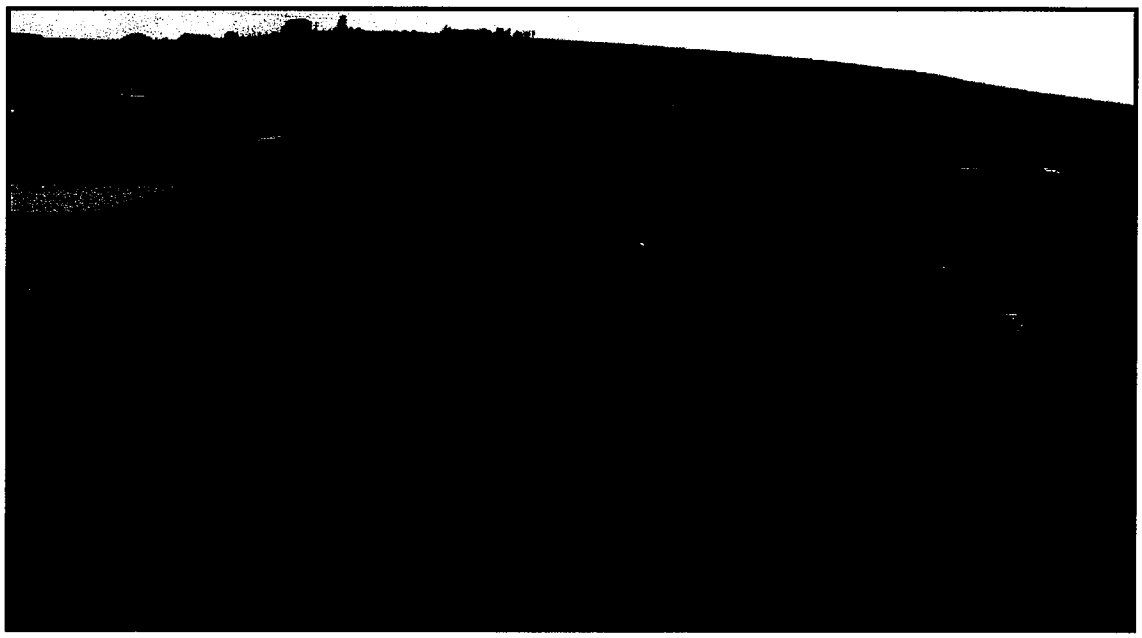
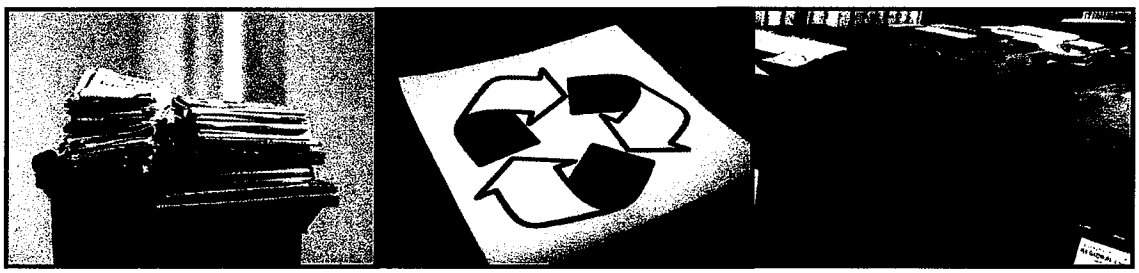
AGENCY REVIEW DRAFT - PRELIMINARY

# *Asotin County 2010 Solid Waste Management Planning Package*





Prepared by

CH2MHILL

May 2010

ASOTIN COUNTY LANDFILL
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Phone: (509) 758-1965
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RECEIVED
JUN 30 2010
DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE

June 22, 2010

James Wavada
Environmental Planner
Washington State Department of Ecology
Eastern Regional Office - Spokane
4601 N. Monroe St.
Spokane, WA 99205-1295

Subject: Asotin County Solid Waste Management Plan 2010 Update – Preliminary Agency Review Request

Dear Mr. Wavada:

Please find enclosed the 2010 Solid Waste Planning Package for Asotin County. Asotin County is seeking review and input from Ecology (and WUTC) on this Preliminary Agency Review Draft.

This 2010 plan was prepared pursuant to the Revised Code of Washington (RCW) Chapter 70.95 – *Solid Waste Management – Recycling and Reduction*, and provides data through calendar year 2009. This updated SWMP also aligns with current solid waste management practices and state laws applicable to the landfill facility, including the *Solid Waste Handling Standards*, WAC 173-350 and the *Criteria for Municipal Solid Waste Landfills*, WAC 173-351.

The 2010 Solid Waste Planning Package includes (tabbed sections):

- Solid Waste Planning Checklist;
- 2010 Solid Waste Management Plan (SWMP) Update;
- WUTC Cost Assessment Questionnaire;
- SEPA Checklist;
- Interlocal Agreements; and
- Sample Resolution Adoption Forms.

Please also contact me (509-758-1965) if you have any questions.

Sincerely,

Stephen L. Becker
Solid Waste Supervisor

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# *Asotin County*
# *2010 Solid Waste Planning Package*

| | |
|---|---|
| Tab 1 | Solid Waste Planning Checklist* |
| Tab 2 | SWMP – 2010 Update |
| Tab 3 | WUTC Cost Assessment Questionnaire |
| Tab 4 | SEPA Checklist |
| Tab 5 | Interlocal Agreements |
| Tab 6 | Sample Resolution Adoption Forms |

*To be completed following SWAC review and before issuance to Ecology.

# Solid Waste Planning Checklist

## Minimum Submittal Packet for <u>preliminary review</u>:

*(45 days for WUTC, 120 days for Ecology)*

- ☒ Five (5) copies of Plan draft
  ***5 Copies Provided****
- ☒ Letter of transmittal requesting review
  ***Cover Letter Provided****
- ☒ Evidence of SWAC participation *(e.g. plan element describing the involvement process or a letter from the SWAC)*
  ***SWAC Participation is described in the Plan – refer to Section 1.2****
- ☒ Interlocal Agreements for implementing jurisdictions
  ***Interlocal Agreements provided – see Tab****
- ☒ Resolutions of Adoption
  ** ***Samples provided in Package – see Tab****
- ☒ WUTC cost assessments
  ***WUTC Questionnaire provided in Package – see Tab****
- ☒ SEPA documentation
  ***SEPA Checklist provided in Package – see Tab****

## Beyond Waste Review Criteria

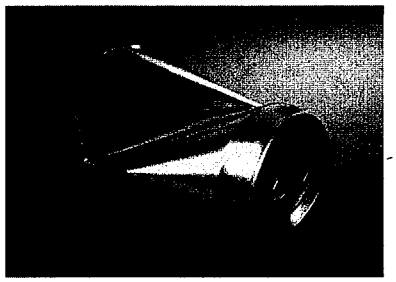
- ☒ Vision statement that includes the three E's of sustainability
  ***Provided in the Plan – refer to Mission/Vision Statement and Plan Summary Section of the Plan****
- