportunities like waste-to-energy (WTE) and rail transport to other landfills or WTE.	x		6.3.4.1
Contractual Arrangements	Evaluate landfills with lower tipping rates or long-term pricing; evaluate the escalation rate for the transfer stations to manage future budgets.	x		6.3.4.2
Alternative Disposal Technologies				
Future Consideration and Feasibility	Review the feasibility of developing a WTE facility in the County.	x		6.4.2.1
Alternative Energy Technologies	Track advancements in alternative technologies.	x		6.4.2.2
Special Waste				
Recovery of Construction and Demolition (C&D)C&D Debris	Evaluate the recovery of debris at Ryegrass and the two transfer stations with private recyclers.	x		7.2.5.1
Materials Exchange Program	Continue working with nonprofit organizations to promote materials exchange and reuse stores for C&D material.	x		7.2.5.2
Evaluate Flow Control Measures	Write a flow control ordinance to keep all solid waste within the County.	x		7.2.5.3
Agricultural Waste				
Evaluate Opportunities for Beneficial Reuse of Biomass	Maintain biomass as an option; review feasibility of developing biomass facilities in the County.	x		7.3.3.1
Agricultural Pests and Other Nuisances	Operate within the apple maggot quarantine rules. Enforce commercial and residential onsite solid waste storage.		x - 2021	7.3.3.2
Tires				

Table 10-2. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Public Education Programs for Tires	Provide the public lists of facilities that accept tires with the web and apps; target education of companies with commercial fleets.	x		7.4.3.1
Evaluate Diversion Options for Tires	Evaluate whether tire diversion options are viable.	x		7.4.3.2
Continue Current Tire Ban	Continue to promote the tire ban from landfills.	x		7.4.3.3
Biomedical Waste				
Public Education of Residential Medical Waste	Develop and distribute education materials for correct management of residential medical waste.	x		7.5.3.1
Monitoring municipal solid waste (MSW) for Biomedical Waste	Encourage the Health Department to monitor the MSW program.	x		7.5.3.2
Pharmaceutical Waste	Evaluate options for drop-off sites. Support private efforts for take-back programs.	x		7.5.3.3
Veterinary Waste				
Large Animal Disposal	Support development of programs for large animal disposal alternatives.	x		7.6.4.1
Education and Outreach - Large Animal	Provide information on County disposal options including proper composting techniques onsite.	x		7.6.4.2
Petroleum-Contaminated Soils				
In-County PCS Site	Support the development a site that can convert remediated soil to daily cover.	x		7.7.3.1
Street Sweepings Management	Evaluate management of street sweepings to become remediated and then used as daily cover.	x		7.7.3.2
Feasibility Study for PCS Management	Conduct a feasibility study about the options to handle PCS effectively.	x		7.7.3.3
Import PCS	Explore the import of treated PCS for daily cover at Ryegrass.	x		7.7.3.4
Asbestos				
Public Education on Asbestos-Containing Materials	Allow current private solid waste hauler to inform the public on proper handling of ACM.	x		7.8.3.1
Liquid Waste				
Catch Basin Liquids	Evaluate the feasibility of constructing of a new lagoon.	x		7.9.4.1
Electronic Waste				
Monitor and Evaluate E-Waste Program	Submit annual Satisfaction Report summarizing program.	x		7.10.3.1
E-Waste Education	Promote the drop-off locations for educational materials from the E-Cycle Toolkit.	x		7.10.3.2
Moderate Risk Waste				
MRW Facilities	Expand existing MRW facilities to accommodate more waste types. Increase participation by hosting regular business hours.	x		8.7.1

Table 10-2. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Commercial Outreach, Education, and Technical Assistance	Implement outreach education and technical assistance to commercial entities.	x		8.7.2
Funding for MRW Programs	Seek additional funding sources from the State as well as increasing handling and disposal fees.	x		8.7.3
Administration and Enforcement				
Staffing and Resources	Utilize a cooperative approach to staffing and program evaluation with the SWAC.	x		9.3.2.1
Administration Funding	Explore additional grant funding.	x		9.3.2.2
Other Long-Term Needs	Consider other policies between Plan updates.	x		9.3.2.3
New Regulations and Ordinance Requirements	Update other policies when regulations change between Plan updates.	x		9.3.2.4
Permit Procedures, Policies, and Fee Structures	County Health Department to continue to implement relevant policies, procedures, and fees for solid waste facilities.	x		9.3.2.5
Permit Review	SWAC to review all new solid waste facility permit requests.	x		9.3.2.6
Emergency Debris Management Plan	Connect SWMP with Emergency Debris Management Plan.		- x2021	9.3.2.7

10.3 Implementation Budget Six-Year Capital and Operational Financing

Table 10-3 presents a detailed accounting of the six-year capital and operational financing implementation budget.

Table 10-3. Six-year Capital and Operational Financing

		2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)
Waste Reduction							
	Existing Programs	18,540	19,096	19,669	20,259	20,867	21,493
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Waste Reduction		18,540	19,096	19,669	20,259	20,867	21,493
Recycling							
	Existing Programs	77,250	79,568	81,955	84,413	117,846	121,381
	New Programs	0	0	30,000	30,000	0	0
	Capital Expenditures	0	0	Included with Transfer Station	Included with Transfer Station	0	0
Subtotal, Recycling		77,250	79,568	111,955	114,413	117,846	121,381
Composting							
	Existing Programs*	173,500	178,750	184,150	189,650	195,350	201,211
	New Programs	0	0	50,000 New Compost Facility operations	350,000	0	0
	Capital Expenditures	0	0	Included with Transfer Station	Included with Transfer Station	0	0
Subtotal, Composting		173,500	178,750	234,150	539,650	195,350	201,211
Solid Waste Collection							
	Existing Programs	7,919	8,157	8,401	8,653	8,913	9,180
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Solid Waste Collection		7,919	8,157	8,401	8,653	8,913	9,180
Transfer Stations							
	Existing Programs	335,750	352,000	387,800	426,000	469,000	483,070
	New Programs	0	0	0	100,000	0	0
	Capital Expenditures	500,000	10,000,000 New Transfer station	10,000,000 New Transfer Station	0	0	0
Subtotal, Transfer Stations		835,750	5,352,000	5,387,800	526,000	469,000	483,070
Landfill Disposal and Waste Import/Waste Export							
	Existing Programs	2,391,453	2,463,176	2,537,071	2,613,183	2,691,578	2,769,6342
	New Programs	0	0	0	0	0	0

	2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)
Capital Expenditures	0	0	0	0	0	0
Subtotal, Waste Import/Export	2,391,453	2,463,176	2,537,071	2,613,183	2,691,578	2,769,634
Alternative Disposal Technologies						
Existing Programs	1,910	1,968	2,027	2,088	2,150	2,215
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Alternative Disposal Technologies	1,910	1,968	2,027	2,088	2,150	2,215
Special Waste						
Construction and Demolition Debris						
Existing Programs	245,000	275,000	250,000	257,500	265,000	272,553
New Programs	0	0	0	0	0	0
Capital Expenditures		75000 Open new area	0	0	0	0
Subtotal, Construction and Demolition Debris	245,000	350,000	250,000	257,500	265,000	272,553
Agricultural Waste						
Existing Programs	1,910	1,968	2,000	2,058	2,118	2,179
New Programs	0	10,000	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Agricultural Waste	1,910	11,968	2,000	2,058	2,118	2,179
Tires						
Existing Programs	33,000	33,500	34,000	34,000	35,000	35,525
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Tires	33,000	33,500	34,000	34,000	35,000	35,525
Biomedical Waste						
Existing Programs	5,078	5,230	5,387	5,548	5,715	5,886
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Biomedical Waste	5,078	5,230	5,387	5,548	5,715	5,886
Veterinary Waste						
Existing Programs	5,657	5,827	6,002	6,182	6,367	6,558
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Veterinary Waste	5,657	5,827	6,002	6,182	6,367	6,558
Petroleum-Contaminated Soils						
Existing Programs	46,000	46,000	46,000	0	0	0
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Petroleum-Contaminated Soils	46,000	46,000	46,000	0	0	0

		2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)
Asbestos							
	Existing Programs	1,775	1,802	1,829	1,856	1,884	1,913
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
	Subtotal, Asbestos	1,775	1,802	1,829	1,856	1,884	1,913
Liquid Waste							
	Existing Programs	184,500	190,000	190,000	195,000	200,800	206,623
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
	Subtotal, Liquid Waste	184,500	190,000	190,000	195,000	200,800	206,623
Electronic Waste							
	Existing Programs	4,498	4,633	4,772	4,915	5,063	5,214
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Electronic Waste		4,498	4,633	4,772	4,915	5,063	5,214
Moderate Risk Waste							
	Existing Programs	90,000	92,700	95,000	98,000	100,000	102,000
	New Programs	0	0	15,000	10,000	0	0
	Capital Expenditures	0	0	Included in new Transfer Station	150,000 Clean up old Site	0	0
Subtotal, Moderate Risk Waste		90,000	92,700	110,000	158,000	100,000	102,000
Administration and Enforcement (Solid Waste only, not Public Health Enforcement)							
	Existing Programs	747,000	770,375	793,400	817,000	841,806	866,218
	New Programs	0	10,000	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Administration and Enforcement		747,000	780,375	793,400	817,000	841,806	866,218
Other							
	Existing Programs	20,840	21,153	21,470	21,792	22,119	22,451
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Other		20,840	21,153	21,470	21,792	22,119	22,451
	GRAND TOTAL	***4,891,581***	***14,645,901***	***14,765,932***	***5,428,098***	***4,991,575***	***5,135,304***

11. References

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Appendix A
Interlocal Agreement

JOINT SOLID WASTE DISPOSAL SYSTEM

This Agreement, made and entered into on this 12th day of March, 1979, is by and between Kittitas County (hereinafter referred to as "COUNTY") and the following additional governmental entities (hereinafter referred to as "CITIES"):

1. City of Ellensburg, a municipal corporation
2. City of Roslyn, a municipal corporation
3. City of Cle Elum, a municipal corporation
4. Town of South Cle Elum, a municipal corporation
5. City of Kittitas, a municipal corporation

WHEREAS, the parties hereto recognize the mandate imposed by Chapter 70.95 of the Revised Code of Washington requiring the parties individually or collectively to prepare and adopt a solid waste management plan for the proper and appropriate collection and disposal of solid wastes of every description; and

WHEREAS, the parties hereto have already agreed among themselves by actions of the governing authorities of the respective parties that there should be only one solid waste management plan to encompass the entirety of Kittitas County; and

WHEREAS, the Board of County Commissioners acting for Kittitas County desires and is willing to provide for, operate and maintain such a solid waste disposal system in accordance with applicable state laws and regulations.

NOW, THEREFORE, in consideration of the premises and in further consideration of the mutual agreements and covenants herein contained, the parties agree as follows:

Section 1. AUTHORITY

The parties to this Agreement jointly have and possess the power and authorization under Chapter 39.34 of the laws of the State of Washington, being entitled the "Interlocal Corporation Act", to acquire or lease land for solid waste disposal purposes; to acquire and construct facilities, and to operate and maintain such facilities for the collection and disposal of solid wastes and do jointly agree that a countywide solid waste management system can best be achieved by cooperative action of the parties to this Agreement operating through authorization bestowed by said Chapter 39.34, Revised Code of Washington.

Section 2. PURPOSE

The purpose of this intergovernmental agreement is to provide for the economic and sanitary disposal of solid wastes produced or generated within each member municipality and within the unincorporated areas of the COUNTY.

Section 3. POWERS

The parties hereto delegate, and the COUNTY hereby assumes both the power and obligation to do each of the following:

a. To provide solid waste disposal facilities and service to all participating parties hereto.

b. To establish a schedule of fees to be collected from all users of the disposal facilities to cover current operating expenses, equipment and facility rental expense, provided, however, that any such future rates shall not be set nor revenues used for the purpose of satisfying any indebtedness incurred prior to the effective date of this agreement.

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c. To purchase, lease, receive as gifts or donations or otherwise acquire all land, buildings, equipment or supplies needed to provide a solid waste disposal system.

d. To make or cause to be made studies and surveys necessary to carry out the functions of countywide solid waste management.

e. To propose and recommend to participating parties to this agreement such local ordinances governing collection and disposal of solid waste as might be deemed desirable.

f. To provide for a system of budgeting, accounting and auditing of all funds associated with the solid waste system.

g. To accept grants or loans of money or property from the United States, the State of Washington or any person and to enter into any agreement in connection therewith, and to hold, use and dispose of such money or property in accordance with the terms of the gift, loan or grant.

h. To do such other things that are reasonably necessary to accomplish the purpose as stated in Section 2 of this Agreement.

Section 4. ORGANIZATION

a. The Commissioners or their designated agent shall be in charge of managing the solid waste disposal operation for the benefit of all citizens residing in Kittitas County.

b. The COUNTY shall require any solid waste contractor to operate the solid waste disposal facilities in accordance with such Joint Solid Waste Management Plan as shall be approved by all the parties hereto and by the Washington State Department of Ecology.

c. The Kittitas County Health Officer or his designated agent shall have the responsibility on behalf of the parties hereto to enforce appropriate health regulations with respect to solid waste and to issue to qualified parties such permits and licenses as might be necessary and it is further agreed that this responsibility shall be exercised for the benefit of all citizens residing in Kittitas County.

d. Each of the cities shall adopt as soon as practicable an ordinance which shall require a private collector of solid waste to obtain a permit to collect said solid waste within the city. Said ordinance and the permit issued thereunder shall provide that all solid waste collected by any permittee shall be deposited only at a disposal site to be designated by a Joint Solid Waste Management Plan of the County and Cities herein.

e. The City of Cle Elum presently contracts with a private solid waste collector to provide for the collection of solid waste in the City of Cle Elum at city expense. It is understood that the City of Cle Elum, or any other city contracting with a private collector, instead of adopting an ordinance as above provided, shall provide in the contract with its private collector, that said collector shall deposit all solid waste collected under said contract only at a disposal site to be designated by a Joint Solid Waste Management Plan of the County and Cities herein.

f. The CITIES agree that they each have the power to, and shall as soon as practicable, amend their own respective existing permits and contracts to provide that the present private collector within their respective cities shall deposit all solid waste collected under said existing permits or existing contracts only

at a disposal site to be designated by a Joint Solid Waste Management Plat of the County and Cities herein.

Section 5. FINANCING

a. The COUNTY shall be solely responsible for providing and paying for capital facilities and equipment acquired by the County for the Countywide system.

Section 6. ACCOUNTING AND AUDITS

a. The COUNTY shall maintain books of account for the solid waste disposal operation in accordance with the requirements of the Washington State Auditor.

b. Authorized representatives of any party hereto shall have the right to inspect said books of account at any time.

Section 7. PROPERTY RIGHTS

a. CITIES will retain their financial share in the existing capital facilities and each shall be reimbursed for their respective shares of the then current value of any cooperatively funded asset when and in the event it is sold.

b. In the event of termination of this Agreement, the facilities and any funds in the possession of the COUNTY at such time shall be distributed in kind or sold, as may be agreed upon by the parties, and the proceeds thereof distributed to the parties as their interests appear on the books of the COUNTY.

Section 8. TERM

This Agreement shall continue until rescinded, or terminated as herein provided.

Section 9. RECISION OR TERMINATION

This Agreement may be rescinded and all obligations herein terminated only by written consent of all the parties hereto. This Agreement hereby replaces and supersedes all previous agreements between the named parties on the subject of solid waste.

Section 10. ADMISSION OF NEW PARTIES

a. It is recognized that public entities other than the original parties hereto may wish to hereafter join in this Agreement.

b. Additional public entities may be added upon such terms and conditions as the then participating parties shall unanimously agree upon.

c. The terms of and conditions upon the admission of such additional parties shall be evidenced by a written addendum to this Agreement signed by the then participating parties and the additional party.

Section 11. AMENDMENTS

Amendments to this Agreement shall only be made by written agreement of all the parties hereto.

IN TESTIMONY WHEREOF, the parties hereto have caused this agreement to be executed by their duly authorized governing authorities as of the day and year first above written.

(1) ATTEST:

Town Clerk

TOWN OF SOUTH CLE ELUM

Mayor

(2) ATTEST:

City Clerk

CITY OF ROSLYN

Mayor

(3) ATTEST:

City Clerk

CITY OF KITTITAS

Mayor

(4) ATTEST:

City Clerk

CITY OF CLE ELUM

Mayor

(5) ATTEST:

City Clerk

CITY OF ELLENSBURG

Mayor

(6) ATTEST:

County Auditor

KITTITAS COUNTY

Commissioner

Commissioner

Commissioner

Resolution Adopting the 1979 Update to the
Kittitas County Countywide Solid Waste Management Plan
RESOLUTION NO. 79-3

WHEREAS, the Board of Kittitas County Commissioners have acted to update and revise the countywide solid waste management plat to reflect the designation of the Ryegrass site in Section 16, Township 17 N., Range 21 E.W.M. as the designated countywide landfill site after closure of the interim East Kittitas site; and

WHEREAS, the Board of Kittitas County Commissioners have acted to plan for installation of a baling system at the Ellensburg Transfer Station as a means of improving the quality of solid waste handling in Kittitas County; and

WHEREAS, these changes have been included in the updated solid waste management plan titled, 1979 Update: Cooperative Countywide Solid Waste Management Plan,

THEREFORE, Be It Hereby Resolved,

That the parties adopt the 1979 Update: Cooperative Countywide Solid Waste Management Plan for Kittitas County and the incorporated municipalities as the approved solid waste management plan for Kittitas County.

Signed this 12th day of March, 1979.

Attest: _____ City Clerk — _____ City of Ellensburg - Mayor

Attest: _____ City Clerk — _____ City of Cle Elum - Mayor

Attest: _____ Town Clerk — _____ Town of South Cle Elum - Mayor

Attest: _____ Town Clerk — _____ Town of Kittitas - Mayor

Attest: _____ City Clerk — _____ City of Roslyn - Mayor

Attest: _____ County Auditor — _____ County of Kittitas, Chairman, Board of County Commissioners

BOOK 6 PAGE 917

Appendix B
Solid Waste Advisory Committee
Membership and Minutes

KITTITAS COUNTY SOLID WASTE ADVISORY COMMITTEE BYLAWS AND MEETINGS PROCEDURES

I. STATEMENT OF PURPOSE

The Kittitas County Solid Waste Advisory Committee (SWAC) has been appointed by the Board of County Commissioners in accordance with Chapter 70.95 (165) RCW. The statute requires the SWAC to "assist in the development of solid waste handling programs and policies concerning solid waste handling and disposal, and review and comment on proposed rules, policies or ordinances prior to their adoption…" These Bylaws will become a part of the County Solid Waste Plan by reference and will define the SWAC function and rules.

The scope and duties of the Kittitas County Solid Waste Advisory Committee shall be to:

A. Advise Kittitas County on all aspects of solid waste management planning.
B. Assist Kittitas County in the development of programs and policies concerning solid waste management.
C. Review and comment on proposed solid waste management rules, policies, or ordinances prior to their adoption.

II. MEMBERSHIP AND TERMS

A. Members. The SWAC shall be composed of a minimum of nine and no more than twelve members representing balance of interests among the following groups: citizens; public interest groups; business; the waste management industry; Washington State Department of Agriculture and local elected public officials. Members shall provide on-going public input, coordination and information exchange between the groups. Five of the members shall be representatives of the cities and towns of the county and shall be recommended by their respective councils.

B. Ex-Officio Members. The Kittitas County Board of Commissioners may appoint non-voting ex-officio members to the SWAC, who will serve at the board of commissioner's discretion.

C. Appointment. Members shall be appointed by motion of the County Board of Commissioners.

D. Terms. Members shall serve a term of three (3) years or until their successor is appointed and confirmed as provided in the SWAC by-laws. The terms of office shall be staggered. Members may be reappointed to serve consecutive terms but no member shall serve more than three consecutive terms. Reappointment shall be subject to confirmation by motion of the County Board of Commissioners.

E. Vacancies. Vacancies shall be filled for the remainder of the term of the vacant position in the manner described in the initial appointment.

F. Participation. Members of the Committee are needed to advise on matters of public policy formulation and their regular attendance is essential. The Chair may recommend to the Board of County Commissioners replacement of a member if three consecutive meetings are missed, or if half the meetings in a given year are missed.

G. Training. Members should make themselves available to participate in training workshops pertinent to current solid waste issues as they become available.

H. Substitution. An appointed member may have a person, representing the absent member's interest, attend meetings and vote in the member's place for two meetings per year.

III. MEETINGS

A. Official Action. The committee shall adopt no recommendation, except in a meeting open to the public and then only at a meeting, the date of which public notice has been given by notifying press and radio in the county, and by such other means as may now or hereafter be provided. The committee may adopt recommendations and take other actions as necessary, by a majority vote of the members present at the meeting.

B. Regular Meetings. The time and place of the regular meetings shall be set by the Chair in a manner acceptable to the Committee. The Chair may cancel a regular meeting. SWAC is to be an ongoing committee, with meetings to be held at least four times per year during development of a comprehensive plan, and at least twice a year at other times. The regular meeting schedule may be expanded during major plan review and other such meetings as needed to carry out the duties of the SWAC.

C. Special Meetings. The Chair, or in the Chair's absence the Vice Chair, may call a special meeting for one or more specific purposes, provided that proper notice is provided to each member and other interested parties describing the purposes at least twenty-four hours prior to the time scheduled for the Special Meeting.

IV. CHAIR AND VICE CHAIR

A. Chair. A majority of the committee shall elect one of its members as Chair. The term of the Chair shall be for one (1) year. The Chair shall be elected at the first meeting in January and shall serve for a term of one year. The election year and the term of the chair will begin at the first meeting in January of each year.

B. Vice Chair. A majority of the Committee shall elect one of its members as Vice Chair. The term of Vice Chair shall be for one (1) year. The election year and the term of the Vice Chair will begin at the first meeting in January of each year.

STAFF
The SWAC shall be staffed by the Kittitas County Solid Waste Division, as necessary, to provide support to the SWAC.

VI. CONDUCT OF MEETINGS

A. Robert Rules of Order. The parliamentary rules known as Roberts Rules of Order shall apply to and govern the procedures of all meetings of the Committee. Provided that the chair may elect to allow a more informal discussion format so long as business is conducted in good order and participation of all members is assured. Consensus of the members is the preferred means to resolve all questions before the Committee. Consensus is hereby defined as the absence of any no votes by members.

B. Minutes/Agendas. Minutes of all meetings shall be kept by staff and distributed to the members within one week after a meeting. Meeting minutes will be approved by a majority vote of members present. Agendas will be prepared by staff, with verbal approval of the Chair, and distributed to the members at least seven days in advance of any regularly scheduled meeting.

C. Public Access. All meetings shall be open to the public. Provision shall be made for public comment at each meeting. Approved meeting minutes shall be available to the public on request. The County's ADA policies will be adhered to.

VII. WAIVER OF THE RULES
Any of the above rules or procedures may be waived by the majority vote of the Committee provided further that the reason therefore be included in each motion for waiver.

VIII. AMENDMENTS
To the extent that such an amendment would not conflict with the purpose for which the Committee was established, any of these by-laws may be amended or repealed, and new by-laws may be adopted, by majority vote of the entire SWAC. Members will be provided with proposed amendments at least two weeks before action is taken to amend these by-laws.

IX. TOPICS OF REVIEW
A. County Solid Waste Plan. Formulation of the Plan, including major updates, recommendations, amendments and addenda to the Plan.

B. Moderate Risk Waste Plan. Formulation of the Plan, including major updates, recommendations, amendments and addenda to the Plan.

C. Legislative proposals. Regulations adopted by the Board of Health, and by the Board of County Commissioners affecting solid waste management and related issues will be assigned to the Committee for review and comment prior to their adoption.

D. Other Issues. Additional questions pertaining to the Kittitas County's waste management program may be addressed to the Committee by the Board of Commissioners as deemed appropriate.

Meeting Minutes
Kittitas County Solid Waste Advisory Committee
February 20th, 2019 at 3:00pm
Kittitas County Solid Waste – 925 Industrial Way

Present:	Ryan Lyyski, City of Ellensburg Jesse Cox, KC Health Dept. Mike Slack, Waste Management Steve Sowers, South Cle Elum Bret Wachsmith, Commissioner Also present via Skype: Lyndsey Lopez, Jacobs Tami Yager, Waste Management Heather Church, Dept. of Ecology James Rivard, Dept. of Ecology
Staff Present:	Patti Johnson Lisa Lawrence Bryan Nass

Patti Johnson brought the meeting to order at 3:03 pm.

Housekeeping:

Introductions were held on members, visitors and staff present.
Approve December 12, 2018 minutes: Ryan Lyyski made a motion to approve the minutes as presented. Patti Johnson seconded the motion. Motion passed.

Transfer Station Relocation Update:

Patti informed the Committee that she had met with the City and that they have provided comments on the new site and that the consultant is reviewing them and working on a response.

County Covered Load Ordinance:

Patti informed the Committee that staff had researched and found an existing ordinance addressing the covered load requirement and the ability to collect a fee. Discussion was held on public comments of litter concerns at the New Transfer Stations, fees and programs that other Counties have adopted. Pros and cons of staggered fees for Scalehouse attendants and that an amendment to the existing resolution would have to be adopted to set a fee. Discussion was tabled.

Solid Waste Plan Update – Review Options:

Lyndsey Lopez of Jacobs informed the Committee that the goal was to go through the list of options that would be included in the Executive Summary of the Solid Waste Management Plan Update. Discussion was held on Waste Reduction, Recycling, Composting, Solid Waste Collection, Transfer Stations, Landfill Disposal, Alternative Disposal Technologies, Special Wastes, Agriculture, Tires, Biomedical Waste and Veterinary Waste. The table and notes from the discussion are herein attached.

Closing:

The next meeting will likely be April 17th, with the anticipation of having a final draft of the Solid Waste Management Plan available for review by SWAC. Meeting adjourned at 4:20 p.m.

Kittitas County
WASHINGTON

Kittitas County Boards and Committees

Solid Waste Advisory Committee

Twelve members, indefinite terms
Authority: RCW 70.95.165

Members

Position	Name	Agency	Term Expiration	Term Length
1.	(Vacant)	Member at large		Ad hoc
2.	Martin Thacker	City of Kittitas Council Member/Alternate		Ad hoc
3.	Amy Clow	Washington State Department of Agriculture		Ad hoc
4.	Kathi Swanson	City of Cle Elum Council Member/Alternate		Ad hoc
5.	Steve Sowers	City of S. Cle Elum Council Member/Alternate		Ad hoc
6.	Brett Wachsmith	BoCC Rep		Ad hoc
7.	Stacy Engel	City of Ellensburg Councilmember/Alternate		Ad hoc
8.	(Vacant)	City of Roslyn		Ad hoc
9.	(Vacant)	Unincorporated		Ad hoc
10.	Tami Yager	Business with interest		Ad hoc
11.	(Vacant)	Business with Interest		Ad hoc
12.	Seth Benge	WSDOE		Ad hoc

Patti Johnson, Coordinator, 962-7070

The Solid Waste Advisory Committee is a committee established to assist in the development of programs and policies concerning solid waste handling and disposal and to review and comment upon proposed rules, policies, or ordinances prior to their adoption. The committee shall represent a balance of interests including, but not limited to, citizens, public interest groups, business, the waste management industry, and local elected public officials. Meetings are held twice a year at 3:00 pm (unless advised otherwise) at Kittitas County Solid Waste, 925 Industrial Way Ellensburg WA 98926 or in Upper County at the Ranger Station.

Kittitas County Solid Waste Advisory Committee
May 8, 2019 Meeting Notes

Kittitas County Solid Waste Management Plan Update

SWAC Members Amy Clow, WSDA; Brett Wachsmith, Kittitas County Commissioner; Mayor of Roslyn; City of South Cle Elum; Greg Poe, Central Washington University; Heather Church, Ecology; James Rivard, Ecology; Jesse Granado, Waste Management; Kathi Swanson, City of Elum; Martin Thacker, City of Kittitas; Mike Slack, Waste Management; Natalie Caulkins, Kittitas County; Phil Mattlocks, KValley Computers & Internet; Robert Omans, City of Elum; Ryan Lyyski, City of Ellensburg Public Works; Scott Moore, City of Kittitas; Seth Benge, Ecology; Stacey Engel, City of Ellensburg; Steve Sowers, South Cle Elum; Tami Yager, Waste Management; Tristen Lamb, Kittitas County; Jesse Cox, Kittitas County Health Department

General Comments Provided During SWAC Meeting 5/8/2019 and phone call 5/29/2019	Response
It appears you took an existing plan and updated it with new numbers and updated regulations.	Correct.
Tami (WM) submitted comments via email. She said Jacobs/County did a great job. "This plan is very clean and easy to read. Better than some others we've read."	Thank you
Amy (Washington Department of Agriculture) will email her comments.	Received.
Patti sent a first round of comments to Jacobs. They've already been incorporated into the version the SWAC is viewing. Her remaining comments are mostly related to formatting, number changes and graphs.	Comments addressed
The SWAC will get one more shot at commenting on the SWMP Update before we go to final.	Deadline May 22.

Section	Title	Comment	Incorporated in SWMP Text
1	Introduction		
1.3.1	Apple Maggot Quarantine	Amy - the Apple Maggot Permit that WM holds requires organic waste NOT be mixed with MSW. Include some more of the details about this permit in the plan. Even though the majority of Kittitas County is in the quarantine area, specify the % of the County. Patti: Mention where the new transfer station facility is located in relation to the quarantine area. Amy: Mention the way the County prevents residential yard waste from getting in the MSW. Discussion from 5/29/2019: Four key items needed as part of compliance and also needed for the SWMP are: 1. Segregation – need to have segregation of municipal green waste (MGW) from MSW - The only place within the plan area that offers a curbside program is the City of Ellensburg. City of Ellensburg offers separate garbage, recycling, and yard debris (i.e. MGW) service. All of the MGW goes to the Ellensburg TS/compost operation and is processed onsite - The remaining MGW is either self-hauled to either the Ellensburg TS or Cle Elum TS. Each TS has a separate dropoff are for MGW. MGW brought to the Ellensburg TS is directed to the compost area for onsite processing. The self-hauled MGW received at Cle Elum TS is hauled by WM to the Ellensburg TS/compost facility for processing. The price to drop off MGW is 1/3 the price to drop off MSW and is a great incentive to segregate the MGW from the MSW - Other residents just manage their MGW onsite (backyard composting or other methods) Properly Informed Residents – Kittitas County and WM both use a variety of means to educate the public about proper MGW management. Kittitas County goes to various venues to share this information. They also have Backyard Composting resources and classes to encourage onsite management of MGW. There are additional online resources for backyard composting. 2. Properly Informed Residents 3. Monitoring Program – At the transfer stations, the scale house attendant does waste screening. In addition, the $65/ton difference in price encourage residents to segregate. At the landfill WM does a minimum of 5 spot checks per week. If they find MGW in a load, then they notify the customer. They are not seeing this as a problem. 4. Proper Containment for Transit – Residents are instructed to have covered loads. WM loads are sealed in transit.	New figure added. New text added using meeting notes from 5/29/2019.
1.3.7	Tipping Fees	Patti: tipping fees will be going up. WM just informed the County that their rates will need to go up 3%	Changed text to "Tipping fees will likely be adjusted 3% to reflect CPI later this year."
1.3.9	Marijuana Composting	You're watching the marijuana composting issue? Patti: Yes	No changes to text.
2	**Description of the Planning Area**	no comments	
3	**Waste Generation and Characterization**		
3.2.2	Recycling Quantities and Rate	Tami: Are the recycling #s that Ellensburg collects not in the Recycling Rate? Lyndsey: It is just County #s. There was a request to add WM #s to the Recycling Rate to get the cities' numbers included in the county-wide rate. Patti explained Kittitas County usually separtes WM #s from the Annual Recycling Report so it is not double-counted.	Added explanatory sentence. Since WM wasn't reference by name in this document, I used the term "WUTC hauler".
4	**Waste Reduction, Recycling, and Composting**		
4.2.4	Public Outreach and Education	Patti: Add reference to direct mail because the Kittitas Solid Waste bills quarterly which provides an opportunity for timely notices. They also send a guide/mailer once a year.	Added bullet to Promotional Materials in Table 4-2
4.3.5	Curbside Collection of Recyclables	Tami- Recycling isn't paying for itself. We should not use the language of "free". In some points, recycling costs more than trash. Overall, its about handling materials in the most efficient and affordable fashion. Patti- We need to get away from calling recycling free. Even self-haul people don't realize what the fees are going towards.	Incorporated edit from Tami/WM
4.3.11	Recycling Needs and Opportunities	Tami- Doesn't it seem like we should address that the entire recycling collection, transport, sorting process costs as much or more than landfilling? Meaning, we should view the solid waste system as a whole – e.g. materials management vs. recycling and disposal. This statement in 4.3.11 needs review: "Recycling rates remain flat because residents and businesses have little financial incentive to recycle and curbside collection is only available to residents of Ellensburg" Going forward, is a financial incentive to recycle the right recipe? Can we start to make a paradigm shift? What about "environmentally appropriate and fiscally responsible materials management costs X".	Took stab at new intro paragraph.
4.3.12	Recycling Recommended Options and Implementation		

4.3.12.1	Collection	Kittitas County will need to pass an ordinance/resolution to require recycling in the other cities/designated area. Cle Elum does not have curbside recycling so, the statement about expand mixed paper recycling collection to Cle Elum is confusing. Shouldn't this be SSR collection? Patti agreed Cle Elum does not collect mixed paper and mixed paper is not being added to transfer station.	Edits made.
4.3.12.5	Rate Structure	4.3.12.6 the PAYT language seems old becacuse some studies are showing it is not changing behavior. Revise with more boundaries on the concept of PAYT.	Removed specific language about 17% disposal reduction and replaced with more general statement.
4.3.12.12	Public Outreach and Education	Tami- You could add something about "work with the WUTC hauler to provide recycling guides and WRR information to their curbside customers". WM sends a service guide once per year with WRR and SW info. Also, we have a website which the county could connect to. I know the preference is not to call out private sector names, however since we are regulated by the WUTC, you might be able to consider it an exception. WM wants to further partner with Kittitas to ensure county/city customers continue to receive environmentally responsible and fiscally viable sw services and information on how to use these services.	Revised/added text.
4.4	Composting and Yard Waste	Patti wants to leave food waste alone until its mandated. They're not going to venture in this market. They've had enough problems trying to remove contamination from yardwaste. Ellensburg is experiencing contamination in their yard waste (e.g. hoses and lawn furniture). they don't want a new group of contaminants.	Removed reference to preconsumer food waste.
4.4.2.2	Curbside Collection of Yard Waste	Tami- WM is willing to accept food waste in the organics collection program if there is a processor willing to take it. Patti - The County is not interested in food waste until it is mandated.	No text added.
4.4.4	Composting Recommended Options and Implementation Actions	See Comment from Section 4.4.4.2	Removed reference to preconsumer food waste.
5	**Solid Waste Collection**		
5.5.2	Curbside Recycling Collection	Tami wrote to Patti – I'm not sure the sentence [on awarding contracts from residences in unincorporated areas] reads quite right. It is my understanding that Counties can pass an ordinance and require the WUTC hauler to provide curbside collection of recyclables in the unincorporated areas (or certain designated areas). The WUTC hauler would then file for recycle service rates with the WUTC. This is different than letting a contract. Would you like me to have our legal advisory review this section?	Under review.
6	**Transfer and Disposal**		
6.3.2	Waste Export	Amy- The Greater Wenachtee permit is issued to WM. Specify the permit is for the transport of MSW. Delete "all regulated commodities". It only applies to MSW. Describe the program of how separation is occuring. Make it obvious there is a separation program. It could be explained here or Section 1.3.1	Made edits to 6.3.2. Utilized meeting notes from 5/29/2019 to write new paragraph in Section 1.3.1.
7	**Special Waste**	no comments	
8	**Moderate Risk Waste**	no comments	
9	**Administration and Enforcement**	no comments	
10	**Implementation**	no comments	
10.1.1	Grants	Patti just calculated the Ecology CPG 2019 grants will be down $50,000 again. Grant applications are due June 1, 2019	Current language seems appropriate. No edits made.
11	**References**		
Appendixes		no comments	

Appendix C
Kittitas County Solid Waste Ordinance 1999-01

KITTITAS COUNTY BOARD OF HEALTH
ORDINANCE NUMBER 1999-01

SOLID WASTE REGULATIONS

July 15, 1999

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KITTITAS COUNTY BOARD OF HEALTH

ORDINANCE 1999

SOLID WASTE REGULATIONS

SECTION I. AUTHORITY AND PURPOSE

These solid waste rules and regulations are promulgated under the authority of Chapters 70.05 and 70.95 revised Code of Washington to protect the public peace, health, safety and welfare of the citizens and environment of Kittitas County. All regulations pertinent to solid waste are listed and hereby adopted as noted in Appendix A. These rules and regulations govern the handling, storage, collection, transportation, treatment, utilization, processing and final disposal of all solid waste within Kittitas County, including the issuance of permits and enforcement. Kittitas County has developed a Solid Waste Management Plan, Moderate Risk Waste Plan, and Used Oil Amendment that provides framework to address solid waste issues. All provisions shall be liberally construed for the accomplishment of these purposes.
It is expressly the purpose of these rules, regulations, and plans to provide for and promote the health of the general public, and not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of these rules and regulations.

It is the specific intent of these rules, regulations, and plans to place the obligation of complying with its requirements upon waste generators, haulers, and/or operators of disposal sites, and no provision of, nor term used in these rules and regulations is intended to impose any duty whatsoever upon the Health Department nor any of its officers or employees, for whom the implementation or enforcement of these rules and regulations shall be discretionary and not mandatory.

Nothing contained in these rules, regulations and plans is intended to be, nor shall be construed to create or form the basis for any liability on the part of the Health Department or its officers, employees or agents, for any injury or damage resulting from the failure of any person subject to these rules and regulations to comply with these rules and regulations, or by reason or in consequence of any act or omission in connection with the implementation or enforcement of these rules and regulations on the part of the Health Department.

SECTION II. APPLICABILITY

These regulations apply to solid waste and hazardous substances as those terms are defined in Section III of these regulations. These regulations shall not apply to the following solid wastes:

A. Overburden from mining operations intended for return to the mine;

B. Liquid wastes whose discharge or potential discharge is regulated under federal, state or local water pollution permits;

C. Woodwaste used for ornamental, animal bedding, mulch and plant bedding or road building purposes;

D. Agricultural wastes, limited to manures and crop residues, returned to the soils at rates which do not exceed agronomic rates;

E. Clean soils and clean dredge spoils as defined in Section III of these regulations or as otherwise regulated by Section 404 of the Federal Clean Water Act (PL 95-217);

F. Septage taken to a sewage treatment plant permitted under Chapter 90.48 RCW;

G. Radioactive wastes, defined by Chapters 246-220 and 246-232 WAC; and

H. Wood debris resulting from the harvesting of timber and whose disposal is permitted under Chapter 76.04 RCW, the State Forest Practices Act.

SECTION III. DEFINITIONS

When used in this regulation, the following terms have the meanings given below. Chapter 173-351,173-303, and 173-304 WAC and (NESHAP) National Emission Standards for Hazardous Air Pollutants 40 CFR Part 61 are hereby adopted by reference.

Active Area: That portion of a facility where solid waste recycling, reuse, treatment, storage or disposal operations are being, are proposed to be, or have been conducted. Buffer zones shall not be considered part of the active area of a facility.

Acute hazardous waste: Dangerous waste sources (listed in WAC 173-303-9004) F020, F021, F022, F023, F026 or F027, and discarded chemical products (listed in WAC 173-303-9903) that are identified with a dangerous waste number beginning with a "P", including those wastes mixed with source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954. The abbreviation 'AHW" will be used in this ordinance to refer to those dangerous and mixed wastes which are acute hazardous wastes. Note – the terms acute and acutely are used interchangeably.

Agricultural Wastes: Wastes on farms resulting from the production of agricultural products including, but not limited to, manures and carcasses of dead animals weighing each or collectively in excess of fifteen (15) pounds.

Aquifer: A geologic formation, group of formations or part of a formation capable of yielding a significant amount of ground water to wells or springs.

Asbestos: Is a product that contains greater than 1% friable asbestos fibers by volume or weight.(Document 11 of EPA Policy Compendium) "Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered."(WAC 196-62-77)

Asbestos Containing Material (ACM): Any waste that contains asbestos. This term includes asbestos waste from control devices, materials used to enclose the work area during an asbestos project, asbestos containing material(s) collected for disposal, or asbestos contaminated waste, debris, containers, bags, protective clothing, or HEPA filters. Asbestos containing flooring or roofing materials shall not be considered ACM if:

1. The asbestos-containing flooring or roofing material is in good condition and is not peeling, cracking, or crumbling; and

2. The binder is petroleum based, the asbestos fibers are suspended in that base, and individual fibers are still encapsulated; and

3. The asbestos-containing flooring or roofing material does not have a friable asbestos backing or friable asbestos layers in between layers of petroleum based binder; and

4. The building, vessel, or structure containing the asbestos-containing flooring or roofing material, regardless of the condition of the material, will not be demolished by burning.

Ashes: The residue, including any air pollution flue dusts, from combustion or incineration of material including solid wastes.

Batch: Any dangerous waste which is generated less frequently than once per month.

Biomedical Waste: Biomedical waste means, and is limited to, the following types of waste:

1. "Animal waste" is waste animal carcasses, body parts, and bedding of animals that are known to be infected with, or that have been inoculated with, human pathogenic microorganisms infectious to humans.

2. "Biosafety level 4 disease waste" is the waste contaminated with blood, excretions, exudates, or secretions from humans or animals who are isolated to protect others from highly communicable infectious diseases that are identified as pathogenic organisms assigned to biosafety level 4 by the Centers for Disease Control, National Institute of Health, and Biosafety in Microbiological and Biomedical Laboratories, current edition.

3. "Cultures and stocks" are wastes infectious to humans including specimen cultures, cultures and stocks of etiologic agents, wastes from production of biologicals and serums, discarded live and attenuated vaccines, and laboratory waste that has come into contact with cultures and stocks of etiologic agents or blood specimens. Such waste includes but is not limited to culture dishes, blood specimen tubes, and devices used to transfer, inoculate, and mix cultures.

4. "Human blood and blood products" are waste human blood and blood components, and materials containing free-flowing blood and blood products.

5. "Pathological waste" is human source biopsy materials, tissues, and anatomical parts that emanate from surgery, obstetrical procedures, and autopsy. "Pathological waste" does not include teeth, human corpses, remains, and anatomical parts that are intended for internment or cremation.

6. "Sharps waste" is all hypodermic needles, syringes with needles attached, intravenous tubing with needles attached, scalpel blades, and lancets that have been removed from the original sterile package.

Biosolids: Municipal sewage, sludge, and septage is no longer considered a solid waste but a beneficial use product and are therefore not found in these regulations. Refer to Chapter 173-308 WAC.

Buffer Zone: That part of a facility that lies between the active area and the property boundary.

Bulky Waste: Large items of refuse, such as appliances, furniture, junk vehicles, and other oversize wastes which would typically not fit into reusable or disposable containers.

Closure: Those actions taken by the owner or operator of a MSWLF or facility to cease waste handling/disposal operations and to ensure that all MSWLF unit or facility is closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period. Closure is considered part of operation. See definition of operation.

Commercial Waste: All types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

Compliance Schedule: A written schedule of required measures in a permit, including an enforceable sequence leading to compliance with these regulations.

Composting: The controlled degradation of organic solid waste yielding a product for use as a soil conditioner.

Container: A device used for the collection, storage and/or transportation of solid waste including, but not limited to, reusable containers, disposable containers, detachable containers and tanks, fixed or detachable.

Contaminate: To allow to discharge a substance into soils, surface or ground water that would cause:

1. The concentration of that substance in the surface or ground water to exceed the standards or levels specified in Chapter 173-200 WAC, or

2. A statistically significant increase in the concentration of that substance in the surface or ground water where the existing concentration of that substance exceeds the maximum contaminant level specified in Chapter 173-200 WAC, or

3. A statistically significant increase above background in the concentration of a substance which:

    a. Is not specified in Chapter 173-200 WAC; and

    b. Is present in the solid waste; and

    c. Has been determined to present a substantial risk to human health or the environment in the concentrations found at the point of compliance by the jurisdictional health department in consultation with Ecology and the Department of Health.

Cover Material: Soil or other suitable material that has been approved by the Health Officer as cover for wastes.

Dangerous Waste: Means those solid wastes designated in WAC 173-303-070 through 173-303-100 as dangerous, or extremely hazardous or mixed waste. As used in this ordinance, the words “dangerous waste” will refer to the full universe of wastes regulated by this chapter. The abbreviation “DW” will refer only to that part of the regulated universe which is not extremely hazardous waste.

Demolition Waste: Solid waste, largely inert waste, resulting from the demolition or razing of buildings, roads and other man-made structures. Demolition waste consists of, but is not limited to: Concrete, brick, bituminous concrete, wood and masonry, composition roofing and roofing paper, steel, and minor amounts of other metals like copper. Plaster (i.e., sheet rock or plaster board), or any other material, other than wood that are likely to produce gases or leachate during the decomposition process and asbestos waste are not considered to be demolition waste for the purposes of this definition.

Detachable Containers: Reusable containers that are mechanically loaded or handled such as a "dumpster" or drop box.

Disposable Containers: Containers that are used once to handle solid waste such as plastic bags, cardboard boxes and paper bags.

Disposal or Deposition: The discharge, deposit, injection, dumping, leaking or placing of any solid waste into or on any land or water.

Disposal Site: The location where any final treatment, utilization, processing or deposition of solid waste occurs. See also the definition of interim solid waste handling site.

Drop Box Facility: A facility used for the placement of a detachable container, including the area adjacent for necessary entrance and exit roads, unloading and turnaround areas. Drop box facilities normally serve the general public with loose loads and receive waste from off-site. Drop box facilities may also include containers for separated recyclables.

Ecology: The Washington State Department of Ecology.

Emission: The release of air contaminants from solid waste into the outdoor atmosphere.

Energy Recovery: The recovery of energy in a usable form from mass burning or refuse derived fuel incineration, pyrolysis or any other means of using the heat of combustion of solid waste that involves high temperature (above 1,200 degrees Fahrenheit) processing.

EPA: The United States Environmental Protection Agency.

Existing Facility: A facility which is owned or leased, and in operation, or for which construction has begun, on or before the effective date of Chapter 173-304 WAC and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances. A facility has commenced construction if either:

1. A continuous on-site physical construction program has begun; or

2. The owner or operator has entered into contractual obligations which cannot be canceled or modified without substantial financial loss for physical construction of the facility to be completed within a reasonable time.

Lateral extensions of a landfill's active area on land purchased and permitted by the Health Department for the purpose of landfilling before the effective date of Chapter 173-304 WAC shall be considered existing facilities.

Expanded Facility: A facility adjacent to an existing facility for which the land is purchased and approved by the Health Officer after the effective date of Chapter 173-304 WAC. A vertical expansion approved and permitted by the Health Department after the effective date of Chapter 173-304 WAC shall also be considered an expanded facility.

Extremely Hazardous Waste: Those dangerous and mixed wastes designated in WAC 173-303-100 as extremely hazardous. The abbreviation “EHW” will be used in this ordinance to refer to those dangerous and mixed wastes which are extremely hazardous

Facility: All contiguous land (including buffer zones) and structures, other appurtenances, and improvements on the land used for solid waste handling.

Facility Structures: Buildings, sheds, utility lines and drainage systems on the facility.

Final Treatment: The act of processing or preparing solid waste for disposal, utilization, reclamation or other approved method of use.

Garbage: Unwanted animal and vegetable wastes and animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food, swill and carcasses of dead animals, and of such a character and proportion as to be capable of attracting or providing food for vectors, except sewage and sewage sludge.

Ground Water: That part of the subsurface water which is in the zone of saturation.

Hazardous Substance: Any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090 or WAC 173-303-100.

Hazardous Waste: Those solid wastes designated by 40CFR Part 261, and regulated as hazardous and/or mixed waste by the United States EPA. This term will never be abbreviated in this ordinance to avoid confusion with the abbreviations "DW" and "EHW". (See "dangerous waste" and "extremely hazardous waste" definitions.)

Health Department: The Kittitas County Health Department.

Health Officer: The Health Officer or the Health Officer's representative of the Kittitas County Health Department.

Incineration: Reducing the volume of solid wastes by use of an enclosed device using controlled flame combustion.

Industrial Solid Wastes: Solid waste or waste by-products generated by manufacturing or industrial processes such as scraps, trimmings, packing, pallets, and other discarded materials not otherwise designated as dangerous waste under Chapter 173-303 WAC. This term does not include commercial, inert, construction and demolition waste, woodwaste, mining waste, or oil and gas waste but does include lunchroom, office, or other similar waste generated by employees at the industrial facility.

Inert Wastes: Noncombustible, nondangerous solid wastes that are likely to retain their physical and chemical structure under expected conditions of disposal, including resistance to biological attack and chemical attack from acidic rainwater.

Junk Vehicle: A vehicle certified under RCW 46.55.230 as meeting at least three of following requirements:

1. Three (3) years old or older;

2. Extensively damaged, such damage including but not limited to the following: a broken window or windshield, or missing wheels, tires, motor, or transmission;

3. Apparently inoperable;

4. Has approximate fair market value equal only to the approximate value of the scrap in it.

Laboratory: A room or building equipped for scientific experimentation, research, testing or clinical studies of specimens, fluids, tissues, cultures or stocks of etiologic agents and associated biologicals or other biologically active agents.

Land Clearing Waste: Waste resulting from site clearing operations including, but not limited to, stumps, tree trunks, brush, sod and other vegetation and plant waste, and associated rocks, mud, sand, and other mineral waste.

Landfill: A disposal facility or part of a facility at which solid waste is permanently placed in or on land and which is not a landspreading disposal facility.

Leachate: A liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

Liquid: A substance that flows readily and assumes the form of its container, but retains its independent volume.

Liquid Waste: Any waste material that is determined to contain free liquids as defined by Method 9095 (Paint Filter Liquids Test), as described in U.S. Environmental Protection Agency publication SW-846, "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods".

Local Fire Control Agency: A public or private agency or corporation providing fire protection such as a local fire department, the Washington Department of Natural Resources or the United States Forest Service.

Lower Explosive Limits (LEL): The lowest percentage by volume of a mixture of explosive gases which will propagate a flame in air at twenty-five (25) degrees Centigrade and atmospheric pressure.

Manifest: The shipping document, which is used to identify the quantity, composition, origin, routing, and destination of a waste while it is being transported to a point of transfer, disposal, treatment, or storage.

Medical Waste: All infectious and injurious waste originating from a medical, veterinary or intermediate care facility.

Minimum Functional Standards (MFS): Chapter 173-304 WAC, the Minimum Functional Standards for Solid Waste Handling.

Mixed Waste: A dangerous, extremely hazardous, or acutely hazardous waste that contains both a nonradioactive hazardous component and, as defined by 10 CFR 20.1003, source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954 (42 USC 2011 et seq.).

Moderate Risk Waste (MRW): Means any waste that exhibits any of the properties of hazardous waste but is exempt from regulation under Chapter 70.105 RCW solely because the waste is generated in quantities below the threshold for regulation and any household wastes which are generated from the disposal of substances identified by Ecology as hazardous household substances."

Moderate Risk Waste Collection Facility: A dedicated site that is specifically built at a permanent or interim fixed location to collect, treat, recycle, exchange, store, and/or transfer moderate risk waste.

Moderate Risk Waste Fixed Facility (MRWFF): A staffed, dedicated site provided with secondary waste containment that is specifically built or set up at a permanent or interim fixed location to collect, treat, recycle, exchange, store, and/or transfer Moderate Risk Waste.

Moderate Risk Waste Limited Facility (MRWLF): A facility provided with secondary waste containment that is specifically built or set up at a fixed location to collect and store only one or a selected few MRW types.

Municipal Solid Waste Landfill Unit (MSWLF Unit): A discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under Chapter 173-304 WAC, the Minimum Functional Standards for Solid Waste Handling, or Chapter 173-218 WAC, Underground Injection Control Program. A MSWLF unit also may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nondangerous sludge, and

industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion.

New Facility: A facility which begins operation or construction after the effective date of Chapter 173-304 WAC (see also definition of "Existing Facility").

Nonconforming Site: A solid waste handling facility which does not currently comply with the facility requirements of WAC 173-304-400, but does comply with a compliance schedule issued in a solid waste permit by the Health Officer.

Nuisance: Consists in unlawfully doing an act, or omitting to perform a duty, which act or omission either annoys, injures or endangers the comfort, repose, health or safety of others; or unlawfully interferes with, obstructs or tends to obstruct, any lake or navigable river, bay, stream, canal or basin, or any public park, square, street or highway; or in any way renders other persons insecure in life, or in the use of property.

One-Hundred Year Floodplain: Any land area which is subject to one percent or greater chance of flooding in any given year from any source.

Operation: Means those actions taken by an owner or operator of a facility or MSWLF unit beginning with waste acceptance at a facility or MSWLF unit up to and including closure of the facility or MSWLF unit.

Permit: An authorization issued by the Health Officer which allows a person to perform solid waste handling activities at a specific location and which includes specific conditions for such facility operations.

Person: An individual, firm, association, copartnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatsoever.

Pesticide: Means, but is not limited to: Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, nematode, mollusk, fungus, weed, and any other form of plant or animal life, or virus (except virus on or in living man or other animal which is normally considered to be a pest or which the department of agriculture may declare to be a pest; any substance or mixture of substances intended to be used as a plant regulator, defoliant, or desiccant; any substance or mixture of substances intended to be used as spray adjuvant; and, any other substance intended for such use as may be named by the department of agriculture by regulation. Herbicides, fungicides, insecticides, and rodenticides are pesticides for the purposes of this ordinance.

Pile: Any non-containerized accumulation of solid waste that is used for treatment or storage.

Plan of Operation: The written plan developed by an owner or operator of a facility, and approved by the Health Department and Ecology, detailing how a facility is to be operated during its active life and during closure and post-closure.

Point of Compliance: That part of ground water that lies beneath the perimeter of a solid waste facility's active area as that active area would exist at closure of the facility.

Post-Closure: The requirements placed upon disposal facilities after closure to ensure their environmental safety for a thiry-year period or until the site becomes stabilized (i.e., little or no settlement, gas production, or leachate generation). Post-closure includes the development of a written plan which complies with the requirements of Chapter 173-303 WAC, Chapter 173-304 WAC, Chapter 173-351 WAC, and the Solid Waste

Handling Permit issued by the Health Department. The post-closure plan is approved by the Health Department and Ecology and implemented by an owner or operator of a facility or MSWLF unit after closure.

Premises: A tract or parcel of land with or without habitable buildings.

Processing: An operation to convert a solid waste into a useful product or to prepare it for disposal.

Putrescible Waste: Solid waste which contains material capable of being decomposed by microorganisms.

Pyrolysis: The process in which solid wastes are heated in an enclosed device in an oxygen-deficient environment to vaporization, producing a hydrocarbon-rich gas capable of being burned for recovery of energy.

Quantity Exclusion Limits (QEL): These limits are used to distinguish when a dangerous waste is only subject to the small quantity generator provisions, and when a dangerous waste is subject to the full requirements of WAC 173-303.

Recycling: The source separation of recyclable materials from solid waste or the processing of solid waste mechanically or by hand to segregate recyclable materials for sale or reuse.

Recyclable Materials: Materials which can be removed from solid waste through recycling include, but are not limited to, paper and paperboard products, newsprint, cardboard, magazines, aluminum, glass, plastics, chemicals, oil, wood, compostable organics (food, yard and land clearing wastes), scrap metal, waste tires, construction and demolition debris, gypsum wallboard, and inert material.

Reusable Containers: Containers that are used more than once to handle solid waste such as garbage cans.

Rubbish: All nonputrescible wastes from all public and private establishments and from all residences.

Run-Off: Any rainwater, leachate or other liquid which drains over land from any part of the facility.

Run-On: Any rainwater or other liquid which drains over land onto any part of a facility.

Scavenging: The removal of materials at a disposal site, without the approval of the owner or operator and the Health Officer.

Small Quantity Generator (SQG):

a) a business whose waste is dangerous waste under WAC 173-303-070 subsection (3) and the quantity of waste generated per month (or the aggregated quantity if more than one kind of waste is generated) does not equal or exceed the quantity exclusion limit (QEL) for such waste (or wastes) as described in WAC 173-303-979(7); and

b) the quantity accumulated or stored does not exceed 2200 pounds for wastes with a 220 pound Quantity Exclusion Limit (QEL) and 2.2 pounds for waste with a 2.2 pound QEL. (Exception: The accumulation limit for the acute hazardous wastes described in WAC 173-303-081 (2)(iv) and 173-303-082(2)(b) is 220 lbs.); and

c) the total quantity of dangerous waste generated in one month, all DW and EHW regardless of their QEL's, does not equal or exceed 220 pounds. If a person generates any dangerous wastes that exceed the QEL or accumulates or stores waste that exceeds the accumulation limits, then all dangerous waste generated, accumulated, or stored by that person is subject to the requirements of this chapter. A small

quantity generator who generates in excess of the quantity exclusion limits or, accumulates, or stores waste in excess of the accumulation limits becomes subject to the full requirements of WAC 173-303 and cannot again be a small quantity generator until after all dangerous waste on-site at the time he or she became fully regulated have been removed, treated, or disposed.

Sole Source Aquifer: An aquifer designated by the EPA pursuant to Section 1424e of the Safe Drinking Water Act (PL 93-523).

Solid Waste: All putrescible and nonputrescible solid and semi-solid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, junk vehicles or parts thereof, and discarded commodities. This includes all liquid, solid and semi-solid, materials which are not the primary products of public, private, industrial, commercial, mining and agricultural operations. Solid waste also includes, but is not limited to, woodwaste, dangerous waste and problem wastes.

Solid Waste Collection Service: Any agency, business, or service operated by a person for the purpose of collecting and transporting solid waste.

Solid Waste Handling: The management, storage, collection, transportation, treatment, utilization, processing or final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery of energy resources from such wastes or the conversion of the energy in such wastes to more useful forms or combinations thereof.

Solid Waste Management: The systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment and disposal of solid waste.

Storage: The holding of solid waste materials for a temporary period.

Stream: The point at which any confined freshwater body of surface water reaches a mean annual flow of twenty (20) cubic feet per second.

Surface Impoundment: A facility or part of a facility which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling and aeration pits, ponds or lagoons, but does not include injection wells.

Surface Water: All lakes, rivers, ponds, streams, inland waters, salt waters and all other water and water courses within the jurisdiction of the State of Washington.

Transfer Station: A permanent, fixed, supplemental collection and transportation facility, used by persons and route collection vehicles to deposit collected solid waste from off-site into a larger transfer vehicle for transport to a solid waste handling facility. Transfer stations may also include recycling facilities.

Treatment: The physical, chemical or biological processing of solid waste to make such solid wastes safer for storage or disposal, amenable for energy or material resource recovery or reduced in volume.

Used Oil:

1. Lubricating fluids that have been removed from an engine crankcase, transmission, gearbox, hydraulic device, or differential of an automobile, truck, bus, vessel, plane, heavy equipment, or machinery powered by an internal combustion engine; or

2. Any oil that has been refined from crude oil, used, and as a result of use, has been contaminated with physical or chemical impurities; or

3. Any oil that has been refined from crude oil and, as a consequence of extended storage, spillage, or contamination, is no longer useful to the original purchaser; and

4. Used oil does not include oil to which hazardous wastes have been added.(i.e. brake fluid, antifreeze, solvents, thinners, gasoline).

Utilization: Consuming, expending or exhausting by use, solid waste materials.

Vadose Zone: That portion of a geologic formation in which soil pores contain some water, the pressure of that water is less than atmospheric pressure, and the formation occurs above the zone of saturation.

Vector: A living animal, insect or other arthropod which transmits an infectious disease from one organism to another.

Waste Recycling: Reusing waste materials and extracting valuable materials from a waste stream.

Waste Tires: Tires that are no longer suitable for their intended purpose because of wear, damage or defect.

Waste Tire Carrier: A person who transports waste tires over public roads for the purpose of storage, recycling or final disposal. This does not include:

1. Any person transporting five tires or less;

2. Any person transporting tire derived products;

3. Any United States government agency or political subdivision, when involved in the clean-up of illegal waste tire piles; or

4. Any person in the business of new or used tire sales, who transports more than five (5) waste tires generated by their operations for the purposes of recycling or final disposal, provided that said businesses retain complete trip manifests as provided in Section V.B.3.a.

Waste Tire Storage Facility: Any facility which stores more than two hundred (200) waste tires at any one time.

Water Quality Standard: A standard set for maximum allowable concentrations of specific parameters in surface waters as set forth in Chapter 173-201 WAC, Water Quality Standards for Waters of the State of Washington.

Wetlands: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, such as swamps, marshes, bogs, and similar areas. This includes wetlands created, restored or enhanced as part of a mitigation procedure. This excludes constructed wetlands.

White Goods: Appliances such as stoves,dishwashers and water heaters that no longer function for which they were intended and can be salvaged for scrap.

White Goods (freon containing): Refrigerators and Air Conditioning units that no longer function for which they were intended that can be salvaged for scrap once proper removal of freon is removed by a qualified technician.

Woodwaste: Solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, handling and storage of raw materials and trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hog fuel and log sort yard waste, but does not include wood pieces or particles containing chemical preservatives such as creosote, pentachlorophenol or copper-chrome-arsenate.

Yard Waste: A compostable organic material generated in yards, gardens, and private or public areas resulting from the maintenance or removal of ornamental vegetation, including, but not limited to, brush, branches, prunings, grass, leaves, flowers, shrubs, and small trees. Yard waste shall not include land clearing wastes, construction and demolition wastes, woodwaste, animal excrement, rocks, garbage, moderate risk waste, or dangerous waste.

SECTION IV. ON-SITE SOLID WASTE MANAGEMENT STANDARDS

A. General Standards

1. Owner Responsibilities for Solid Waste.

   The owner, operator or occupant of any premise, business establishment or industry shall be responsible for the satisfactory and legal handling and/or disposal of all solid waste generated by them or accumulated on the property. Except as provided in Section IV.B.6., single-family residences and single-family farms are prohibited from dumping or depositing solid waste onto or under the surface of land owned or leased by them. All solid wastes must be stored in accordance with Section IV.A.2. until removed to a permitted solid waste handling facility.

2. Storage Requirements.

   a. Responsibility. The owner and/or occupant of any premises shall be responsible for the safe and sanitary storage of all solid wastes generated or accumulated at that premises until it is removed to a permitted solid waste facility. The storage area and storage containers shall be maintained in a clean, safe, and nuisance-free condition. Provisions shall be made for the safe and sanitary disposal of leakage and drainage from sanitary compactors, drop boxes, and storage areas. Materials shall be contained to prevent blowing. Additionally, generators should refer to Section IV.B. pertaining to specific solid waste handling requirements.

   b. On-Site Storage.

      (1) The owner, operator or occupant of any premises, business establishment or industry shall store all garbage and rubbish in containers that meet the following requirements, except for recyclables which are addressed in Section IV.A.2.b.(3).:

         (A) Disposable containers shall be sufficiently strong to allow lifting without breakage.

(B) Reusable containers, except for detachable containers, shall be:

(i) Rigid and durable;

(ii) Corrosion resistant;

(iii) Nonabsorbent and watertight;

(iv) Rodent-proof and easily cleanable;

(v) Equipped with a close-fitting cover;

(vi) Suitable for handling with no sharp edges or other hazardous conditions; and

(C) Detachable containers shall be durable, corrosion-resistant, nonabsorbent, non-leaking and having either a solid cover or screen cover to prevent littering.

(D) The Health Officer may require disinfection of any container. Containers shall be cleaned frequently to prevent rodent/vector nuisances. All wastewater from container cleaning shall be disposed of in a sanitary sewer system, unless otherwise authorized by the Health Officer.

(E) Any litter container required and approved pursuant to the Model Litter Control Act, Chapter 70.93 RCW, shall be exempt from the provisions of this section.

(2) Containers of garbage and rubbish shall be closed at all times except when waste is being added or removed.

(3) The owner, operator or occupant of any premises, business establishment or industry shall store all recyclable materials so as not to produce unsafe or unsanitary conditions.

3. Removal.

Putricible waste shall be removed from the premises where it was generated to a permitted solid waste handling facility no less than once per week, or at a different frequency approved by the Health Officer due to public health and safety risk. Rubbish shall be removed to a permitted solid waste handling facility as needed so as not to create a nuisance or litter problem.

4. Collection and Transportation.

a. All persons collecting or transporting solid waste shall prevent littering or the creation of other nuisances at the loading point, during transport, and shall be responsible for the proper unloading of the solid waste at a permitted transfer station or other permitted solid waste handling or disposal site. Non-containerized solid waste and recyclable materials shall be covered during transport to prevent spillage.

b. Vehicles or containers used for the collection and transportation of solid waste, except biomedical waste, shall be tightly covered or screened where littering may occur, durable, and of easily cleanable construction. Where garbage is being collected or transported, containers shall be cleaned and kept in good repair as necessary to prevent nuisances, odors and insect breeding.

c. Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such a manner that the contents will not fall, leak, or spill therefrom. Where such spillage or leakage does occur, the waste shall be picked up immediately by the collector or transporter and returned to the vehicle or container and the area otherwise properly cleaned.

d. The Health Officer may require disinfection of any vehicle. Vehicles shall be cleaned frequently to prevent rodent/vector nuisances. All wastewater from vehicle cleaning shall be disposed of in a sanitary sewer system, unless otherwise authorized by the Health Officer.

e. A fee will be imposed in addition to other solid waste charges for a person arriving at a staffed landfill or transfer station without a cover on the vehicle's waste or without the waste secured in accordance with RCW 70.93.097.

    1. Funds generated by these fees will be utilized for solid waste education and enforcement.

    2. The fees collected by Solid Waste Programs shall be deposited no less often than quarterly with the Kittitas County Health Department.

f. A vehicle which is transporting sand, dirt, or gravel in compliance with the provisions of RCW 46.61.655 shall not be required to secure or cover a load.

5. Disposal.

a. Generally. All solid wastes shall be disposed of at an appropriate solid waste handling facility permitted to receive such waste, or in a manner consistent with these regulations as approved by the Health Officer. Should a situation arise where disposal of solid waste is not covered under these regulations, the Health Officer shall determine acceptability of a method of disposal for the solid waste on a case-by-case basis.

b. Unlawful Dumping. It shall be unlawful for any person to dump, deposit, bury, or allow the dumping, depositing or burying of any solid waste onto or under the surface of the ground or into the waters of this state, except at a solid waste disposal site for which there is a valid permit. Unlawful dumping shall include unauthorized deposition of solid waste into a container that is owned or leased by another person.

c. Name Appearing on Waste Material and Presumption. Whenever solid waste dumped in violation of this regulation contains three (3) or more items bearing the name of one individual, there shall be a presumption that the individual whose name appears on such items committed the unlawful act of dumping.

d. Identification Presumed. When the Health Officer investigates a case of unlawful dumping and finds identification in the solid waste as described in Section IV.A.5.c., or other evidence, he/she may then order the person who committed the unlawful dumping to remove and dispose of said solid waste according to these regulations. Following the disposal of said solid waste, the Health Officer may order this person to present to the Health Officer a receipt from the permitted disposal facility as proof of appropriate disposal.

e. Lack of Identification. When the Health Officer investigates a case of unlawful dumping and finds no identification in the solid waste, nor evidence, he/she may then order the property owner to remove said solid waste from his/her land, and have the solid waste disposed of according to these regulations. Where this occurs on private land, the property owner or occupant shall be responsible

for removal and disposal. Where this occurs on public land, the appropriate governmental agency shall be responsible for removal and disposal.

f. Burning Prohibited. It shall be unlawful for any person to burn solid waste including garbage or rubbish unless these materials are burned in an appropriate permitted energy recovery or incinerator facility.

g. Disposal Service Required. When a person does not dispose of solid wastes in a manner consistent with these regulations, the Health Officer may order said person to obtain ongoing and regularly scheduled solid waste collection service if said person does not already have this service and if a solid waste collection service exists or is offered in the geographic area where the person resides. Said service shall be from an approved solid waste collection service with necessary certificates issued by the Washington Utilities and Transportation Commission. If said person does not have this service and resides in a geographic area where a single solid waste collection service operates exclusively under covenant or ordinance as required by local government, and said service is mandatory for persons residing within the jurisdiction of the local government, the Health Officer may schedule ongoing regularly scheduled service for said person with this solid waste collection service.

B. Specific Waste Stream Standards

1. Applicability.

   This section applies to all persons who generate and/or handle the specific wastes referenced herein.

2. Moderate Risk Waste and Used Oil.

   a. Storage Requirements.

      (1) Moderate Risk Waste (MRW), used oil, and hazardous substances shall be stored in containers which are:

         (A) Compatible with the waste contained therein;

         (B) In good condition and without any leaks, corrosion or other signs of deterioration;

         (C) Securely covered at all times except during the addition or removal of contents; and

         (D) In the case of hazardous substances which are unused products, stored in their original container.

         (E) All containers shall be clearly marked with the contents (i.e. used oil, antifreeze, xylene etc.) or marked with the word “EMPTY”.

      (2) Containers of MRW, used oil, and hazardous substances shall be stored on a bermed or curbed, impervious surface other than the ground, asphalt, or wood, and in a location(s) which is covered and controlled to prevent:

         (A) Container deterioration due to weather exposure;

         (B) Surface water run-on;

(C) Exposure to extreme temperatures; and

(D) Any other controllable condition which may cause or increase the possibility of container failure.

b. Accumulation. In addition as listed below to the quantity exclusion limits (QELs) contained in WAC 173-303-070(8), MRW, used oil, and hazardous substances shall not be accumulated in quantities that, in the opinion of the Health Officer, present a demonstrable threat to public health or the environment.

Small Quantity Generators (SQG*)* shall not accumulate wastes in excess of the Quantity Exclusion Limit for the wastes generated by their business per WAC 173-303-070, 070-100, and 170(1).

Large Quantity (Regulated) Generators shall not accumulate wastes on site in excess of their monthly accumulation limit for waste in accordance with WAC 173-303-200(1)(c), (1)(d).

Medium Quantity Generators (MQG) shall not accumulate wastes on site in excess of 2,200 pounds per 173-303-201(1),(2) WAC.

Above Waste Generators shall abide by the Waste Accumulation Time Limits per 173-303-200(1), (2) WAC.

Used oil shall not be accumulated in quantities in excess of 300 gallons at any one site, home or business. The Health Officer at his discretion may restrict the amount of used oil accumulated if potential public health and safety are at risk.

c. Transportation. MRW and used oil shall be transported in accordance with Sections IV.A.4.a. through IV.A.4.c.

d. Treatment and Disposal.

(1) Moderate Risk Waste. All MRW shall be disposed of at a permitted moderate risk waste collection facility, or picked up by a permitted dangerous waste transporter. MRW may also be processed using an on-site treatment system approved by Ecology which renders the waste non-dangerous. MRW shall not be deposited in the general municipal solid waste collection system, a public sewer system, a storm drain, an on-site sewage system, in surface or ground water, or onto or under the surface of the ground.

(2) Pesticides. Usable pesticides shall be utilized in accordance with the Washington State Department of Agriculture authorized usage of the product. Unused or leftover pesticide materials intended for farm business use that cannot be applied in a manner consistent with the pesticide label use instructions, outdated pesticide or an unwanted pesticide is considered a waste and must be disposed of through a Department of Agriculture sponsored collection event.

Disposal of used containers of DW, EHW, AHW and pesticides. Used liquid containers shall be multiple rinsed (a minimum of three times) so that no residues remain. The rinsate shall be utilized in a manner consistent with the directions. The containers must be clean and dry inside and outside, with no apparent odor, prior to disposal in the municipal solid waste stream.

Used paper and fiber containers must be cut open. To thoroughly remove the contents strike or shake the container and utilize the contents in the manner consistent with the directions. All residue shall be emptied prior to disposal.

(3) Used Oil**.** Used oil shall be recycled or disposed of in accordance with RCW 70.95 and RCW 70.105, RCW 70.94 or a facility permitted in Washington State to transport or accept used oil.

Used oil shall not be burned as fuel in a land-based facility or in state waters unless it meets the standards of RCW 70.94.610.

"A person annually selling one thousand or more gallons of lubricating oil to ultimate consumers for use or installation off the premises, or five hundred or more vehicle oil filters to ultimate consumers for use or installation off the premises within Kittitas County shall:

- Post and maintain at or near the point of sale, durable and legible signs(obtained from the Department of Ecology or Solid Waste Programs at no charge) informing the public of the importance of used oil recycling and how and where used oil may be properly recycled: and

- Provide for sale at or near the display location of the lubricating oil or vehicle oil filters, household used oil recycling containers.

- A person, who, after notice, violates this section is guilty of a misdemeanor and on conviction is subject to a fine not to exceed one thousand dollars."

Disposal of used oil penalty

- The use of used oil for dust suppression or weed abatement is prohibited.
- No person may sell or distribute absorbent-based kits, intended for home use, as a means for collecting, recycling, or disposing of used oil.
- No person may knowingly dispose of used oil except by delivery to a person collecting used oil for recycling, treatment, or disposal subject to the provisions of Chapter 70.95 RCW and RCW 70.105.
- No owner or operator of a solid waste landfill may knowingly accept used oil for disposal in the landfill.
- Any persons who violate this section are guilty of a misdemeanor.

e. Mitigation and Control. A company or person responsible for a spill or nonpermitted discharge of MRW, DW, EHW, AHW, used oil, and/or hazardous substances shall take appropriate and immediate action to protect public health and the environment, including any necessary measure required to protect the immediate environment or human health. In addition, the person responsible for a spill or discharge shall, in accordance with WAC 173-303-145:

(1) Notify the Health Department and, when an imminent threat to public health or the environment exists, emergency 911;

(2) Notify the Central Regional Office of the Department of Ecology,

(3) Clean up any released hazardous substance, or take such actions as may be required or approved by federal, state, or local officials; and

(4) Meet applicable requirements of Section IV.C.3. as directed by the Health Officer.

3. Asbestos Containing Waste.

a. General. Asbestos containing waste material (ACWM), as defined in Section III, shall be handled and disposed of pursuant to 40 CFR Part 61, Chapter 173-303 WAC, and Chapter 296-65 WAC as these regulations are amended.

b. Removal. Persons removing ACWM shall contact Washington State Department of Labor and Industries for information and instruction concerning removal and disposal.

Labor and Industries ACWM must be wetted down during removal to reduce airborne emissions of particulate matter. ACWM shall be sealed into leak tight containers or double bagged in polyethylene bags with a combined six (6) mils thickness or greater and identified with the proper warning label as per 296-62-07723 WAC.

Floor tile, roofing material, packing, and gaskets (normally nonfriable `Asbestos Containing Material (ACM)) must be inspected by an inspector accredited in Washington State to inspect for Asbestos, before demolition to determine if the ACM is in poor condition, indicated by peeling, cracking, or crumbling of the material. If normally nonfriable ACM is in poor condition, then the material must be tested for friability. If the ACM is friable, it must be handled in accordance with the NESHAP. The above four nonfiable ACM should be removed before demolition only if they are in poor condition and are friable.

If the nonfriable ACM is subjected to sanding, grinding, or abrading as part of demolition or renovation, then the nonfriable ACM must be handled in accordance with the NESHAP. If a building is demolished by burning, all ACM must be removed prior to the demolition.

c. Disposal. Generators of ACWM shall contact Kittitas County Solid Waste Programs prior to disposal at the Kittitas County Asbestos Site 24 hours prior to disposal of ACM. The ACM shall be disposed of in accordance with 40 CFR Part 61 and the approved plan under Section VI.B.1.c.(4), and covered with at least fifteen centimeters (6 inches) of non-asbestos containing waste material immediately following disposal..

4. Biomedical Waste.

a. Sections referencing "Biomedical Waste"in WAC 480-70-500,WAC 296-62, and WAC 173-304 is hereby referenced and adopted.

b. Home Sharps. Shall be in leakproof, rigid, puncture resistant, break resistant containers which are labeled and tightly lidded during storage, handling, and transport. These containers must be capable of maintaining their structural integrity from the point of storage to deposition at an approved disposal or collection site. The containers shall be of any color and shall be conspicuously labeled with the international biohazard symbol, and the words "Biohazardous Waste" or words that clearly denote the presence of biomedical waste.

5. Animal Waste.

a. Animal waste, including but not limited to, manure, dead animals and agricultural wastes, shall be disposed of in a manner consistent with Chapter 246-203 WAC, General Sanitation Regulations, or other method approved by the Health Officer. Any animal waste which is deemed biomedical waste as defined in Section III shall be handled, treated and disposed of as required in Section IV.B.4.

b. Dead Animals. Except as otherwise provided in Section IV.B.5., dead animals shall be disposed of in a manner to protect the public health and the environment. Large animals shall be taken to a rendering plant, or a veterinary clinic, or property owners may bury animals on their property so long as no nuisance is created. i.e. (high water table or insufficient depth of soil so as not to completely cover the animal thereby allowing scavenging to take place). Small animals shall be taken to a veterinary clinic, an animal shelter, buried on site, or can be disposed of at transfer stations (double bagged) so as not to create a nuisance.

c. Agricultural Waste. Agricultural waste shall be regulated pursuant to Chapter 70.95 RCW.

d. Pet Feces. Pet feces, especially dog droppings, shall be disposed of in a manner, such as burial or bagging and placement into containers described in Section IV.A.2.b., which does not create a nuisance or pollute surface waters of the state, and shall be disposed of no less than once per week, unless a different frequency is approved by the Health Officer. Pet feces may be disposed of into the sanitary sewer if the system is served by a sewer treatment facility which will accept such waste. This waste shall not be put into a storm sewer.

6. Compost.

Composting of household food waste, grass clippings and/or other compostable material, shall be conducted in a manner which minimizes odors or emissions, does not create a nuisance, or attract rodents and/or other vectors. The Department of Ecology Best Management Practices publication #97-502 Compost Facility Handbook shall be referenced. Single family residences and single family farms which are composting materials resulting from their own activities on site, when such action does not create a nuisance, are exempt from the permit requirements in Section VI.L.

7. Bulky Waste.

Bulky wastes shall be stored and transported in such a manner so as not to create a nuisance or safety hazard. Bulky wastes should be recycled. County transfer stations provide this service(excluding junk cars) as well as independent recyclers. If recycling is not feasible, these wastes shall be disposed of at an approved solid waste facility.

8. Demolition Waste.

Generators of demolition waste should source separate and recycle the material to the maximum extent practicable. Individuals may take this material to county transfer stations. Contractors may contact Solid Waste Programs and once approved, haul directly to a permitted facility.

C. Specific Business Waste Stream Standards

1. Applicability.

This section applies to all businesses which generate and/or handle the specific wastes referenced herein.

2. Small Quantity Generators.

a. Applicability. This section applies to small quantity generators (SQGs) as defined in Section III. In addition to the requirements of this section, SQGs must meet the requirements of Section IV.B.2.

b. Waste Designation. SQGs shall designate suspected or known dangerous wastes pursuant to WAC 173-303-070.

c. Container Labeling. SQG's shall label all containers of MRW and used oil with the name of the waste and major hazard(s) associated with the waste. Containers of MRW shall also be labeled with the words or appropriate acronyms for "dangerous waste", "extremely hazardous waste", acutely hazardous waste".

d. Secondary Containment. Secondary containment is required of all containers of dangerous wastes and/or used oil stored on-site. This containment must be equipped with a drain, durable, compatible with the waste it is meant to contain, and large enough to contain ten (10) percent of the total waste volume, or one hundred ten (110) percent of the largest container, whichever is greater.

e. Hazardous Materials Management Plans. The Health Officer may require an SQG to prepare and follow a written Health Department approved Hazardous Materials Management Plan when the SQG has violated any part of this regulation.

3. Waste Screening.

a. All solid waste must be designated as required by WAC 173-303-070 to prevent the disposal of dangerous waste at a facility not permitted to accept dangerous waste. All solid waste which designates as dangerous waste must be managed in a manner consistent with these regulations and Chapter 173-303 WAC.

b. The Health Officer may require the screening of any wastes suspected of being a regulated dangerous waste as defined in Section III. The screening process may involve analytical testing, a disclosure of the waste constituents and waste generation process, and other additional information necessary to determine if the waste is dangerous. The Health Officer may establish a schedule for compliance as part of the screening process. Based on the results of the required screening, the Health Officer may require the generator or transporter to direct the waste to a facility permitted to handle such waste.

4. Waste Tires.

a. Applicability. This section applies to all buisnesses which store waste tires including, but not limited to, persons involved in the business of new or used tire sales, and waste tire storage facilities. Site owners shall meet applicable regulations contained in Chapter 173-314 and 173-304-420 WAC.

b. Generally. No person shall enter into a contract, or use services, for the transportation of waste tires, with a transporter who does not possess applicable licensing from the state.

c. Storage.

(1) Except as provided in Section IV.C.4.c.(2) below, businesses shall at no time store more than two hundred (200) waste tires, or store any volume of waste tires in which the manner could result in vector harborage and/or fire hazard. Tires shall not be used for the construction of

fencing, corrals or any other use in which tires were not originally intended for without prior written approval of the Health Officer.

(2) Any person who is engaged in the storage of more than two hundred (200) waste tires, shall obtain a Solid Waste Handling Permit as a waste tire storage facility in accordance with Section VI. F. Said waste tire storage facility shall comply with the provisions of WAC 173-304-420 and Chapter 173-314 WAC.

SECTION V. SOLID WASTE COLLECTION SERVICE STANDARDS

A. Operation and Maintenance Requirements

1. General.

   a. All persons operating a solid waste collection service shall prevent littering or the creation of other nuisances at the loading point, during transport, and shall be responsible for the proper unloading of solid waste at a permitted transfer station or other permitted solid waste handling or disposal site. Non-containerized solid waste and recyclable materials shall be covered during transport to prevent spillage.

   b. Vehicles or containers used for the collection and transportation of solid waste, except biomedical waste, shall be tightly covered or screened where littering may occur, durable, and of easily cleanable construction. Where garbage is being collected or transported, containers shall be cleaned and kept in good repair as necessary to prevent nuisances, odors and insect breeding.

   c. Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such a manner that the contents will not fall, leak, or spill therefrom. Where such spillage or leakage does occur, the waste shall be picked up immediately by the collector or transporter and returned to the vehicle or container and the area otherwise properly cleaned.

   d. The Health Officer may require disinfection of any vehicle. Vehicles shall be cleaned frequently to prevent rodent/vector nuisances. All wastewater from vehicle cleaning shall be disposed of in a sanitary sewer system, unless otherwise authorized by the Health Officer.

   e. All persons operating a solid waste collection service shall inspect collection and transportation vehicles at least monthly for repairs to containers such as missing or loose fitting covers or screens, leaking containers, etc., and maintain such inspection records at the facility normally used to park such vehicles or such other location that maintenance records are kept. Such records shall be kept for a period of at least two (2) years, and be made available upon the request of the Health Officer.

   f. Any person desiring to operate a solid waste collection service shall meet the provisions of Chapter 480-70 WAC.

2. Waste Tire Carriers.

   a. Waste tire carriers shall meet the conditions in Section V.A.1.a., b., c., e., and f.

   b. Waste tire carriers shall obtain a waste tire carrier license from the Washington State Department of Licensing pursuant to WAC 173-314-200.

c. All waste tire carriers, and businesses transporting more than five (5) waste tires generated by their own operations for the purpose of recycling, storage or disposal, shall maintain complete trip manifests for each occurrence of waste tire transportation. Completed manifests shall be retained at the point of generation for a period of two (2) years and be available to the Health Officer on request. Manifests shall be on one form and shall include:

(1) Date tires are transported;

(2) Number of tires transported;

(3) Name, telephone number, and location of storage, recycling or final disposal facility to which the load is destined; and

(4) Printed name and signature of person(s) transporting the waste tires.

SECTION VI. SOLID WASTE HANDLING FACILITY STANDARDS

A. General Facility Requirements

1. Applicability.

a. All facilities which are subject to the standards of Chapters 173-303, 173-304 or 173-351 WAC or the amendments thereto, and all solid waste handling, storage, collection, transportation, treatment, utilization, processing, recycling, recovery, and final disposal facilities subject to these regulations are required to obtain permits. Single-family residences and single-family farms who generate waste on site are exempt from these permit requirements provided that the applicable standards of Section IV are fully complied with.

b. Permits are not required for corrective actions at solid waste handling facilities performed by the state and/or in conjunction with the United States Environmental Protection Agency to implement the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), or corrective actions taken by others to comply with a state and/or federal cleanup order provided that:

(1) The action results in an overall improvement of the environmental impact of the site;

(2) The action does not require or result in additional waste being delivered to the site or increase the amount of waste or contamination present at the site;

(3) The facility standards of Chapters 173-304 and 173-351 WAC and Sections IV.B. and VI.A.3. are met; and

(4) The Health Officer is informed in writing of the actions to be taken at least ninety (90) days prior to initial activities, and is given the opportunity to review and comment upon the proposed corrective action plans.

c. Effective Dates.

(1) Existing facilities will operate under the terms and conditions of their existing permits valid on the effective date of this regulation. After the expiratin date of existing permits, these existing facilities shall meet the requirements of this section.

(2) New and expanded waste handling facilities shall meet the requirements of this section on the effective date of this regulation.

2. Solid Waste Handling Permit.

No solid waste disposal site or facility, solid waste handling facility, shall be operated, established, substantially altered, expanded or improved until the county, city or other person operating or owning such site has obtained a Solid Waste Handling Permit from the Health Department pursuant to the provisions of this section.

a. Procedures for Permits.

(1) Any owner or operator subject to the permit requirements who intends to operate a facility must apply for a permit with the Health Officer. Filing shall not be complete until three (3) copies of the application have been signed by the owner and operator and received by the Health Officer, the permit fee has been submitted, and the applicant has filed an environmental checklist required under the State Environmental Policy Act Rules, Chapter 197-11 WAC.

(2) Except for municipal solid waste landfills which shall follow the permitting requirements of WAC 173-351-700 through WAC 173-351-750, all applications for a permit must contain the information set forth in these regulations.

(3) Once the Health Officer determines that an application for a permit is factually complete, he/she shall refer one (1) copy to the Central Regional Office of Ecology and one (1) copy to Solid Waste Programs for review and comment.

(4) If an application for a permit is factually incomplete, the Health Officer may deny the application without prejudice. In such a case, if the application is made factually complete within six (6) months of its denial without prejudice, it shall be considered to be a continuation of the initial application. Application fees are non-refundable.

(5) The Health Officer shall investigate every application to determine whether the facility meets all applicable laws and regulations and complies with all zoning requirements. Solid Waste Programs reviews to ensure that the application conforms with the most recently approved Kittitas County Comprehensive Solid Waste Management Plan.

(6) The Health Officer shall establish and collect fees for permits and renewal of permits. Fees must be submitted with the permit application.

(7) A copy of all permit applications must be sent to the Department of Ecology for review and recommendation for or against the issuance of each permit by the Health Officer

(8) When the Health Officer has evaluated all pertinent information, he or she may issue a permit. Every completed solid waste permit application shall be approved or disapproved within ninety (90) days after its receipt by the Health Officer or the applicant shall be informed as to the status of the application with a schedule for final determination.

(9) After the Health Officer denies issuance of a solid waste permit, reapplication for a permit involving substantially the same proposal shall not be considered for six (6) months and shall consist of an original application.

(10) Every permit application received by the Health Officer shall be on a format prescribed by the Health Officer and shall contain specific requirements necessary for the proper operation and development of the permitted site or facility, including the requirement that final engineering plans, specifications and other reports be submitted for approval to the Health Officer.

(11) The Health Department must file all issued permits with Ecology no more than seven (7) days after the date of issuance.

(12) The owner or operator of a facility shall apply for renewal of the facility's permit annually. The Health Officer shall annually:

(A) Review the original application for compliance with these regulations and such additional information as required in Section VI.A.2.c.;

(B) Review information collected from inspections, complaints or known changes in the operations;

(C) Collect the renewal fee;

(D) Renew the permit; and

(E) File the renewed permit with Ecology no more than seven (7) days after the date of issuance. Ecology shall review and may appeal the renewal as set forth in RCW 70.95.185 and RCW 70.95.190.

b. General Application Contents for Permits for New or Expanded Facilities. Except as provided for in Section VI.C., all permit applications for facilities subject to these regulations, shall include, but may not be limited to, the following:

(1) A general description of the facility;

(2) The types of waste to be handled at the facility;

(3) The plan of operation required by WAC 173-304-405 (2);

(4) The form used to record weights and volumes of each type of waste stream accepted as required by WAC 173-304-405 (3) and stipulated by the approved Kittitas County Comprehensive Solid Waste Management Plan;

(5) An inspection schedule and inspection log required by WAC 173-304-405 (5); and

(6) Documentation to show that any domestic or industrial wastewater treatment facility, such as a leachate collection and treatment system, is being reviewed by Ecology under Chapter 173-240 WAC (Submission of Plans and Reports for Construction of Wastewater Facilities).

c. Application Contents for Existing Facilities Renewing Permits.

(1) All owners or operators of existing facilities shall renew permits on application forms specified by the Health Officer. Previous information submitted to the Health Officer may be referred to on the application forms. Changes in operating methods or other changes must be noted on the application in order to be authorized by permit.

(2) Evidence of general liability insurance in an amount no less than one million dollars ($1,000,000) shall be furnished to the Health Officer, as he or she may require, prior to permit renewal for all existing facilities if the owner or operator is other than a governmental agency.

d. Re-Examination Fee. When plans and specifications that have been examined are altered and resubmitted, an additional fee for the re-examination of such plans shall be assessed at the current cost of the health department's hourly rate. Where a duplicate set of approved plans are submitted for examination and approval at any time after a permit has been issued on the original approved plans, a fee shall be charged at the current hourly rate for such examination and approval. Where a complete redesign of a site is submitted after one design has been examined, the current hourly rate shall also be charged in addition to the application fee for the first design. The examination of any further redesign shall be similarly charged.

3. Facility Standards.

a. The following Ecology facility standards are hereby adopted by reference:

(1) WAC 173-304-467: Financial Assurance for Public Facilities, except for municipal solid waste landfills regulated under Chapter 173-351 WAC.

(2) WAC 173-304-400: Solid Waste Handling Facility Standards.

(3) WAC 173-304-405: General Facility Requirements.

b. Out-of-County Generated Solid Waste. No out-of -county waste shall be accepted unless the Health Officer has reviewed and presented all pertinent information to the Board of Health for their review for either acceptance or denial. The Board of Health shall then forward their recommendation to the County Commissioners. The County Commissioners shall either accept or deny the Board of Health recommendation.

c. Disposal Site Inspection and Screening. If during inspections of solid waste handling facilities the Health Officer observes waste suspected of being regulated dangerous waste, the Health Officer shall have the authority to require the site operator to segregate and hold any such waste. If the Health Officer determines that testing is required to identify the waste, the generator shall be responsible for such analysis. If the generator is not known, the site owner or operator shall be responsible for such analysis. The disposal site owner, operator, and/or attendants shall have similar authority not to accept suspect wastes. All generators of dangerous wastes shall be subject to the conditions of the Dangerous Waste Regulations, Chapter 173-303 WAC. The site owner or operator will assume responsibility for disposal of the waste if the generator is unknown. The site owner or operator shall maintain records of loads refused as suspected dangerous wastes. These records shall include name and address of generator or transporter, license plate number of the transporting vehicle, description of waste and reason for refusal. The site operator shall refer this information to the Health Officer as soon as possible.

B. General Landfill Facilities (except Municipal Solid Waste Landfills)

1. Permit Application Contents.

   In addition to the requirements of Section VI.A.2., each landfill permit application, except for municipal solid waste landfill applications, must include, but may not be limited to, the following:

   a. A geohydrological assessment of the facility which meets the minimum requirements of WAC 173-304-600(3)(b)(i) including, but not limited to, information which addresses:

      (1) Local/regional geology and hydrology, including faults, unstable slopes and subsidence areas on site;

      (2) Evaluation of bedrock and soil types and properties;

      (3) Depths to ground water and/or aquifer(s);

      (4) Direction and flow rate of local ground water;

      (5) Direction of flow of regional ground water;

      (6) Number, location and construction (where available) of private and public wells within a two-thousand (2,000) foot radius of the site;

      (7) Tabulation of all water rights for ground water and surface water within a two-thousand (2,000) foot radius of the site;

      (8) Identification and description of all perennial surface waters within a one-mile radius of the site, and all ephemeral streams, wetlands, and lakes within a two-thousand (2,000) foot radius of the site;

      (9) Background ground water quality assessment, for the drinking water parameters indicated in WAC 173-304-9901 and WAC 173-200-040 (2), which accounts for both dry and wet weather conditions, and for expanded facilities, identification of impacts of existing facilities of the applicant, to date, upon ground waters from landfill leachate discharges or stormwater surface run-off;

      (10) Background surface water quality assessment for temperature, pH, fecal coliform bacteria, conductivity, turbidity, suspended solids, dissolved oxygen, heavy metals, hardness, chloride, nitrate, nitrite, ammonia, sulfate, chemical oxygen demand, total organic carbon, and organics, which account for both dry and wet weather conditions, and for expanded facilities, identification of impacts of existing facilities of the applicant, to date, upon surface waters from landfill leachate discharges or stormwater surface run-off, or other information specified by the Health Officer;

      (11) Calculation of a site water balance;

      (12) Conceptual design of a ground water and surface water monitoring system, including proposed installation methods for these devices and where applicable, a vadose zone monitoring plan;

      (13) Land use in the area, including the location of nearby residences; and

(14) Topography of the site and drainage patterns for both pre- and post-development conditions.

b. Preliminary engineering report/plans and specifications and development and operation plans are subject to the requirements of WAC 173-304-600(3)(b)(ii), and shall include, but not be limited to:

(1) How the facility will meet the locational standards of WAC 173-304-130;

(2) Relationship of the facility to the most recently approved Kittitas County Solid Waste Management Plan, and the basis/calculations for determining the facility's life;

(3) The design of bottom and side liners, and final cover system;

(4) Identification and analysis of borrow sources for liner construction, and daily and final cover;

(5) Interim/final leachate collection, treatment and disposal methodology;

(6) Ground water monitoring;

(7) Landfill gas control and monitoring;

(8) Stormwater surface run-off quality and quantity control, discharge, and monitoring;

(9) Trench design, fill methods, elevation of final cover and bottom liner, and equipment requirements; and

(10) Closure/post-closure design, construction, maintenance and land use.

c. The operation plan is subject to the requirements of WAC 173-304-600(3)(b)(iii), and shall address, at a minimum:

(1) Operation and maintenance of leachate collection, treatment and disposal systems;

(2) Operation and maintenance of landfill gas control systems;

(3) Operation, maintenance, and monitoring plans for ground water, surface water and landfill gases to include sampling technique, frequency, handling and analyses requirements;

(4) Plans for handling solid wastes on-site including plans for handling asbestos and problem wastes;

(5) Safety and emergency plans;

(6) Routine filling, grading, cover and housekeeping, including dust control and blowing litter;

(7) Record system to address records on weights and volumes of each waste stream type, number of vehicles and the types of waste received;

(8) A method to perform an annual waste capacity analysis study of the site to determine total amount of the site capacity filled to date, and total site life remaining based upon the frequency, volumes, and compaction effectiveness of solid wastes brought to the site;

(9) Vector control plans;

(10) Noise control;

(11) How inspections are conducted and their frequency;

(12) Actions to be taken if there is a fire or explosion;

(13) Actions to be taken if a leak is detected;

(14) Corrective action programs to take if ground water or surface water is contaminated; and

(15) Actions to be taken if there is a failure of the surface water containment system.

d. The closure plan is subject to the requirements of WAC 173-304-600(3)(b)(iv), and shall address, at a minimum:

(1) Estimate of closure season/year for individual cells (if applicable) and for the facility in whole;

(2) Capacity of site in volume and tonnage;

(3) Maintenance of active fill versus completed, final covered acreage;

(4) Estimated closure construction timing and notification procedures; and

(5) Inspection by regulatory agencies.

e. The post-closure plan is subject to the requirements of WAC 173-304-600(3)(b)(v), and shall address, at a minimum:

(1) Estimated time period for post-closure activities;

(2) Site monitoring of landfill gas, ground water, surface water, and leachate;

(3) Deed clause changes, land use and zoning restrictions;

(4) Maintenance activities to maintain final cover, stormwater run-on and run-off systems, and monitoring systems; and

(5) Identification of final closure costs, including cost calculations and the funding mechanism for financial assurance, as described in WAC 173-304-467 and WAC 173-304-468, as amended.

2. Facility Standards.

a. Ecology Facility Standards Adopted by Reference. Ecology solid waste facility standards contained in Chapters 173-304 WAC, as amended, and as hereafter adopted by Ecology, are hereby adopted by reference. These facility standards include, but may not be limited to the following:

(1) WAC 173-304-130: Locational Standards for Disposal Sites.

(2) WAC 173-304-460: Landfilling Standards, except for municipal solid waste landfills regulated under Chapter 173-351 WAC.

(3) WAC 173-304-468: Financial Assurance for Private Landfill Disposal Facilities, except for municipal solid waste landfills regulated under Chapter 173-351 WAC.

(4) WAC 173-304-490: Ground Water Monitoring Requirements, except for municipal solid waste landfills regulated under Chapter 173-351 WAC.

(5) WAC 173-304-9901: Maximum Contaminant Levels for Ground Water, except for municipal solid waste landfills regulated under Chapter 173-351 WAC.

b. Methane Monitoring. All landfills where methane gas is generated shall provide for adequate venting, collecting, redirecting, or elimination of gases generated by solid waste. It shall be the responsibility of the landfill operator and/or owner to develop a sampling and testing program to monitor gas production and migration. Such program shall be submitted for review and approval by the Health Officer prior to work initiation.

c. Development and Closure.

(1) WAC 173-304-407: General Closure and Post-Closure Requirements is hereby adopted by reference.

(2) Any person desiring to close an existing landfill facility must apply for a post-closure permit with the Health Officer, on a form to be provided by the Health Officer. The application shall address compliance with the facility's post-closure plan as described in Section VI.B.1.e.

C. Municipal Solid Waste Landfills

1. General.

Municipal solid waste landfills shall comply with the Kittitas County Solid Waste Management Plan and all provisions of Chapter 173-351 WAC: Municipal Solid Waste Landfills, which is hereby adopted by reference. Municipal solid waste landfills shall follow the permitting and permit application content requirements of WAC 173-351-700 through WAC 173-351-750.

2. Facility Standards.

a. General. Municipal solid waste landfills shall comply with the facility standards in Chapter 173-351 WAC and the additional requirements in this section.

b. Waste Screening.

(1) Municipal solid waste landfill operators shall develop and implement a waste acceptance and screening program to prevent dangerous waste from entering the facility. This waste screening program shall be reviewed and approved by the Health Department prior to implementation. At a minimum, the waste screening program shall include the following:

(A) A waste disposal application to be used by the facility to summarize the generator's waste designation procedures. The application shall include, at a minimum:

(i) The company name, contact name, address and telephone number of the generator, the generator's consultant, the generator's contractor, and the analytical laboratory providing data to support the application.

(ii) The site name, street address, city, county and state where the waste proposed for disposal originated. If the site is a remedial action identified by EPA or Ecology, the name and telephone number of the site manager representing the respective agency shall be included.

(iii) A description of how the waste was generated.

(iv) A description of the physical and chemical nature of the waste proposed for disposal including a description of the potential waste contaminants.

(v) Whether the application is for a one-time or on-going disposal authorization. Applications for on-going disposal must identify the procedures used to ensure that the application being submitted will remain representative of the waste proposed for disposal.

(vi) The quantity of waste proposed for disposal in cubic yards and tons and the manner in which the waste is stored on-site. Applications for on-going disposal must identify the quantity of waste that will be disposed of per month, or other frequency if monthly quantification cannot be achieved due to the manner in which the waste is generated.

(vii) A checklist identifying that each requirement of the waste designation procedures in WAC 173-303-070(3) was followed by the generator.

(viii) A description of the sampling frequency and sampling method. The sampling frequency recommended in Table I of Ecology document 91-30, "Guidance for Remediation of Petroleum Contaminated Soils" (April 1994 and as amended) shall be used. If the number of samples collected differs from the number recommended in Table I of this reference or required in the Health Department approved waste screening program a narrative shall be included which provides justification that the number of samples collected is representative of the entire waste stream proposed for disposal.

(ix) A description of the analytical procedures selected to designate the waste proposed for disposal including justification why certain parameters were chosen for analysis and others excluded from analysis. Analyses shall be performed by a professional laboratory accredited by the Washington State Department of Ecology waste water accreditation program, or other equivalent accreditation program(s), for the parameters tested. Equivalency of accreditation programs must be determined by the facility as part of the approved waste screening program. Analytical methods used must be those identified in the following Ecology and EPA guidance documents and their respective amendments:

(aa) Ecology document 80-12, "Biological Testing Methods".

(bb) Ecology document 91-30, "Guidance for Remediation of Petroleum Contaminated Soils".

(cc) Ecology document 93-51, "Chemical Testing Methods for Complying with the Dangerous Waste Regulations".

(dd) EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods".

(ee) Waste proposed for disposal that contains free liquid must also be analyzed pursuant to EPA Method 9095, "Paint Filter Liquids Test" contained in EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods".

(x) Copies of laboratory and/or field analysis reports used to designate the waste proposed for disposal, including quality assurance and quality control data and chain-of-custody's associated with the samples used to designate the waste.

(xi) For petroleum contaminated soils (PCS), the appropriate soil classification from Ecology document 91-30, as amended, shall be stated.

(xii) End use of the waste proposed for disposal shall be described. For PCS, end use shall be consistent with those listed in Table V of Ecology document 91-30, as amended.

(xiii) Certification by the generator and preparer of the application that the application is complete and correct and that the waste has been fully designated pursuant to WAC 173-303-070.

(xiv) Certification that the application has been reviewed for accuracy and completeness by the facility operator, certification that the waste does not designate as a dangerous waste under Chapter 173-303 WAC, and a recommendation by the facility operator as to whether to accept or deny request for disposal.

(B) Random inspections of incoming waste loads. Waste shall be inspected at a minimum of two (2) locations: entrance and active tipping area. If a public drop box is available at the facility, this location shall also be inspected. Inspections shall be recorded and records maintained of loads refused as suspected dangerous waste. These records shall include the name and address of the generator or transporter, license plate number of the transporting vehicle, and reason for denial. This information shall be submitted to the Health Department immediately.

(C) Development and implementation of a Health Department approved contingency plan should unacceptable waste be observed during inspections or during other facility operations.

(D) Training of facility personnel to recognize regulated dangerous waste and PCB wastes.

(2) The waste screening program may be amended by the Health Department. Alterations to the facility's waste screening program initiated by the facility operator shall be approved by the Health Department prior to implementation.

(3) The facility shall reimburse the Health Department for all time spent reviewing waste screening applications, applicable data, and supplemental information for continuous waste streams at the current hourly rate approved by the Kittitas County Board of Health.

D. Transfer Stations, Drop Box Stations, and Baling and Compaction Systems

1. General.

Any facility or site must comply with the Kittitas County Solid Waste Management Plan.

2. Permit Application Contents.

In addition to the requirements of Section VI.A.2., each application for a permit must contain preliminary engineering report/plans and specifications that include, but may not be limited to:

a. The proposed facility's zoning status;

b. The relationship to the most recently approved Kittitas County Comprehensive Solid Waste Management Plan and the area to be served by the facility; and

c. The facility design to address how the facility shall meet requirements of WAC 173-304-410, including closure.

3. Facility Standards.

WAC 173-304-410: Transfer Stations, Baling and Compaction Systems, and Drop Box Facilities, is hereby adopted by reference.

E. Surface Impoundments

1. General

Any facility or site must comply with the Kittitas County Solid Waste Management Plan.

2. Permit Application Contents.

In addition to the requirements of Section VI.A.2., each application for a permit must include, but may not be limited to, the following:

a. A geohydrological assessment of the facility that addresses all of the factors of Section VI.B.1.a.;

b. Preliminary engineering report/plans and specifications that address, where applicable:

(1) How the proposed facility will meet the locational standards of WAC 173-304-130;

(2) The relationship of the facility to the most recently approved Kittitas County Comprehensive Solid Waste Management Plan;

(3) The design of liners and foundation to be incorporated in the facilities design, including the design of leachate collection and treatment systems;

(4) The design of ground water monitoring;

(5) The design of dikes, including calculations on dike stability analyses under conditions of liner failure;

(6) Other design details, including sludge clean-out and disposal, overfilling alarms and inlet design; and

(7) Closure/post-closure design, construction maintenance and land use.

c. An operation plan that addresses:

(1) Operation and maintenance of leachate collection system, or ground water monitoring;

(2) Operation and maintenance of overfilling equipment or details of filling and emptying techniques;

(3) Inspection of dikes and liners for integrity; and

(4) Safety and emergency plans consistent with local police, fire, and emergency management policies and procedures.

d. A closure plan to address:

(1) Estimate of closure year and cost;

(2) Methods of removing wastes, liners and any contaminated soils and location of final disposal;

(3) Closure timing and notification procedures; and

(4) Final inspection by regulatory agencies.

3. Facility Standards.

WAC 173-304-430: Surface Impoundment Standards, is hereby adopted by reference.

F. Piles

1. General

Any site must comply with the Kittitas County Solid Waste Management Plan

2. Permit Application Contents.

In addition to the requirements of Section VI.A.2., each application for a permit must include, but may not be limited to:

a. Preliminary engineering reports/plans and specifications that include, but are not limited to:

(1) How the proposed facility will meet the locational standards of WAC 173-304-130;

(2) The relationship of the facility to the most recently approved Kittitas County Solid Waste Management Plan and zoning;

(3) The design of the liner or sealed surface upon which the liner rests, including an analysis of the liners ability to withstand the stress;

(4) The design of the run-on and run-off system;

(5) The design to avoid washout when the pile is located in a 100-year floodplain; and

(6) Maximum elevation and boundaries of the waste pile.

b. An operation plan that addresses:

(1) Methods of adding or removing wastes from the pile (waste screening) and equipment used;

(2) Inspection of the liner for integrity; and

(3) Safety and emergency plans consistent with local police, fire, and emergency management policies and procedures.

c. A closure plan to address:

(1) Estimate of closure year and cost;

(2) Methods of removing wastes, liners and any contaminated soils, and location of final disposal;

(3) Closure timing and notification procedures; and

(4) Final inspection by regulatory agencies.

3. Facility Standards.

WAC 173-304-420: Piles Used for Storage and Treatment Facility Standards, is hereby adopted by reference.

G. Energy Recovery and Incinerator Facilities

1. General

Any facility must comply with the Kittitas County Solid Waste Management Plan

2. Permit Application Contents.

In addition to the requirements of Section VI.A.2., each application for a permit must include, but may not be limited to:

a. Preliminary engineering reports/plans and specifications that include, but are not limited to:

(1) The relationship of the facility to the most recently approved Kittitas County Comprehensive Solid Waste Management Plan and zoning;

(2) The design of the storage, treatment, and handling facilities on-site for incoming waste, as well as the storage, treatment, and handling on-site, and/or the transportation off-site, of fly ash, bottom ash and any other wastes produced by air or water pollution controls; and

(3) The design of the incinerator or thermal treater, including changing or feeding systems, combustion air systems, combustion or reaction chambers, including heat recovery systems, ash handling systems and air pollution and water pollution control systems. Instrumentation and monitoring systems design shall also be included.

b. An operation plan that includes, but is not limited to:

(1) Cleaning of storage areas as required by WAC 173-304-440 (2)(a);

(2) Alternative storage plans for breakdowns as required in WAC 173-304-440 (2)(c);

(3) Inspection to ensure compliance with state and local air pollution laws and to comply with WAC 173-304-405 (5). The inspection log or summary must be submitted with the application; and

(4) How and where the fly ash, bottom ash and other solid wastes will be disposed of.

c. A closure plan to address:

(1) Estimate of closure year and cost;

(2) Methods of closure and methods of removing wastes, equipment and location of final disposal;

(3) Closure timing and notification procedures; and

(4) Final inspection by regulatory agencies.

3. Facility Standards.

WAC 173-304-440: Energy Recovery and Incinerator Standards, is hereby adopted by reference.

H. Recycling Facilities

1. General

Any facility must comply with the Kittitas County Solid Waste Management Plan.

2. Permit Application Contents.

a. In addition to the requirements of Section VI.A.2., applications shall include a proposed methodology for a waste screening program to effectively remove and properly dispose of unacceptable waste types. Additionally, application contents for recycling facilities shall demonstrate compliance with the requirements of WAC 173-304-300.

b. An operations plan, closure plan, health and safety plan, haul route and site layout.

3. Facility Standards.

The following Ecology facility requirements are hereby adopted by reference:

a. WAC 173-304-300: Waste Recycling Facility Standards.

I. Moderate Risk Waste Collection Facilities

1. Applicability.

   a. Any facility must comply with the Kittitas County Moderate Risk Waste Plan, Solid Waste Plan and Used Oil Amendment to the Solid Waste Plan.

   b. Owners and operators of MRW Facilities shall obtain a permit from the Health Officer as required in Section VI.I.2.

   c. Unless otherwise directed by the Health Officer, operators of temporary MRW collection facilities, commonly referred to as "MRW collection events" or "MRW roundups", are not required to obtain a permit under these regulations when the following conditions are met:

      (1) The Health Department is notified of the event location and schedule at least thirty (30) days in advance of operations; and

      (2) Adequate systems and procedures are implemented to protect pubic health and the environment, and the event meets the general intent of Section VI.I.3.

2. Permit Application Contents.

   In addition to the requirements of Section VI.A.2., each application shall include, but may not be limited to:

   a. A description of how the facility will meet each of the operational requirements of Section VI.I.3.a.

   b. Engineering reports, plans, and specifications that include, but are not limited to:

      (1) How the facility will meet the locational requirements of WAC 173-304-130;

      (2) Facility drawings showing the location of fencing, signs, emergency equipment, absorbents and other supplies, shower(s), eye wash(es), fire extinguishers and other fire suppression equipment, and the location of MRW sorting, analysis, and storage, including a description of aisle spacing between containers and vertical container stacking;

      (3) Stormwater surface run-off quality and quantity control, discharge, and monitoring; and

      (4) Closure/post-closure design, construction, maintenance, and land use.

   c. An operations plan that includes:

      (1) A visitor policy including requirements for safety and supervision;

      (2) A waste acceptance protocol to preclude and redirect fully regulated dangerous waste generators and excluded waste types such as explosives and/or radioactives;

(3) For materials exchanges, a description of the exchange program including the types of waste included and a description of how restricted wastes will be excluded;

(4) Standard administrative procedures, including a description of:

(A) How facility inspections will be performed by the operator, including the frequency and detail of inspections;

(B) Shipping procedures and documentation; and

(C) How facility records and reports will be completed and maintained;

(5) A description of how MRW is handled on-site including:

(A) MRW packing and labeling procedures;

(B) Methods for managing and/or identifying unknown wastes;

(C) Procedures for managing wastes that arrive in corroded or leaking containers or when MRW is left at the gate when the facility is unattended; and

(D) A MRW sorting protocol;

(6) Procedures for checking MRW storage containers for leaks and the signs that indicate container deterioration;

(7) Control measures to protect containers of MRW from weather and temperature extremes;

(8) Actions to take if leaks are detected in containers, tanks, or containment structures;

(9) Actions to take if other releases are detected such as failure of the run-off containment system, or release of gas(es) due to chemical reaction;

(10) How operating, environmental, and safety equipment will be maintained including personal protective equipment; and

(11) An outline of the Safety and Health Program prepared under Chapter 296-62 WAC and copies of all Health and Safety Plans and Procedures prepared under Chapters 296-62 and 296-24 WAC.

d. A description of the facility's direct relationship to the recommended alternatives of the most recently approved Kittitas County Moderate Risk Waste Management Plan.

3. Facility Standards.

a. Operation and Maintenance. MRW collection facilities subject to the requirements of this section are required to meet the following minimum standards:

(1) Comply with the requirements of WAC 173-304-405, "General facility requirements," except for subsections (2)(e), (2)(g), (4)(d), and (6);

(2) Maintain daily operating records which include the number of vehicles entering the facility. Major deviations from the Plan of Operations shall also be noted on the operating record.

(3) Maintain a log of the types and volumes of all MRW and used oil shipped off-site for final disposal or processing. The shipment date shall be included on each log entry.

(4) Restrict public access to the facility when not open to the public and adequately control public access to MRW unloading area(s) while open to the public;

(5) Be constructed of easily cleanable materials;

(6) Provide secondary containment for all MRW;

(7) Be free of potential rat harborages, and provide effective means to control rodents, insects, birds, and other vermin;

(8) Be accessible by all weather roads;

(9) Be designed and serviced as often as necessary to ensure safe handling, appropriate MRW removal, and adequate collection and storage capacity at all times;

(10) Be designed to exclude underfloor spaces and underground storage tanks, except to provide for site utilities, containment spaces, and sumps;

(11) Have an adequate buffer zone around the operating area to minimize noise and dust nuisances, and have a buffer zone of fifty (50) feet from the operating area to the nearest property line in areas zoned residential;

(12) Comply with applicable zoning, fire, hydraulics, and building codes including approved local variances and waivers;

(13) Provide pollution control measures to protect air quality including any applicable requirements of the Washington Clean Air Act of 1991, and its amendments;

(14) Prohibit scavenging, with the exception of approved materials exchange programs;

(15) Provide adequately trained staff on-site during hours of operation;

(16) Comply with the Department of Labor and Industries standards for health and safety, including Chapters 296-62 and 296-24 WAC;

(17) Have a sign readable from a distance of at least twenty-five (25) feet that identifies at least the facility name, the hours the facility is open for public and/or business use, and the materials not accepted at the facility;

(18) Have communications capabilities to immediately summon fire, police, or emergency services personnel in the event of an emergency; and

(19) Remove all wastes at closure from the facility to a solid waste handling facility permitted to receive the wastes.

b. Development and Closure. MRW collection facilities subject to the requirements of this section are required to comply with the minimum standards in WAC 173-304-407(1) through (5), "General closure and post-closure requirements".

J. Commercial Compost Facilities

1. General.

   a. Any facility must comply with the Kittitas County Solid Waste Management Plan.

   b. Generators of compost for retail sales shall operate under permit by the Health Officer and submit chemical analyses and reports to the Health Officer in sufficient frequency to demonstrate that the resulting product does not contain levels of chemicals or pathogens that could create a risk to the public health. Publication #97-502 Department of Ecology Compost Facility Resource Handbook shall be referenced.

   c. Generators of sewage sludge compost and/or biosolids compost shall operate under permit by the Health Officer and must follow the methods and procedures developed by Ecology and EPA.

2. Facility Standards.

   a. Commercial compost facilities shall meet the applicable facility standards found in WAC 173-304-300, as amended, which are adopted by reference in Section VI.J.2.a. herein.

   b. Generators shall provide written information to the compost user describing appropriate end uses of the compost product. This information should identify application rates, feedstock percentages, and specify if the compost is recommended for use in home gardens.

   c. Odorous materials such as spoiled foods, animal feces, blood and slaughter house wastes shall be immediately processed to prevent odors.

   d. The composted material shall not reheat upon standing, shall be innocuous and shall contain no sharp particles which would cause injury to persons handling the compost.

K. Other Methods of Solid Waste Handling

1. General.

   a. Any site must comply with the Kittitas County Solid Waste Management Plan.

   b. Other methods of solid waste handling such as a material resource recovery system for municipal waste not specifically identified elsewhere in this regulation, nor excluded from this regulation. Owners and operators of other methods of solid waste handling shall comply with the requirements contained in Chapter 173-304 WAC.

   c. Petroleum Contaminated Soils (PCS) shall be remediated in accordance with the Guidance for Remediation of Releases from Underground Storage Tanks, Washington State Department of Ecology Toxics Cleanup Program (July, 1991, 91-30) and subsequent revisions.

2. Solid Waste Handling Permit.

Owners and operators of other methods of solid waste handling shall obtain a permit from the Health Officer as required in Section VI.A. by submitting an application containing information required in Section VI.A.2. and such other information as may be required by the Health Officer and Ecology, including but not limited to:

a. Preliminary engineering reports, plans, and specifications;

b. Operation and development plans and specifications; and

c. A closure plan, health and safety plan, haul route and site layout.

SECTION VII. ADMINISTRATION AND ENFORCEMENT

A. Other Laws, Regulations and Agency Requirements

1. All solid waste management shall be subject to the authority of other laws, regulations or other agency requirements in addition to these rules and regulations. Nothing in these rules and regulations is intended to abridge or alter the rights of action by the state or by persons which exist in equity, common law or other statutes to abate pollution or to abate a nuisance.

2. Chapter 173-304 WAC and 173-351WAC, or as amended, is hereby adopted by reference. If a conflict exists in the interpretation of these chapters or these regulations, the more stringent shall apply.

3. Information revealing the identity of persons who file complaints with the Health Department, is exempt from public inspection and copying if disclosure would endanger any person's life, physical safety, or property, as stipulated in RCW 42.17.310(1)(e) which is hereby adopted by this reference. If at the time a complaint is filed the complainant, victim, or witness indicates a desire for disclosure or nondisclosure, such desire shall govern.

B. Enforcement Authority

The Health Officer shall have the authority to enforce the provisions of these regulations equally on all persons. The Health Officer is also authorized to adopt rules consistent with the provisions of these rules and regulations for the purpose of enforcing and carrying out its provisions.

C. Right of Entry

1. Whenever necessary to make an inspection to enforce or determine compliance with the provisions of these regulations, and other relevant laws and regulations, or whenever the Health Officer has cause to believe that a violation of these regulations has been or is being committed, the Health Officer or his/her duly authorized inspector may enter any building, structure, property or portion thereof at reasonable times to inspect the same.

2. If such building, structure, property or portion thereof is occupied, the inspector shall present identification credentials, state the reason for the inspection, and request entry. Entry shall not be unreasonably denied by the owner or his or her agent, but may be conditioned on the owner or an agent of the owner escorting the inspector, said escort to be provided immediately upon request.

3. If such building, structure, property or portion thereof is unoccupied, the inspector shall first make a reasonable effort to locate the owner or other persons having charge or control of the building, structure, property or portion thereof and request entry. If the inspector is unable to locate the owner or such

other persons and he/she has reason to believe that conditions therewith create an immediate and irreparable health hazard, then he/she shall make entry.

4. If entry is refused, the Health Officer shall have recourse to the remedies provided by law to secure entry, including but not limited to search warrants.

D. Violations and Penalties - Persons Not Requiring a Permit

1. Applicability.

   The requirements in this section apply to all persons who are not required to obtain a permit under these regulations. The violation of any provisions of these regulations shall constitute an infraction. Each such violation shall constitute a separate infraction for each and every day or portion thereof during which such violation is committed, continued, or not permitted.

2. Violations - Investigations - Evidence.

   An authorized representative of the Health Department may investigate alleged or apparent violations of these regulations. Upon request of the authorized representative of the Health Department, the person allegedly or apparently in violation of these regulations shall provide information identifying themselves. Willful refusal to provide information identifying a person as required by this section is a misdemeanor.

3. Notice and Order to Correct Violation.

   a. Issuance. Whenever an authorized representative of the Health Department determines that a violation has occurred or is occurring, he/she may issue a written notice and order to correct violation to the property owner or to any person causing, allowing or participating in the violation.

   b. Content. The notice and order to correct violation shall contain:

      (1) The name and address of the property owner or other persons to whom the notice and order to correct violation is directed;

      (2) The street address or description sufficient for identification of the building, structure, premises, or land upon or within which the violation has occurred or is occurring;

      (3) A description of the violation and a reference to that provision of the regulation which has been violated;

      (4) A statement of the action required to be taken to correct the violation and a date or time by which correction is to be completed;

      (5) A statement that a monetary penalty in an amount per day for each violation shall be assessed against the person to whom the notice and order to correct violation is directed for each and every day, or portion of a day, on which the violation continues following the date set for correction; and

      (6) A statement requiring the person to whom the notice and order to correct violation is directed to produce receipts from a permitted solid waste disposal facility or transporter to demonstrate compliance with any order issued by the Health Department.

c. Service of Order. The notice and order to correct violation shall be served upon the person to whom it is directed, either personally or by mailing a copy of the order to correct violations by certified mail, postage prepaid, return receipt requested, to such person at his/her last known address. Proof of service shall be made at the time of service by a written declaration under penalty of perjury executed by the persons effecting the service, declaring the time and date of service and the manner by which service was made.

d. Extension. Upon written request received prior to the correction date or time, the authorized representative may extend the date set for corrections for good cause. The authorized Health Department representative may consider substantial completion of the necessary correction or unforeseeable circumstances which render completion impossible by the date established as a good cause.

4. Notice of Civil Infraction - Service.

An authorized representative of the Health Department may issue a notice of civil infraction pursuant to Chapter 7.80 RCW if the authorized representative has reasonable cause to believe that the person has violated any provision of these regulations or has not corrected the violation as required in the written notice and order to correct violation. A notice of civil infraction may be served either by:

a. The authorized representative serving the notice of civil infraction on the person named in the notice of civil infraction at the time of issuance; or

b. The authorized representative filing the notice of civil infraction with the Department court, in which case the Department court shall issue the notice and the authorized representative shall have it served, either personally or by mail, postage prepaid, on the person named in the notice of infraction at his or her last known address.

5. Notice of Civil Infraction - Contents.

The notice of civil infraction shall include the following:

a. A statement that the notice represents a determination that the infraction has been committed by the person named in the notice and that the determination shall be final unless contested as provided in this regulation;

b. A statement that the infraction is a non-criminal offense for which imprisonment shall not be imposed as a sanction;

c. A statement of the specific infraction for which the notice was issued;

d. A statement that monetary penalties as set forth below have been established for each infraction;

e. A statement of the options provided in these regulations for responding to the notice and the procedures necessary to exercise these options;

f. A statement that at any hearing to contest the determination that the Health Department has the burden of proving by a preponderance of the evidence that the infraction was committed; and that the person may subpoena witnesses, including the authorized representative of the Health Department, who issued and served the notice of infraction;

g. A statement that at any hearing requested for the purpose of explaining mitigating circumstances surrounding the commission of the civil infraction, the person will be deemed to have committed the civil infraction and may not subpoena witnesses;

h. A statement that the person must respond to the notice as provided in this section within fifteen (15) days; and

i. A statement that failure to respond to the notice or a failure to appear at a hearing requested for the purpose of contesting the determination or for the purpose of explaining mitigating circumstances will result in a default judgment against the person in the amount of the penalty and that this failure may be referred to the prosecuting attorney or city attorney for criminal prosecution for failure to respond or appear.

6. Notice of Civil Infraction - Filing in Department Court.

A notice of civil infraction shall be filed in Department Court within forty-eight (48) hours of issuance, excluding Saturdays, Sundays, and holidays. Kittitas County Department Court shall have jurisdiction to hear and determine violations occurring under these regulations.

7. Notice of Civil Infraction - Determination Infraction Committed.

Unless contested in accordance with this regulation, the notice of civil infraction represents a determination that the person to whom the notice was issued committed the infraction.

8. Notice of Civil Infraction - Response Requesting A Hearing - Failure To Respond Or Appear - Order To Set Aside.

a. A person who receives a notice of civil infraction shall respond to the notice as provided in this section within fifteen (15) days of the date the notice was served.

b. If the person named in the notice of civil infraction does not contest the determination, the person shall respond within fifteen (15) days by completing the appropriate portion of the notice of civil infraction and submitting it, either by mail or in person to the court specified in the notice. A check or money order in the amount of the penalty prescribed for the infraction must be submitted with the response. When a response which does not contest the determination is received, an appropriate order shall be entered in the court's records and a record of the response shall be furnished to the Health Department.

c. If the person named in the notice of civil infraction wishes to contest the determination, the person shall respond within fifteen (15) days by completing the portion of the notice of civil infraction requesting a hearing and filing it with the court specified on the notice. The court shall notify the person in writing of the time, place, and date of the hearing and that date shall not be earlier than seven (7) days nor more than ninety (90) days from the date of the notice of hearing except by agreement.

d. If the person named in the notice of civil infraction does not contest the determination, but wishes to explain mitigating circumstances surrounding the infraction, the person shall respond by completing the portion of the notice of civil infraction requesting a hearing for that purpose and filing it with the court specified in the notice. The court shall notify the person in writing of the time, place, and date of the hearing, and that date shall not be earlier than seven (7) days nor more than ninety (90) days from the date of the notice of the hearing, except by agreement.

e. The court may enter a default judgment assessing the monetary penalty prescribed for the infraction, and may notify the prosecuting attorney of the failure to respond to the notice of civil infraction or to appear at a requested hearing if any person issued a notice of civil infraction:

(1) Fails to respond to the notice of civil infraction as provided in Section VII.D.8.b.; or

(2) Fails to appear at a hearing requested pursuant to either Section VII.D.8.c. or Section VII.D.8.d.

9. Notice. Failure To Sign, Non-Appearance - Failure To Satisfy Penalty.

a. A person who fails without just cause to sign a notice of civil infraction is guilty of a misdemeanor.

b. Any person willfully violating his or her written and signed promise to appear in court or his or her written and signed promise to respond to a notice of civil infraction is guilty of a misdemeanor regardless of the disposition of the notice of civil infraction; provided that a written promise to appear in court or a written promise to respond to a notice of civil infraction may be complied with by appearance by counsel.

c. A person who willfully fails to pay a monetary penalty or to perform community service as required by a court under these regulations may be found in civil contempt of a court after notice and hearing.

10. Representation by Attorney.

a. A person subject to proceedings under these regulations may appear or be represented by counsel.

b. The prosecuting attorney representing the Health Department may, but need not, appear in any proceedings under these regulations, notwithstanding any statue or court rules to the contrary.

11. Infraction - Hearing - Procedure - Burden of Proof - Order - Appeal.

a. A hearing held to contest the determination that an infraction has been committed shall be without a jury.

b. The court may consider the notice of civil infraction and any sworn statements submitted by the Health Department's authorized representative who issued and served the notice in lieu of his or her personal appearance at the hearing. The person named in the notice may subpoena witnesses, including the authorized representative who has issued and served the notice, and has the right to present evidence and examine witnesses present in court.

c. The burden of proof is on the Health Department to establish the commission of the infraction by a preponderance of the evidence.

d. After consideration of the evidence and argument, the court shall determine whether the infraction was committed. If it has not been established that the infraction was committed, an order dismissing the notice shall be entered in the court's records. If it has been established that a civil infraction has been committed, an appropriate order shall be entered in the court's records.

e. An appeal from the court's determination or order shall be to the Superior Court in the manner provided by the Rules of Appeal of Decisions of Courts of Limited Jurisdiction. The decision of the Superior Court is subject only to discretionary review pursuant to the Rules of Appellate Procedure.

12. Infraction - Explanation of Mitigating Circumstances.

    a. A hearing held for the purpose of allowing a person to explain mitigating circumstances surrounding the commission of an infraction shall be an informal proceeding. The person may not subpoena witnesses. The determination that an infraction has been committed may not be contested at a hearing held for the purpose of explaining mitigating circumstances.

    b. After the Court has heard the explanation of the circumstances surrounding the commission of the infraction, an appropriate order shall be entered in the court's records.

13. Monetary Penalties - Restitution.

    a. In addition to or as an alternative to any other judicial or administrative remedy provided in this regulation or by law or other rules and regulations, any person found to have committed an infraction shall be assessed a monetary penalty. All violations of this ordinance shall be denominated Class I Civil Infractions.

    b. Whenever a monetary penalty is imposed by court under this ordinance it is immediately payable. If the person is unable to pay at that time, the court may grant an extension of the period in which the penalty may be paid. If the penalty is not paid on or before the time established for payment, the court may proceed to collect the penalty in the same manner as other civil judgments and may notify the prosecuting attorney of the failure to pay. The court shall also notify the Health Department of the failure to pay the penalty, and the Health Department shall not issue the person any future permits or approvals until the monetary penalty has been paid.

    c. The court may also order a person found to have committed a civil infraction to make restitution.

14. Order of Court - Civil Nature - Modification of Penalty - Community Service.

    a. An order entered after the receipt of a response which does not contest the determination, or after it has been established at a hearing that the civil infraction was committed, or after a hearing for the purpose of explaining the mitigating circumstances is civil in nature.

    b. The court may waive, reduce to be consistent, or suspend the monetary penalty prescribed for the civil infraction. If the court determines that a person has insufficient funds to pay the monetary penalty, the court may order performance of a number of hours of community service in lieu of a monetary penalty, at the rate of the state’s current minimum hourly wage.

15. Costs and Attorney's Fees.

    Each party in a civil infraction case is responsible for costs incurred by that party, but the court may assess witness fees against a non-prevailing respondent. Attorney's fees may be awarded to either party in a civil infraction case.

16. Written Assurance of Discontinuance.

    The Health Officer may accept a written assurance of discontinuance of any act in violation of this regulation from any person who has engaged in such act. Failure to comply with the assurance of discontinuance shall be a further violation of this regulation.

17. Stop-Work and Abatement Orders.

    a. Stop-Work Orders. The Health Officer may cause a stop-work order to be issued whenever the Health Officer has reason to believe that a violation of this regulation is occurring. The effect of the stop-work order shall be to require the immediate cessation of such work or activity which has contributed to the violation until authorized by the Health Officer to proceed. The stop-work order shall be posted upon the property where the violation is occurring, and shall be served upon the owner of the property either personally or by certified mail, return receipt requested, at the owner's last known address.

    b. Abatement Orders. In addition to or as an alternative to any other judicial or administrative remedy provided in these regulations or by law or other rules and regulations, the Health Officer may order a violation of these regulations to be abated. The effect of the abatement order shall be to require work to be done to correct the violation within a reasonable time period. If the required corrective work is not commenced or completed within the time specified, the Health Officer will proceed to abate the violation and cause the work to be done. The abatement order shall be posted upon the property where the violation is occurring, and shall be served upon the owner of the property either personally or by certified mail, return receipt requested, at the owner's last known address. The property owner is responsible for the costs of all corrective action, whether done by the owner or the Health Department. The Health Department shall have the right to collect the amount expended for abatement through appropriate legal action.

18. Other Legal or Equitable Relief.

    Notwithstanding the existence or use of any other remedy, the Health Officer may seek legal or equitable relief to enjoin any acts or practices or abate any conditions which constitute or will constitute a violation of these regulations, or rules and regulations adopted under them.

E. Violations and Penalties - Persons Requiring a Permit

1. Applicability.

   The requirements in this section apply to all persons which are required to obtain a permit under these regulations.

2. Violations - Investigations - Evidence.

   An authorized representative of the Health Department may investigate alleged or apparent violations of these regulations. Upon request of the authorized representative of the Health Department, the person allegedly or apparently in violation of these regulations shall provide information identifying themselves. Willful refusal to provide information identifying a person as required by this section is a misdemeanor.

3. Notice and Order to Correct Violation.

   a. Issuance:

(1) Whenever an authorized representative of the Health Department determines that a violation has occurred or is occurring at an unpermitted site, he/she may issue a written notice and order to correct violation to the property owner or to any person causing, allowing or participating in the violation.

(2) Whenever an authorized representative of the Health Department determines that a violation has occurred or is occurring at a permitted site, he/she shall pursue a reasonable attempt to secure voluntary correction, failing which he/she may issue a written notice and order to correct violation to the property owner or to any person causing, allowing or participating in the violation. Pursuant to Section VII.H., the Health Department may issue a written notice and order to correct violation without first pursuing a reasonable attempt to secure voluntary correction if there is an imminent and substantial danger to public health.

b. Content. The notice and order to correct violation shall contain:

(1) The name and address of the property owner or other persons to whom the notice and order to correct violation is directed;

(2) The street address or description sufficient for identification of the building, structure, premises, or land upon or within which the violation has occurred or is occurring;

(3) A description of the violation and a reference to that provision of the regulation which has been violated;

(4) A statement of the action required to be taken to correct the violation and a date or time by which correction is to be completed; and

(5) A statement that a monetary penalty in an amount per day for each violation shall be assessed against the person to whom the notice and order to correct violation is directed for each and every day, or portion of a day, on which the violation continues following the date set for correction.

c. Service of Order. The notice and order to correct violation shall be served upon the person to whom it is directed, either personally or by mailing a copy of the order to correct violations by certified mail, postage prepaid, return receipt requested, to such person at his/her last known address. Proof of service shall be made at the time of service by a written declaration under penalty of perjury executed by the persons effecting the service, declaring the time and date of service and the manner by which service was made.

d. Extension. Upon written request received prior to the correction date or time, the authorized representative may extend the date set for corrections for good cause. The authorized Health Department representative may consider substantial completion of the necessary correction or unforeseeable circumstances which render completion impossible by the date established as a good cause.

e. Administrative Conference. An informal administrative conference may be conducted at any time by the Health Officer for the purposes of bringing out all the facts and circumstances related to an alleged violation, promoting communications between concerned parties, and providing a forum for efficient resolution of any violation. The Health Officer may call a conference in response to a request from any person aggrieved by the Health Officer's order or the Health Officer may call a conference on his/her own motion. Attendance at the hearing shall be determined by the Health

Officer and need not be limited to those named in an order to correct violations. As a result of information developed at the conference, the Health Officer may affirm, modify or revoke his/her order. The administrative conference is optional with the Health Officer and is not a prerequisite to utilization of any of the enforcement provisions described in these regulations.

f. Appeals. Appeals from any decision by the Health Officer made pursuant to these regulations, shall be made to the Board of Health within the stated time period and in the following manner:

(1) Any bona fide party aggrieved by a decision or order of the Health Officer made pursuant to these regulations pertaining to a solid waste handling or disposal site or facility in which the person has an interest may file an appeal.

(2) Any appellant wishing to appeal the decision of the Health Officer must file in writing a statement with the Health Officer within ten (10) calendar days of the date of serving of the order. Such notice must be delivered personally to the Administration Office of the Kittitas County Health Department (Attn: Health Officer) or sent by certified mail. The appellant shall submit specific statements in writing of the reason why error is assigned to the decision of the Health Officer, and which shall be accompanied by a fee as established in the current Health Department fee schedule.

(3) When an appeal of the Health Officer's decision is made to the Board of Health, the filing of such appeal shall stay the effective date of the decision until such time as the appeal is adjudicated or withdrawn, unless in the opinion of the Board of Health such decision is necessary to protect the immediate health and safety of the public.

(4) A Health Officer's decision which has been appealed in a timely manner shall be reviewed by the Board of Health or designated Board of Health member(s). The review shall occur not less than twenty (20) days and not more than thirty (30) days after service of the statement of appeal upon the Health Officer. Parties shall be notified of the date of review by the Board of Health or the designated Board of Health member(s). Both parties may submit additional written information, if desired, for review by Board members. Such information must be received by the Health Officer not fewer than five (5) working days prior to the hearing to permit copying and mailing to Board members.

g. Supplemental Order to Correct Violation. The Health Officer may at any time add to, rescind in part, or otherwise modify a notice and order to correct violation. The supplemental order shall be governed by the same procedures applicable to all notice and order to correct violations procedures contained in these regulations.

h. Finality of Order.

(1) Any order duly issued by the Health Officer pursuant to the procedures contained in this regulation shall become final thirty (30) days after service of the order unless a written request for hearing or statement of appeal is received by the Health Officer within the ten (10) day period.

(2) An order which is subjected to the appeal procedure shall become final twenty (20) days after mailing of the Board of Health's decision unless within that time period an aggrieved person initiates review by writ of certiorari in Superior Court.

i. Enforcement of Final Order.

(1) If, after any order duly issued by the Health Officer has become final, the person to whom such order is directed fails, neglects, or refuses to obey such order, the Health Officer may:

(A) Cause such person to be prosecuted under these regulations; and/or

(B) Institute any appropriate action to collect a civil penalty assessed under these regulations; and/or

(C) Abate the health violation using the procedures of these regulations; and/or

(D) Pursue any other appropriate remedy at law or equity under these regulations.

(2) Enforcement of any notice and order of the Health Officer pursuant to these regulations shall be stayed during the pendency of any appeal under these regulations, except when the Health Officer determines that the violation will cause immediate and irreparable harm and so states in the notice and order issued.

4. Written Assurance of Discontinuance.

The Health Officer may accept a written assurance of discontinuance of any act in violation of this regulation from any person who has engaged in such act. Failure to comply with the assurance of discontinuance shall be a further violation of this regulation.

5. Violation of Permit Conditions - Misdemeanor Penalty.

Any person who: (a) fails, neglects, or refuses to obey a final order of the Health Officer to correct a violation as set forth in Section VII.E.3.i. above; (b) fails, neglects, or refuses to comply with a written assurance of discontinuance pursuant to Section VII.E.4. above; (c) operates a solid waste facility or collection service without a permit; or (d) operates a solid waste facility or collection service after a permit has been revoked; is guilty of a misdemeanor, and upon conviction, shall be punished by imprisonment in the county jail for a maximum term fixed by the court, or by a fine in an amount fixed by the court, or by both such imprisonment and fine. The court may also impose restitution.

6. Stop-Work and Abatement Orders.

a. Stop-Work Orders. The Health Officer may cause a stop-work order to be issued whenever the Health Officer has reason to believe that a violation of this regulation is occurring. The effect of the stop-work order shall be to require the immediate cessation of such work or activity until authorized by the Health Officer to proceed. The stop-work order shall be posted upon the property where the violation is occurring, and shall be served upon the owner of the property either personally or by certified mail, return receipt requested, at the owner's last known address.

b. Abatement Orders. In addition to or as an alternative to any other judicial or administrative remedy provided in these regulations or by law or other rules and regulations, the Health Officer may order a violation of these regulations to be abated. The effect of the abatement order shall be to require work to be done to correct the violation within a reasonable time period. If the required corrective work is not commenced or completed within the time specified, the Health Officer will proceed to abate the violation and cause the work to be done. The abatement order shall be posted upon the property where the violation is occurring, and shall be served upon the owner of the property either personally or by certified mail, return receipt requested, at the owner's last known address. The property owner is responsible for the costs of all corrective action, whether done by the owner or

the Health Department. The Health Department shall have the right to collect the amount expended for abatement through appropriate legal action.

7. Other Legal or Equitable Relief.

   Notwithstanding the existence or use of any other remedy, the Health Officer may seek legal or equitable relief to enjoin any acts or practices or abate any conditions which constitute or will constitute a violation of these regulations, or rules and regulations adopted under them.

8. Permit Suspension, Revocation, and Appeal.

   a. Suspension of Permits.

      (1) The Health Officer may temporarily suspend any permit issued under these regulations for: (a) failure of the holder to comply with the requirements of the permit; (b) failure to comply with any notice and order issued pursuant to these regulations related to the permitted activity; or (c) the dishonor of any check or draft used by the permit holder to pay any fees associated with the permit.

      (2) Permit suspension shall be carried out through the notice and order provisions specified in Section VII.E.3., and the suspension shall be effective upon service of the notice and order upon the holder or operator. The holder or operator may appeal such suspension as provided in Section VII.E.3.f. and Section VII.E.8.c.

      (3) Notwithstanding any other provision of this regulation, whenever the Health Officer finds that a violation of this regulation has created or is creating an unsanitary, dangerous or other condition which, in his/her judgment, constitutes an immediate and irreparable hazard, he/she may, without service of a written notice and order, suspend and terminate operations under the permit immediately.

   b. Revocation of Permits.

      (1) The Health Officer may permanently revoke any permit issued by him/her for: (a) failure of the holder to comply with the requirements of the permit; (b) failure of the holder to comply with any notice and order issued pursuant to these regulations related to the permitted activity; (c) interference with the Health Officer in the performance of his/her duties; (d) discovery by the Health Officer that a permit was issued in error or on the basis of incorrect information supplied to him/her; or (e) the dishonor of any check or draft used by the holder to pay any fees associated with the permit.

      (2) Such permit revocation shall be carried out through the notice and order provisions specified in Section VII.E.3. and the revocation shall be effective upon service of the notice and order upon the holder or operator. The holder or operator may appeal such revocation, as provided in these regulations.

      (3) A permit may be suspended pending its revocation or a hearing relative to revocation pursuant to the provisions of Section VII.E.8.a. above.

   c. Permit Appeal.

      (1) Subject to Appeal. Any denial, suspension or revocation of a solid waste permit by the Health Officer may be appealed.

(2) Appellant Defined. The appellant shall be the applicant for a solid waste permit or holder of a solid waste permit who appeals a decision denying, suspending or revoking a solid waste permit.

(3) Appeal Procedure. The appeal procedure shall be carried out through the appeals process specified in VII.E.3.f.

F. Variances

1. Applicability.

   Any person who owns or operates a solid waste facility may apply to the Health Officer for a variance from any section of these regulations. The application shall be accompanied by such information as the Health Officer may require. The Health Officer may grant such variance, but only after due notice (or a public hearing) if it finds that:

   a. The solid waste handling practices or site location do not endanger public health, safety or the environment; and

   b. Compliance with the regulation from which variance is sought would produce hardship without equal or greater benefits to the public.

2. Application.

   a. An application for a variance, or for the renewal thereof, submitted to the Health Officer shall be approved or disapproved by the Health Officer within ninety (90) days of receipt unless the applicant and the Health Officer agree to a continuance.

   b. Notice shall be given by mailing a notice of the variance application to persons who have written to the Health Officer asking to be notified of all variance requests.

3. Granting Requirements.

   a. No variance shall be granted pursuant to this section until the Health Officer has considered the relative interests of the applicant, other owners of property likely to be affected by the handling practices and the general public.

   b. Any variance or renewal shall be granted within the requirements of this section and for time period and conditions consistent with the reasons therefore, and within the following limitations:

      (1) If the variance is granted on the grounds that there is no practicable means known or available for the adequate prevention, abatement or control of pollution involved, it shall be only until the necessary means for prevention, abatement or control become known and available and subject to the taking of any substitute or alternative measures that the Health Officer may prescribe;

      (2) The Health Officer may grant a variance conditioned by a time table if:

         (A) Compliance with this regulation will require spreading of costs over a considerable time period; and

         (B) The timetable is for a period that is needed to comply with this regulation.

d. No variance from Chapters 173-304 and 173-351 WAC shall be granted by the Health Officer except with the approval and written concurrence of Ecology prior to action on the variance by the Health Officer. The Health Officer may grant variances from these Board of Health regulations for standards that are more stringent than the standards of Chapters 173-304 and 173-351 WAC, or from provisions in these Board of Health regulations that are not contained in Chapters 173-304 and 173-351 WAC.

4. Renewal.

Any variance granted pursuant to this section may be renewed on terms and conditions and for periods which would be appropriate on initial granting of a variance. No renewal thereof shall be granted, unless following a public hearing on the complaint or due notice, the Health Officer finds the renewal is justified. No renewal shall be granted except on application. Any such application shall be made at least sixty (60) days prior to the expiration of the variance. Within ten (10) business days of receipt of an application for renewal the Health Officer shall give public notice of such application in accordance with these regulations.

G. Inspections

1. General.

At a minimum, quarterly inspections of all permitted solid waste facilities shall be performed by the authorized representative of the Health Department. Findings shall be noted and kept on file. A copy of the inspection report or annual summary shall be furnished to the site operator at the discretion of the Health Officer or upon request.

2. Pre-Operational Inspection.

Whenever plans and specifications are required by these regulations to be submitted to the Health Officer, the Health Officer shall inspect the proposed solid waste disposal site, solid waste handling facility, or solid waste collection service prior to the start of the operations.

H. Imminent and Substantial Dangers

Notwithstanding any provisions of this regulation the Health Officer may take immediate action to prevent an imminent and substantial danger to the public health by the improper management of any waste irrespective of quantity or concentration.

SECTION VIII. ADDENDUM INCORPORATION

The Health Officer shall have the authority to adopt or incorporate any addenda or amendments to these regulations, provided such addenda or amendments are not at variance with the Minimum Functional Standards for Solid Waste Handling, Chapter 173-304 WAC, or the Criteria for Municipal Solid Waste Landfills, Chapter 173-351 WAC, in accordance with due process of law.

SECTION IX. SEVERABILITY

Should any section, paragraph, phrase, sentence or clause of these regulations be declared invalid or unconstitutional for any reason, the remainder of these regulations shall not be affected thereby.

SECTION X. EFFECTIVE DATE

The effective date of this regulation shall be July 15, 1999.

APPENDIX A. REFERENCES

The following is a list of Federal, State, and local laws, regulations, and documents referenced in Kittitas County Board of Health Ordinance 1999-, Solid Waste Regulations. Copies of these documents may be found at the Kittitas County Health Department, Kittitas County Solid Waste Programs, or the Public Library.

A. Federal

1. United States Code (USC):

33 USC 1344	SECTION 404 OF THE FEDERAL CLEAN WATER ACT (PL 95-217), PERMITS FOR DREDGED OR FILL MATERIAL
42 USC 300	SAFE DRINKING WATER ACT (PL 95-523)
42 USC 2011	ATOMIC ENERGY ACT OF 1954

2. Code of Federal Regulations (CFR):

10 CFR Part 20	STANDARDS FOR PROTECTION AGAINST RADIATION
40 CFR Part 61	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
40 CFR Part 258	CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS
40 CFR Part 503	STANDARDS FOR THE USE OR DISPOSAL OF SEWAGE SLUDGE

3. Environmental Protection Agency:

SW-846	TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/ CHEMICAL METHODS

B. State:

1. Revised Code of Washington (RCW), Chapters:

7.80	CIVIL INFRACTIONS
42.17	DISCLOSURE - CAMPAIGN FINANCES - LOBBYING - RECORDS
46.55	ABANDONED, UNAUTHORIZED, AND JUNK VEHICLES - TOW TRUCK OPERATORS
49.17	WASHINGTON INDUSTRIAL SAFETY AND HEALTH
70.05	LOCAL HEALTH DEPARTMENTS, BOARDS, OFFICERS - REGULATIONS
70.93	WASTE REDUCTION, RECYCLING, AND MODEL LITTER CONTROL ACT
70.94	WASHINGTON CLEAN AIR ACT
70.95	SOLID WASTE MANAGEMENT - REDUCTION AND RECYCLING
70.95K	BIOMEDICAL WASTE
70.105	HAZARDOUS WASTE MANAGEMENT

76.04 STATE FOREST PRACTICES ACT
90.48 WATER POLLUTION CONTROL

2. Washington Administrative Code (WAC), Chapters:

173-200 WATER QUALITY STANDARDS FOR GROUND WATERS OF THE STATE OF WASHINGTON
173-201A WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF WASHINGTON
173-218 UNDERGROUND INJECTION CONTROL PROGRAM
173-240 SUBMISSION OF PLANS AND REPORTS FOR CONSTRUCTION OF WASTEWATER UTILITIES
173-303 DANGEROUS WASTE REGULATIONS
173-304 MINIMUM FUNCTIONAL STANDARDS FOR SOLID WASTE HANDLING
173-314 WASTE TIRE CARRIER AND STORAGE SITE LICENSES
173-340 MODEL TOXICS CONTROL ACT
173-351 CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS
173-400 CLEAN AIR ACT
197-11 SEPA RULES
246-203 GENERAL SANITATION
246-220 RADIATION PROTECTION - GENERAL PROVISIONS
246-232 RADIOACTIVE MATERIALS - LICENSING APPLICABILITY
296-24 GENERAL SAFETY AND HEALTH STANDARDS
296-62 GENERAL OCCUPATIONAL HEALTH STANDARDS
296-65 ASBESTOS REMOVAL AND ENCAPSULATION
480-70 SOLID WASTE AND/OR REFUSE COLLECTION COMPANIES

3. Washington State Department of Ecology (Ecology):

Ecology document 80-12, “Biological Testing Methods”

Ecology document 91-30, “Guidance for Remediation of Petroleum Contaminated Soils” (revised April 1994)

Ecology document 92-13, "Moderate Risk Waste Fixed Facility Guidelines"

Ecology document 93-51, “Chemical Testing Methods for Complying with the Dangerous Waste Regulations”

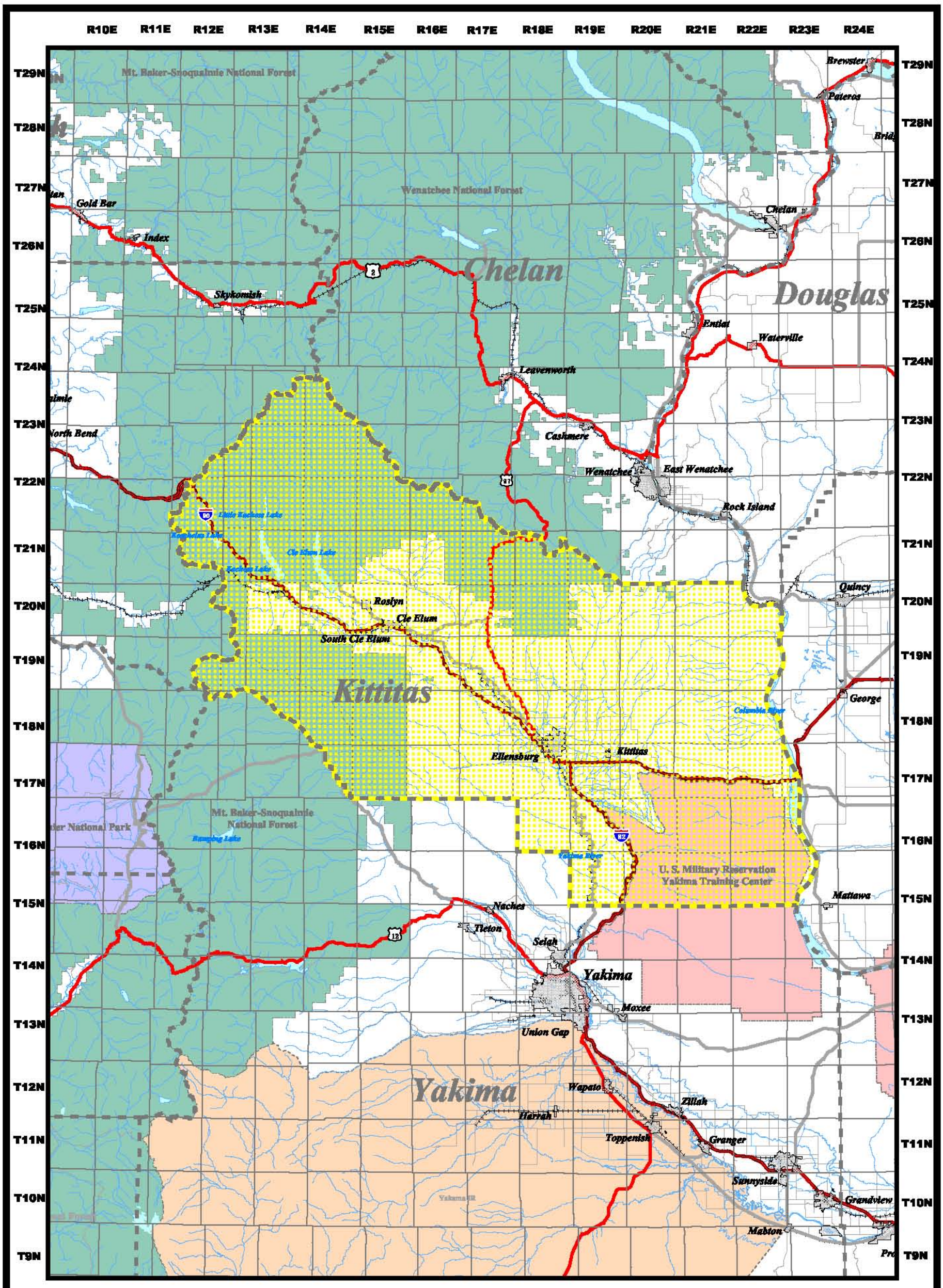
C. Local:

Kittitas County Solid Waste Management Plan

Used Oil Amendment to the Solid Waste Management Plan

Kittitas County Moderate Risk Waste Management Plan

Appendix D
Service Area Map



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Kittitas County Authority

UTILITIES AND TRANSPORTATION COMMISSION
WASHINGTON STATE SOLID WASTE CERTIFICATE AUTHORITY
June 2004
Waste Management of WA, Inc.
Certificate : G000237
(Kittitas County)

WASHINGTON UTC UTILITIES AND TRANSPORTATION COMMISSION

For more information contact:
Ray Dejoe
GIS Tech
(360) 664-1249

Legend

Application No. GA-079268 Docket No. TG- 040570 Effective: 06-08-2004

PID427_Solid Waste Collection Service (All)

Cities
County Lines
Interstate Highway
Local Roads
Rail Lines
State Highway
Township Lines
U.S. Highway
Water (River, Creek)
National Forest
National Park Service
Military Installations
Native American Lands
Water (Ocean, Lake)

Data used to create this map were generated at a scale of 1:24,000. Use of this information for purposes requiring a greater accuracy is not recommended.

Appendix E
Transfer Area Site Plan

US 97/Old Highway 10 site

Appendix F
Washington Utilities and Transportation Commission Cost Assessment Questionnaire

COST ASSESSMENT QUESTIONNAIRE for local solid waste management planning

PLAN PREPARED FOR THE COUNTY OF: *Kittitas*

PREPARED BY: *Jacobs (as reviewed and approved by Kittitas County)*

CONTACT TELEPHONE: *(503) 736-4344* **DATE:** *June 2019*

DEFINITIONS

Please provide these definitions as used in the Solid Waste Management Plan and the Cost Assessment Questionnaire.

Throughout this document:

YR.1 shall refer to *2020***.**
YR.3 shall refer to *2022***.**
YR.6 shall refer to *2025***.**

Year refers to **calendar** (Jan 01 - Dec 31).

1. **DEMOGRAPHICS:** To assess the generation, recycling and disposal rates of an area, it is necessary to have population data. This information is available from many sources (e.g., the State Data Book, County Business Patterns, or the State Office of Finance and Management).

1.1 Population

1.1.1 What is the **total** population of your County/City?

YR.1 *46,641* YR.3 *47,269* YR.6 *49,151*

1.1.2 For counties, what is the population of the area **under your jurisdiction?** (Exclude cities choosing to develop their own solid waste management system.)

YR.1 *46,641* YR.3 *47,269* YR.6 *49,151*

1.2 References and Assumptions

Population growth is based on intermediate forecasts from the Washington State Office of Financial Management and the U.S. Census Bureau, starting with the official estimate for 2018 (the last complete year) and then projecting years 1 through 6 using the intermediate growth series (applying varied growth by period: 0.99% growth through 2020 and 1.05% through 2025).

2. **WASTE STREAM GENERATION:** The following questions ask for total tons "recycled" and total tons "disposed". Total tons disposed are those tons disposed of at a landfill, incinerator, transfer station or any other form of disposal you may be using. If other, please identify.

2.1 Tonnage Recycled

2.1.1 Please provide the total tonnage **recycled** in the base year, and projections for years three and six.

YR.1 *4,440* YR.3 *4,529* YR.6 *4,666*

2.2 Tonnage Disposed

2.2.1 Please provide the total tonnage **disposed** in the base year, and projections for years three and six.

YR.1 *36,424* YR.3 *37,156* YR.6 *38,282*

2.3 References and Assumptions

Recycling and waste disposal projections assume a 1.0% percent annual population growth rate (based on the annualized growth rate between years 2020 through 2040) applied to recorded 2017 tonnages.

3. **SYSTEM COMPONENT COSTS:** This section asks questions specifically related to the types of programs currently in use and those recommended to be started. For each component (i.e., waste reduction, landfill, composting, etc.) please describe the anticipated costs of the program(s), the assumptions used in estimating the costs and the funding

mechanisms to be used to pay for it. The heart of deriving a rate impact is to know what programs will be passed through to the collection rates, as opposed to being paid for through grants, bonds, taxes and the like.

3.1 Waste Reduction Programs

3.1.1 Please list the solid waste programs which have been implemented and those programs which are proposed. If these programs are defined in the SWM plan, please provide the page number. (Attach additional sheets as necessary.)

Implemented & Proposed:

- ***See Attachment 1 for list of programs and location in the SWMP.***

3.1.2 What are the costs, capital costs and operating costs for waste reduction programs implemented and proposed?

- ***See Attachment 2 for capital and operational financing.***

Implemented:

YR.1 $*18,540* YR.3 $*19,669* YR.6 $*21,493*

Proposed:

YR.1 $*0* YR.3 $*0* YR.6 $*0*

3.1.3 Please describe the funding mechanism(s) that will pay the cost of the programs in 3.1.2.

Implemented:

Waste reduction programs are currently funded by grants, tip fees, and other sources.

Proposed:

Expansion of existing programs would not be implemented unless additional funding sources become available.

3.2 Recycling Programs

3.2.1 Please list the proposed or implemented recycling program(s) and, their costs, and proposed funding mechanism or provide the page number in the draft plan on which it is discussed. (Attach additional sheets as necessary.)

Implemented & Proposed:

- ***See Attachment 1 for list of programs and location in the SWMP.***
- ***See Attachment 2 for capital and operational financing.***

Implemented:

YR.1 $*77,250* YR.3 $*111,955* YR.6 $*121,381*

Recycling programs are currently funded by grants, tip fees, and other sources.

Proposed:

YR.1 $*0* YR.3 $*30,000* YR.6 $*0*

Proposed programs would be conducted with limited operating budgets used for current implementation of programs unless additional funding sources become available.

3.3 Solid Waste Collection Programs

3.3.1 Regulated Solid Waste Collection Programs

Fill in the table below for each **WUTC regulated** solid waste collection entity in your jurisdiction. (Make additional copies of this section as necessary to record all such entities in your jurisdiction.)

WUTC Regulated Hauler Name: *Waste Management of Ellensburg*

G-permit #237

	YR.1	YR. 3	YR. 6
RESIDENTIAL			
# Customers	4,860	4,957	5,108
Tonnage Collected	2,543	2,595	2,673
COMMERCIAL			
# Customers	672	686	707
Tonnage Collected	2,675	2,729	2,812
ROLLOFF			
# Customers	122	125	129
Tonnage Collected	4,991	5,091	5,246

3.3.2 Other (non-regulated) Solid Waste Collection Programs Fill in the table below for other solid waste collection entities in your jurisdiction. (Make additional copies of this section as necessary to record all such entities in your jurisdiction.)

Hauler Name: *Waste Management of Ellensburg (serves City of Ellensburg)*

	YR.1	YR. 3	YR. 6
RESIDENTIAL			
# Customers	3,573	3,645	3,756
Tonnage Collected	2,250	2,295	2,365
COMMERCIAL			
# Customers	529	540	556
Tonnage Collected	4,476	4,566	4,704
ROLLOFF			
# Customers	58	59	61
Tonnage Collected	3,911	3,990	4,111

Hauler Name: *Waste Management of Ellensburg (serves City of Cle Elum)*

	YR.1	YR. 3	YR. 6
RESIDENTIAL			
# Customers	765	780	804
Tonnage Collected	482	492	507
COMMERCIAL			
# Customers	199	203	209
Tonnage Collected	776	792	816
ROLLOFF			
# Customers	6	6	6
Tonnage Collected	437	446	459

3.4 Energy Recovery & Incineration (ER&I) Programs

Kittitas County has not implemented this type of program.

3.5 Land Disposal Program

(If you have more than one facility of this type, please copy this section to report them.)

3.5.1 Provide the following information for each **land disposal facility** in your jurisdiction which receives garbage or refuse generated in the county.

Name: *Ryegrass Limited Purpose Landfill*
Owner: *Kittitas County*
Operator: *Kittitas County*

Ryegrass only accepts construction and demolition debris. It is described in Chapter 6.3.1 of the SWMP.

3.5.2 Estimate the **approximate tonnage** disposed at the landfill by **WUTC regulated haulers**. If you do not have a scale and are unable to estimate tonnages, estimate using cubic yards, and indicate whether they are compacted or loose.

The WUTC hauler sends CDL to Ryegrass.

YR.1 *8,843* YR.3 9,021 YR.6 9,294

3.5.3 Using the same conversion factors applied in 3.5.2, please estimate the **approximate tonnage** disposed at the landfill by other contributors.

YR.1 *19,029* YR.3 *19,411* YR.6 *20,000*

3.5.4 Provide the cost of operating (including capital acquisitions) each landfill in your jurisdiction. For any facility that is privately owned and operated, skip these questions.

YR.1 *$554,500* YR.3 *$544,500* YR.6 *$577,800*

3.5.5 Please describe the funding mechanism(s) that will defray the cost of this component.

Funding for this facility is through tipping fees and lease payments exclusively.

3.6 Administration Program

3.6.1 What is the budgeted cost for administering the solid waste and recycling programs and what are the major funding sources.

Budgeted Cost

YR.1 *$780,375* YR.3 *$817,000* YR.6 *$866,218*

Funding Source

Administration costs funding sources include tipping fees and grants.

3.6.2 Which cost components are included in these estimates?

Expenses included in the budget include salaries, benefits, supplies, legal fees, telephone, postage, travel, insurance, utilities, building maintenance, equipment repairs, vehicle maintenance, capital outlay, equipment replacement and depreciation and other miscellaneous costs. See Chapter 9 in the SWMP for a description of administrative functions.

3.6.3 Please describe the funding mechanism(s) that will recover the cost of each component.

Funding mechanisms listed in 3.6.1 are not targeted for specific components.

3.7 Other Programs

For each program in effect or planned which does not readily fall into one of the previously described categories please answer the following questions. (Make additional copies of this section as necessary.)

3.7.1 Describe the program or provide a page number reference to the plan.

- ***See Attachment 1 for list of the remaining programs and location in the SWMP.***

3.7.2 Owner/Operator: Kittitas County Solid Waste Department

3.7.3 Is WUTC Regulation involved? If so, please explain the extent of involvement in Section

N/A

3.7.4 Please estimate the anticipated costs for this program, including the cost of this component.

- ***See Attachment 2 for capital and operational financing.***

3.8 References and Assumptions (attach additional sheets as necessary)

N/A

4. FUNDING MECHANISMS: This section relates specifically to the funding mechanisms currently in use and the ones which will be implemented to incorporate the recommended programs in the draft plan. Because the way a program is funded directly relates to the costs a resident or commercial customer will have to pay, this section is crucial to the cost assessment process. Please fill in each of the following tables as completely as possible.

Table 4.1.1. Facility Inventory

Facility Name	Type of Facility	Tip Fee per Unit Quantity	Unit Quantity	Transfer Cost	Transfer Station Location	Final Disposal Location	Total 2018 Quantity Disposed	Total Revenue Generated (Tip Fee x Tons)
Ellensburg Transfer Station	**Transfer**				**Ellensburg, WA**			
Solid Waste		$103.35	tons	$63.93		Wenatchee Landfill	26,385.65	$2,726,956.93
Septage		$0.15	gallons				313,346.24	$47,001.94
Tires Passenger By Weight		$200.00	tons			L&S Tire Company	51.31	$10,262.00
Yard Waste		$37.86	tons	$23.92		Kittitas County Compost Facility	2,231.09	$84,469.07
Ag Waste		$38.63	tons				14.69	$567.47
CDL - Ellensburg		$50.15	tons	$18.12		Ryegrass Landfill	1,919.75	$96,275.46
Compost Sold		$60.00	tons				238.73	$14,323.80
Compost Sold (Nursery/Farm/Large Projects)		$30.00	tons				575.93	$17,277.90
Compost Sold Commercial		$50.00	tons				120.15	$6,007.50
Compost - Mulch w/ Tax		$20.00	tons				418.74	$8,374.80
Leachate Special to Ryegrass		$0.15	gallons				978.29	$146.74
Appliance		$12.00	each			Weddle Trucking Co.	768.00	$9,216.00
Tires - Heavy Equipment		$57.50	each			L&S Tire Company	2.00	$115.00
Tires - Implement		$15.00	each			L&S Tire Company	9.00	$135.00
Tires - Passenger Each		$2.00	each			L&S Tire Company	1,429.00	$2,858.00
Tires - Truck		$5.75	each			L&S Tire Company	100.00	$575.00
Cle Elum Transfer Station	**Transfer**				**Cle Elum, WA**			
Solid Waste		$103.35	tons	$63.93		Wenatchee Landfill	10,678.05	$1,103,576.47
Septage		$0.15	gallons				10,944.55	$1,641.68
Tires Passenger By Weight		$200.00	tons			L&S Tire Company	53.84	$10,768.00
Yard Waste		$37.86	tons	$23.92		Kittitas County Compost Facility	403.79	$15,287.49
Ag Waste		$38.14	tons				8.31	$316.94
CDL - Cle Elum		$61.51	tons	$30.17		Ryegrass Landfill	1,046.92	$64,396.05

Table 4.1.1. Facility Inventory

Facility Name	Type of Facility	Tip Fee per Unit Quantity	Unit Quantity	Transfer Cost	Transfer Station Location	Final Disposal Location	Total 2018 Quantity Disposed	Total Revenue Generated (Tip Fee x Tons)
Appliance		$12.00	each			Weddle Trucking Co.	372.00	$4,464.00
Tires - Heavy Equipment		$57.50	each			L&S Tire Company	5.00	$287.50
Tires - Implement		$15.00	each			L&S Tire Company	3.00	$45.00
Tires - Passenger Each		$2.00	each			L&S Tire Company	972.00	$1,944.00
Tires - Truck		$5.75	each			L&S Tire Company	19.00	$109.25
Ryegrass Landfill	**Disposal**				**Ellensburg, WA**			
Septage - Ryegrass		$0.15	gallons			Ryegrass Landfill	1,029,970.00	$154,495.50
Dirt		$7.00	yard			Ryegrass Landfill	965.00	$6,755.00
Concrete		$7.00	yard			Ryegrass Landfill	2,520.50	$17,643.50
CDL - Ryegrass		$7.00	yard			Ryegrass Landfill	19,975.00	$139,825.00

Table 4.1.2. Tip Fee Components

Tip Fee by Facility	Surcharge	City Tax	County Tax	Transportation Tax	Operational Cost	Administrative Cost	Post-Closure Cost
Ellensburg Transfer Station – MSW	$1.65	$-	$-	$-	$61.72	$38.43	$1.55
Cle Elum Transfer Station – MSW	$1.65	$-	$-	$-	$61.72	$38.43	$1.55
Ellensburg Transfer Station – Yard Waste	$-	$-	$-	$-	$37.86	$-	$-
Cle Elum Transfer Station – Yard Waste	$-	$-	$-	$-	$37.86	$-	$-
Ryegrass Limited Purpose Landfill	$-	$-	$-	$-	$7.00	$-	$-
Ellensburg Transfer Station – C&D	$-	$-	$-	$-	$17.06	$33.09	$-
Cle Elum Transfer Station – C&D	$-	$-	$-	$-	$28.42	$33.09	$-

Note: There is no City, County, or Transportation tax component in the tip fee in Kittitas County. Taxes that are borne by the WUTC hauler are embedded in the operational cost.

Table 4.1.3. Funding Mechanism

Name of Program Funding Mechanism Will Defray Costs	Bond Name	Total Bond Debt	Bond Rate	Bond Due Date	Grant Name	Grant Amount	Tip Fee	Taxes	Other	Surcharge
Tip Fees	N/A						$4,546,118			
Grant Funding[1]	N/A				DOE Grant - CPG & DOE Litter Grant	$75,000				
Recycling[2]	N/A								$42,000	
Other Incomes[3]	N/A								$355,533	
Loan	N/A								$500,000	

[1] Grant amount based on existing funds from 2017-2019 grant.
[2] Recycling based on $4,000 for recyclables from Waste Management and $38,000 from baling of segregated metals, used oil, refrigerator collection and recycling of batteries.
[3] Other incomes from Trendwest contract for the cost of the Upper County Transfer Station and Wind Farm energy lease in Ryegrass facility.

Table 4.1.4. Tip Fee Forecast

		2020	2021	2022	2023	2024	2025
Tip Fee by Facility	**Unit**	**YR. 1**	**YR. 2**	**YR. 3**	**YR. 4**	**YR. 5**	**YR. 6**
Ellensburg Transfer Station	ton	$108.56	$112.36	$116.29	$120.36	$124.45	$128.68
Cle Elum Transfer Station	ton	$108.56	$112.36	$116.29	$120.36	$124.45	$128.68
Ellensburg Transfer Station C&D	ton	$54.01	$55.63	$57.30	$59.02	$61.03	$63.10
Cle Elum Transfer Station C&D	ton	$66.22	$68.21	$70.26	$72.37	$74.83	$77.37
Ryegrass CDL Site - Contractors	cubic yard	$7.43	$7.65	$7.88	$8.12	$8.40	$8.68
Ryegrass Liquid Waste	gallon	$0.15	$0.16	$0.16	$0.16	$0.17	$0.17
Yard Waste	ton	$40.72	$41.94	$43.20	$44.50	$46.01	$47.58
Street Sweeping	ton	$53.31	$54.11	$54.93	$55.75	$57.65	$59.61

4.2 Funding Mechanisms summary by percentage: In the following tables, please summarize the way programs will be funded in the key years. For each component, provide the expected percentage of the total cost met by each funding mechanism (e.g. Waste Reduction may rely on tip fees, grants, and collection rates for funding). You would provide the estimated responsibility in the table as follows: Tip fees=10%; Grants=50%; Collection Rates=40%. The mechanisms must total 100%. If components can be classified as "other," please note the programs and their appropriate mechanisms. Provide attachments as necessary.

Table 4.2.1. Funding Mechanism by Percentage

Year One, Three, Six					
Component	**Tip Fee**	**Grant**	**Revenue**	**Other**	**Total**
Waste Reduction	100%	0%	0%	0%	100%
Recycling	80%	0%	20%	0%	100%
Composting	85%	0%	15%	0%	100%
Solid Waste Collection	98%	0%	0%	2%	100%
Transfer Stations	98%	0%	0%	2%	100%
Landfill Disposal and Waste Import/Waste Export	75%	0%	0%	25%	100%
Alternative Disposal Technologies	75%	0%	0%	25%	100%
Special Waste	100%	0%	0%	0%	100%
Moderate Risk Waste	30%	70%	0%	0%	100%
Administration and Enforcement (Solid Waste only, not Public Health Enforcement)	75%	0%	0%	25%	100%
Other	100%	0%	0%	0%	100%

Assumes Years 1, 3, and 6 funding mechanisms by percentage will be similar.

4.3 References and Assumptions

Please provide any support for the information you have provided. An annual budget or similar document would be helpful.

- ***See Attachment 2 for capital and operational financing.***
- ***See Attachment 3 for 2019 budget narrative.***

4.4 Surplus Funds

Please provide information about any surplus or saved funds that may support your operations.

Any surplus or saved funds will go towards development of the new transfer station.

Attachment 1
Options Carried Forward

Table A1-1. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Waste Reduction				
Waste Reduction Policies	Track progress of the procurement policy.	x		4.2.6.1
Public Education and Outreach	Continue to implement electronic, print, and presentation recycling outreach elements including moderate risk waste (MRW).	x		4.2.6.2
Commercial Technical Assistance	Continue to offer more technical assistance and provide a case study of high-performing businesses.	x		4.2.6.3
Institutional and Nonprofit Assistance	Support community activities and local organizations to expand their programs through sponsorships and presentations.	x		4.2.6.4
Purchasing	Develop procurement policies for agencies, ensure the success of the plastic ban bag, and promote smart purchasing options.	x		4.2.6.5
Recycling				
Collection	Work with haulers and cities to provide recycling services that support the viability of those programs and are economically feasible based on market conditions.	x		4.3.12.1
Commercial Programs	Provide technical assistance to large businesses. Target agricultural activities. Develop a recognition program to increase recycling.	x		4.3.12.2
Large Venue and Special Event Recycling	Continue reviewing event plans and develop best management practices for event planners.	x		4.3.12.3
Self-Haul	Provide recycling services that support the viability of those programs and are economically feasible based on market conditions.	x		4.3.12.4
Rate Structure	Maintain the PAYT structure. Evaluate if rate changes are necessary to adequately cover the cost of recycling.	x		4.3.12.5
Recycling Incentives	Assist organizations in applying for grants. Encourage use of the recycling trailer.	x		4.3.12.6
Evaluation and Monitoring	Conduct annual assessment of progress meeting the goals and objectives of the Plan.	x		4.3.12.7
Identify Funding and Other Nonmonetary Resources	Identify and pursue funding and nonmonetary resources for developing and implementing recycling programs and promotion.	x		4.3.12.8
Formal Working Relationships	Encourage the establishment of formal working relationships between the County and other agencies, institutions, and organizations.	x		4.3.12.9
Sustainable Community	Promote complementary programs like green building and food waste reduction.	x		4.3.12.10
Evaluate Expansion of Programs	Evaluate the expansion of programs to target specific waste generators; evaluate curbside recycling.	x		4.3.12.11
Public Outreach and Education	Continue existing outreach and expand program resources online.	x		4.3.12.12
Composting				
Composting Public Education	Continue to develop, distribute, and post composting	x		4.7.4.1

Table A1-1. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
and Outreach	education materials. Expand the Master Composter program and offer additional workshops.			
Compost Facility	Develop new Compost Facility at the new transfer station that is being developed.		x	4.4.4.2
Vermicomposting	Continue composting workshops and recruit small-scale pilot composting projects.	x		4.4.4.3
Residential Yard Waste Collection Programs	Continue existing green waste collection programs and evaluate expanding curbside service.	x		4.4.4.4
Commercial Collection of Organics	Conduct a feasibility study to evaluate collection of preconsumer food waste.	x		4.4.4.5
Marketing of Finished Compost Products	Evaluate the marketing of finished compost.	x		4.4.4.6
Tiered Rate Structure for Organics	Review the green waste tipping fee and implement a higher charge for contaminated green waste.	x		4.4.4.7
Solid Waste Collection				
Routing of Collected Waste Through County Facilities	Continue to route all municipal solid waste to the County.	x		5.5.1
Curbside Recycling Collection	Evaluate curbside program outside served areas.	x		5.5.2
Review Collection Contracts	Periodically review hauler contracts to confirm obligations are met. Review complaints to confirm resolution is met and fees are paid.	x		5.5.3
Funding Sources	Identify and procure additional funding sources to meet minimum level of service requirements.	x		5.5.5
Transfer Stations				
Replace Ellensburg Transfer Station	Complete the design, permitting, and construction phase of the Ellensburg Transfer Station Replacement project.		x - 2022	6.1.4.1
Use of Transfer Stations	Continue to route all municipal solid waste through facilities within the County and ensure collection of program fees.	x		6.1.4.2
Landfill Disposal				
Long-Term Disposal Opportunities	Evaluate disposal opportunities like waste-to-energy (WTE) and rail transport to other landfills or WTE.	x		6.3.4.1
Contractual Arrangements	Evaluate landfills with lower tipping rates or long-term pricing; evaluate the escalation rate for the transfer stations to manage future budgets.	x		6.3.4.2
Alternative Disposal Technologies				
Future Consideration and Feasibility	Review the feasibility of developing a WTE facility in the County.	x		6.4.2.1
Alternative Energy Technologies	Track advancements in alternative technologies.	x		6.4.2.2
Special Waste				
Recovery of Construction and Demolition (C&D)C&D Debris	Evaluate the recovery of debris at Ryegrass and the two transfer stations with private recyclers.	x		7.2.5.1
Materials Exchange Program	Continue working with nonprofit organizations to promote materials exchange and reuse stores for	x		7.2.5.2

Table A1-1. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
	C&D material.			
Evaluate Flow Control Measures	Write a flow control ordinance to keep all solid waste within the County.	x		7.2.5.3
Agricultural Waste				
Evaluate Opportunities for Beneficial Reuse of Biomass	Maintain biomass as an option; review feasibility of developing biomass facilities in the County.	x		7.3.3.1
Agricultural Pests and Other Nuisances	Operate within the apple maggot quarantine rules. Enforce commercial and residential onsite solid waste storage.		X 2021	7.3.3.2
Tires				
Public Education Programs for Tires	Provide the public lists of facilities that accept tires with the web and apps; target education of companies with commercial fleets.	x		7.4.3.1
Evaluate Diversion Options for Tires	Evaluate whether tire diversion options are viable.	x		7.4.3.2
Continue Current Tire Ban	Continue to promote the tire ban from landfills.	x		7.4.3.3
Biomedical Waste				
Public Education of Residential Medical Waste	Develop and distribute education materials for correct management of residential medical waste.	x		7.5.3.1
Monitoring municipal solid waste (MSW) for Biomedical Waste	Encourage the Health Department to monitor the MSW program.	x		7.5.3.2
Pharmaceutical Waste	Evaluate options for drop-off sites. Support private efforts for take-back programs.	x		7.5.3.3
Veterinary Waste				
Large Animal Disposal	Support development of programs for large animal disposal alternatives.	x		7.6.4.1
Education and Outreach - Large Animal	Provide information on County disposal options including proper composting techniques onsite.	x		7.6.4.2
Petroleum-Contaminated Soils				
In-County PCS Site	Support the development a site that can convert remediated soil to daily cover.	x		7.7.3.1
Street Sweepings Management	Evaluate management of street sweepings to become remediated and then used as daily cover.	x		7.7.3.2
Feasibility Study for PCS Management	Conduct a feasibility study about the options to handle PCS effectively.	x		7.7.3.3
Import PCS	Explore the import of treated PCS for daily cover at Ryegrass.	x		7.7.3.4
Asbestos				
Public Education on Asbestos-Containing Materials	Allow current private solid waste hauler to inform the public on proper handling of ACM.	x		7.8.3.1
Liquid Waste				
Catch Basin Liquids	Evaluate the feasibility of constructing of a new lagoon.	x		7.9.4.1

Table A1-1. Options Carried Forward

Option	Summary	Existing Option	New Option	Chapter Location in SWMP
Electronic Waste				
Monitor and Evaluate E-Waste Program	Submit annual Satisfaction Report summarizing program.	x		7.10.3.1
E-Waste Education	Promote the drop-off locations for educational materials from the E-Cycle Toolkit.	x		7.10.3.2
Moderate Risk Waste				
MRW Facilities	Expand existing MRW facilities to accommodate more waste types. Increase participation by hosting regular business hours.	x		8.7.1
Commercial Outreach, Education, and Technical Assistance	Implement outreach education and technical assistance to commercial entities.	x		8.7.2
Funding for MRW Programs	Seek additional funding sources from the State as well as increasing handling and disposal fees.	x		8.7.3
Administration and Enforcement				
Staffing and Resources	Utilize a cooperative approach to staffing and program evaluation with the SWAC.	x		9.3.2.1
Administration Funding	Explore additional grant funding.	x		9.3.2.2
Other Long-Term Needs	Consider other policies between Plan updates.	x		9.3.2.3
New Regulations and Ordinance Requirements	Update other policies when regulations change between Plan updates.	x		9.3.2.4
Permit Procedures, Policies, and Fee Structures	County Health Department to continue to implement relevant policies, procedures, and fees for solid waste facilities.	x		9.3.2.5
Permit Review	SWAC to review all new solid waste facility permit requests.	x		9.3.2.6
Emergency Debris Management Plan	Connect SWMP with Emergency Debris Management Plan.		x - 2021	9.3.2.7

Attachment 2
Six-Year Capital and Operational Financing

		2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)
Waste Reduction							
	Existing Programs	18,540	19,096	19,669	20,259	20,867	21,493
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Waste Reduction		18,540	19,096	19,669	20,259	20,867	21,493
Recycling							
	Existing Programs	77,250	79,568	81,955	84,413	117,846	121,381
	New Programs	0	0	30,000	30,000	0	0
	Capital Expenditures	0	0	Included with Transfer Station	Included with Transfer Station	0	0
Subtotal, Recycling		77,250	79,568	111,955	114,413	117,846	121,381
Composting							
	Existing Programs*	173,500	178,750	184,150 50,000	189,650	195,350	201,211
	New Programs	0	0	New Compost Facility operations	350,000	0	0
	Capital Expenditures	0	0	Included with Transfer Station	Included with Transfer Station	0	0
Subtotal, Composting		173,500	178,750	234,150	539,650	195,350	201,211
Solid Waste Collection							
	Existing Programs	7,919	8,157	8,401	8,653	8,913	9,180
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Solid Waste Collection		7,919	8,157	8,401	8,653	8,913	9,180
Transfer Stations							
	Existing Programs	335,750	352,000	387,800	426,000	469,000	483,070
	New Programs	0	0 10,000,000	0 10,000,000	100,000	0	0
	Capital Expenditures	500,000	New Transfer station	New Transfer Station	0	0	0
Subtotal, Transfer Stations		835,750	10,352,000	10,387,800	526,000	469,000	483,070
Landfill Disposal and Waste Import/Waste Export							
	Existing Programs	2,391,453	2,463,176	2,537,071	2,613,183	2,691,578	2,769,6342
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Waste Import/Export		2,391,453	2,463,176	2,537,071	2,613,183	2,691,578	2,769,634
Alternative Disposal Technologies							
	Existing Programs	1,910	1,968	2,027	2,088	2,150	2,215

	2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Alternative Disposal Technologies	1,910	1,968	2,027	2,088	2,150	2,215
Special Waste						
Construction and Demolition Debris						
Existing Programs	245,000	275,000	250,000	257,500	265,000	272,553
New Programs	0	0	0	0	0	0
Capital Expenditures		75000 Open new area	0	0	0	0
Subtotal, Construction and Demolition Debris	245,000	350,000	250,000	257,500	265,000	272,553
Agricultural Waste						
Existing Programs	1,910	1,968	2,000	2,058	2,118	2,179
New Programs	0	10,000	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Agricultural Waste	1,910	11,968	2,000	2,058	2,118	2,179
Tires						
Existing Programs	33,000	33,500	34,000	34,000	35,000	35,525
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Tires	33,000	33,500	34,000	34,000	35,000	35,525
Biomedical Waste						
Existing Programs	5,078	5,230	5,387	5,548	5,715	5,886
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Biomedical Waste	5,078	5,230	5,387	5,548	5,715	5,886
Veterinary Waste						
Existing Programs	5,657	5,827	6,002	6,182	6,367	6,558
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Veterinary Waste	5,657	5,827	6,002	6,182	6,367	6,558
Petroleum-Contaminated Soils						
Existing Programs	46,000	46,000	46,000	0	0	0
New Programs	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Subtotal, Petroleum-Contaminated Soils	46,000	46,000	46,000	0	0	0
Asbestos						
Existing Programs	1,775	1,802	1,829	1,856	1,884	1,913

		2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
	Subtotal, Asbestos	1,775	1,802	1,829	1,856	1,884	1,913
Liquid Waste							
	Existing Programs	184,500	190,000	190,000	195,000	200,800	206,623
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
	Subtotal, Liquid Waste	184,500	190,000	190,000	195,000	200,800	206,623
Electronic Waste							
	Existing Programs	4,498	4,633	4,772	4,915	5,063	5,214
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Electronic Waste		4,498	4,633	4,772	4,915	5,063	5,214
Moderate Risk Waste							
	Existing Programs	90,000	92,700	95,000	98,000	100,000	102,000
	New Programs	0	0	15,000	10,000	0	0
	Capital Expenditures	0	0	Included in new Transfer Station	150,000 Clean up old Site	0	0
Subtotal, Moderate Risk Waste		90,000	92,700	110,000	158,000	100,000	102,000
Administration and Enforcement (Solid Waste only, not Public Health Enforcement)							
	Existing Programs	747,000	770,375	793,400	817,000	841,806	866,218
	New Programs	0	10,000	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Administration and Enforcement		747,000	780,375	793,400	817,000	841,806	866,218
Other							
	Existing Programs	20,840	21,153	21,470	21,792	22,119	22,451
	New Programs	0	0	0	0	0	0
	Capital Expenditures	0	0	0	0	0	0
Subtotal, Other		20,840	21,153	21,470	21,792	22,119	22,451
	GRAND TOTAL	***4,891,581***	***14,645,901***	***14,765,932***	***5,428,098***	***4,991,575***	***5,135,304***

Attachment 3
2019 Budget Narrative

KITTITAS COUNTY SOLID WASTE
2019 BUDGET NARRATIVE

	2015	2016	2017	2018	2019 Preliminary
Budget Totals	3,047,895.00	4,617,537.00	4,765,915	5,164,143	5,192,759
# of Personnel full time	**8**	**8**	**8**	**8**	**8**
# of Personnel part time	**2**	**2**	**2**	**4**	**4**
#of Personnel Seasonal	**5**	**5**	**5**	**5**	**5**

Kittitas County Solid Waste operates multiple facilities and programs including two Transfer Stations and Recycling Facilities, two Moderate Risk Waste Facilities and a Compost Facility to provide a convenient, cost effective and safe drop off collection system for the residents of Kittitas County.

Not as visible to the County residents Kittitas County Solid Waste also operates, monitors and maintains additional facilities which include a Limited Purpose Landfill (CDL), Liquid Waste Lagoons, and a closed MSW Landfill.

In addition to operating facilities Kittitas County Solid Waste also provides education to the public, and schools on disposal options, waste reduction, recycling, composting and alternatives to toxic substances, along with technical assistance to businesses.

The Solid Waste Main office handles the billing and accounts for all the facilities. In 2010, Solid Waste managed 693 accounts. In 2018, we manage 975 accounts, and process approximately $310,000 per month in payments on accounts. The office also handles the household fluorescent bulb recycling program, battery collection, syringe collection, and hazardous waste appointments scheduled and unscheduled drop ins. The Transfer Stations handle approximately $115,000 per month in cash and checks.

In 2016 the Solid Waste Department started a feasibility study to evaluate relocating the Ellensburg Transfer Station. The study was completed and the siting process culminated with the recommendation to purchase property located on Highway 97.

In 2018 we have acquired the property on Highway 97 along with the water rights for the property. Since the acquisition of the property we have started the wetland inventory and the archeological study which are on schedule to be completed by the end of 2018.

In 2018 we added two additional part time positions to assist with operations. One was a 30 hour a week operator/mechanic to help with preventive maintenance on equipment at both the Compost facility and the Ryegrass landfill. We also added a part time scale house attendant to work at Ryegrass and the other scale houses as needed to provide additional coverage.

GOALS FOR 2019

In 2019 we will be working with the City of Ellensburg and the Health Department on permitting the New Ellensburg facility. In 2018 Solid Waste applied for and received a $1,000,000 loan from the Public Works Trust fund to help cover the cost of permitting and design of the new facility. The loan has one outstanding item which is the County being in compliance with GMA by January 4, 2019. We are working with CDS to track the progress of this item.

In addition in 2019 we are excited to work with Public Works to bring City of Cle Elum water to the Cle Elum transfer station. This water line will tie into our existing system and provide fire flow for the site. We will also be working with Public Works and the State to add a turn lane off of Highway 903 to provide additional queuing for the Upper County Transfer Station. Both of these projects will help improve safety at our facility.

In 2019 we will be working with SWAC to develop a covered load Ordinance to bring forward to the Board for review and adoption. This will assist with the reduction of litter on the County roads.

Solid Waste Department and SWAC will also be looking at bringing forward level of service areas in the County which would allow for curbside recycling.

SOLID WASTE REVENUE

Revenue	Actual 2017	As of August 30, 2018	Budget 2019
Tip/garbage	**3,740,239**	**2,284,103**	**3,617,250**
Tip fee/ CDL	**321,144**	**121,989**	**300,000**
Tip fee/ Yard Waste	**104,471**	**59330**	**107976**
Tip Fee/Liquid Waste Lagoons	**$179,281**	**112,251**	**195000**
Grants	**105,828**	**30,593**	**75000**
Recycling	**56,734**	**19,129**	**42000**
Other Incomes	**249,989**	**354,733**	**355,533**
Loan			**500,000**
Total	**4,757,686.00**	**2,982,128**	**5,192,759.00**

1. **Tipping Fee - Garbage** - The current tipping fee is$103.35.per ton, based on the anticipated 35000 tons of garbage to be collected in 2019 our revenue is anticipated at being $3,617,250.00 Of the 103.35 per ton, $1.55 per ton is set aside for Ryegrass Post-Closure

Costs, $61.72 per ton for contractor operations, and an average $1.65 per ton for fuel surcharge leaving a balance of $38.43 for programs.

2. **Tipping Fee - Tires** - This budget category retains the current tipping fee of $2.00 per passenger tire, or $200.00 per ton. Estimating 130 tons of tires for collection in 2018.

3. **Tipping Fee - Yardwaste** - This tipping fee for yard waste disposal is retained at $37.86 per ton with $22.53 per ton going to the contractor to haul yard waste from the Upper County transfer station to Ellensburg leaving $ 15.33 per ton for Solid Waste Compost Facility operations costs. It is estimated that with the City of Ellensburg curbside yardwaste program and continued collection at each of the transfer stations that 2,725 tons of yard waste will be collected.

4. **Sale of Compost-** Tip fee for Compost Varies from $60.00 per ton to $30.00 per ton depending on Volume.

5. **Tipping Fee - CDL** - The tipping fee for CDL remains the same at $7.00 per yard for loads delivered to Ryegrass and $50.15 per ton at the Ellensburg Transfer Station and $61.51 at the Cle Elum Transfer Station. The Contractor is paid $17.06 per ton from the Ellensburg Transfer Station and $28.42 per ton from the Cle Elum Transfer Station. This category is based on receiving 15,000 yards at Ryegrass, 2000 tons at the Ellensburg Transfer Station and 900 tons at the Cle Elum Transfer Station.

6. **Liquid Waste Lagoons** - Revenue is based on 1,200,000 gallons of liquid waste at 15 cents per gallon.

7. **Recyclable Materials** - This category is based on receiving $4,000.00 for recyclables from Waste Management and an additional $38,000.00 from baling of segregated metals, used oil, refrigerator collection and recycling of batteries.

8. **DOE Grant - CPG** - In 2019 we are unsure what level of grant funding to anticipate from the state. We have funding left from our 2017-2019 grant to start the year. Over the past bienniums our funding has been trending downward. This funding has been historically used to fund our Moderate risk waste programs and our outreach and educations programs.

9. **DOE Litter Grant**- This is the First year of a two-year grant program. This grant is funded 100% from DOE with no matching fund funds required form the County. The grant started July 1, 2017 and will end June 30, 2019.

10. **Trendwest Contract** – Suncadia, through contract, provides 61.6% of the cost of the Upper County Transfer Station to cover the original construction cost.

11. **Wind Energy Lease**- The payments received on this lease are based on power generated at the Wind Farm located on the Ryegrass facility. On average we receive $62,000 in revenue from the lease.

2019 NEW EXPENSE REQUEST

There are seven new requests which are budgeted and funded in our 2019 preliminary budget.

1. New Transfer station permitting and design.
2. Water wagon for the liquid waste lagoon.
3. Litter fence for the Limited purpose landfill
4. Paving of the Main office parking lot.
5. Add second computer to Cle Elum Scale House
6. Portable Storage Shed for solid waste office for storage of light bulbs collected as part of the light cycle Washington program.
7. A wage adjustment for Lisa Lawrence, Assistance Director. Lisa is a valued County employee with 22 years longevity. I have budgeted for a 4% increase $2384.33 in addition to the 3% percent being budgeted for all non-union employees.

Appendix G
SEPA Checklist

SEPA Environmental Checklist (WAC 197-11-960)

Kittitas County Solid Waste Management Plan

Agency Review Draft

July 2019

Kittitas County, Washington

Kittitas County Transfer Station Relocation Project

Project No:	684127CH.03.02
Document Title:	SEPA Environmental Checklist (WAC 197-11-960) Kittitas County Transfer Station Relocation Project
Document No.:	AX1205181215PDX
Revision:	Agency Review Draft
Date:	July 2019
Client Name:	Kittitas County, Washington
Project Manager:	Lyndsey Lopez
Author:	Kimberly Varner Wetzel

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Contents

SEPA Environmental Checklist (WAC 197-11-960)
Kittitas County Solid Waste Management Plan

Purpose of Checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for Applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use “not applicable” or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of Checklist for Nonproject Proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the supplemental sheet for nonproject actions (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for nonprojects) questions in Part B – Environmental Elements – that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable:

Kittitas County Solid Waste Management Plan

2. Name of applicant:

Kittitas County Solid Waste Department

3. Address and phone number of applicant and contact person:

Patti Johnson, Director
Kittitas County Solid Waste
925 Industrial Way
Ellensburg, WA
(509) 962-7577

4. Date checklist prepared:

March 2019

5. Agency requesting checklist:

City of Ellensburg, Washington

6. Proposed timing or schedule (including phasing, if applicable):

The SWMP planning horizon is 2020-2040

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

This plan will be updated in 6 years.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Environmental review will occur on a per-project basis.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Not applicable to this proposal.

10. List any government approvals or permits that will be needed for your proposal, if known.

The SWMP will be adopted by the Kittitas County Commission after the SEPA review is complete.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The Kittitas County Solid Waste Management Plan provides a guide for the short- and long-term management of the solid waste systems within the planning area. The Plan documents the existing solid waste programs and facilities, describes the opportunities for improvement to the existing solid waste

system, evaluates alternatives, recommends programs and facilities that will achieve the County's goals, and describes the strategy for implementing the recommended programs. The Plan's 20-year planning period is from 2020-2040. The 6-year implementation schedule was developed for the years 2020-2026.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Kittitas County, Washington

B. Environmental Elements

1. Earth

a. General description of the site:

Varies throughout Kittitas County.

b. What is the steepest slope on the site (approximate percent slope)?

Varies throughout Kittitas County.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The geology of Kittitas County varies. Volcanic and old marine sedimentary rocks occur mostly in western portions of the County. The eastern half is chiefly composed of younger sedimentary units and basalt flows. Valleys have deep glacial and alluvial deposits, with some areas of wind-deposited soils. Depth to groundwater is widely variable, reflecting the complexity of the geologic formations in Kittitas County.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Does not apply.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Does not apply.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Does not apply.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Does not apply.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Does not apply.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Does not apply.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Does not apply.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Does not apply.

3. Water

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The major bodies of water in Kittitas County include Lake Keeche (which flows into the Yakima River), Lake Kachess, Lake Easton, and Lake Cle Elum (which flows into the Cle Elum River). There are numerous smaller lakes in the Cascade Range on the western edge of the County.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Does not apply.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Does not apply.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Does not apply.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Does not apply.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Does not apply.

b. Groundwater:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Does not apply.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals…; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Does not apply.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Does not apply.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Does not apply.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Does not apply.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Does not apply.

4. Plants

a. Check the types of vegetation found on the site:

Does not apply.

b. What kind and amount of vegetation will be removed or altered?

Does not apply.

c. List threatened and endangered species known to be on or near the site.

Does not apply.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Does not apply.

e. List all noxious weeds and invasive species known to be on or near the site.

Does not apply.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Does not apply.

b. List any threatened and endangered species known to be on or near the site.

Does not apply.

c. Is the site part of a migration route? If so, explain.

Does not apply.

d. Proposed measures to preserve or enhance wildlife, if any:

Does not apply.

e. List any invasive animal species known to be on or near the site.

Does not apply.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Does not apply.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Does not apply.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Does not apply.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

The County operates two Moderate Risk Waste (MRW) facilities. The facility sites are operated by trained County personnel. Residents drop off waste materials at the sites for recycling or proper disposal. Materials are stored temporarily onsite in enclosed containers. The facilities incorporate various spill containment measures. Exposure to the general public is limited.

1) Describe any known or possible contamination at the site from present or past uses.

County Fire Department personnel would respond to emergencies at the MRW facilities.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

The MRW facilities incorporate various spill control and containment measures.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Does not apply.

4) Describe special emergency services that might be required.

Does not apply.

5) Proposed measures to reduce or control environmental health hazards, if any:

Does not apply.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Does not apply.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Does not apply.

3) Proposed measures to reduce or control noise impacts, if any:

Does not apply.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Does not apply.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Does not apply.

1) **Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:**

Does not apply.

c. Describe any structures on the site.

Does not apply.

d. Will any structures be demolished? If so, what?

Does not apply.

e. What is the current zoning classification of the site?

Does not apply.

f. What is the current comprehensive plan designation of the site?

Does not apply.

g. If applicable, what is the current shoreline master program designation of the site?

Does not apply.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Does not apply.

i. Approximately how many people would reside or work in the completed project?

Does not apply.

j. Approximately how many people would the completed project displace?

Does not apply.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Does not apply.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

Does not apply.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Does not apply.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Does not apply.

c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Does not apply.

b. What views in the immediate vicinity would be altered or obstructed?

Does not apply.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Does not apply.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Does not apply.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Does not apply.

c. What existing off-site sources of light or glare may affect your proposal?

Does not apply.

d. Proposed measures to reduce or control light and glare impacts, if any:

Does not apply.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Does not apply.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Does not apply.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Does not apply.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.

Does not apply.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Does not apply.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Does not apply.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Does not apply.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Does not apply.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Does not apply.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Does not apply.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Does not apply.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Does not apply.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Does not apply.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

Does not apply.

h. Proposed measures to reduce or control transportation impacts, if any:

Does not apply.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

Does not apply.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None

16. Utilities

a. Circle utilities currently available at the site:

Does not apply.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Does not apply.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of Signee: _____

Position and Agency/Organization: _____

Date Submitted: _____

D. Supplemental Sheet for Nonproject Actions

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1) **How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

   Does not apply.

   Proposed measures to avoid or reduce such increases are:

   Does not apply.

2) **How would the proposal be likely to affect plants, animals, fish, or marine life?**

   Does not apply.

   Proposed measures to protect or conserve plants, animals, fish, or marine life are:

   Does not apply.

3) **How would the proposal be likely to deplete energy or natural resources?**

   Does not apply.

   Proposed measures to protect or conserve energy and natural resources are:

   Does not apply.

4) **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

   Does not apply.

   Proposed measures to protect such resources or to avoid or reduce impacts are:

   Does not apply.

5) **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

   Does not apply.

   Proposed measures to avoid or reduce shoreline and land use impacts are:

   Does not apply.

6) **How would the proposal be likely to increase demands on transportation or public services and utilities?**

   Does not apply.

   Proposed measures to reduce or respond to such demand(s) are:

   Does not apply.

7) **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

The Kittitas County Solid Waste Management Plan has been prepared in compliance with local and state laws and regulations governing solid waste management and is based on published guidelines by the Washington Department of Ecology.

Appendix H
Resolutions of Adoption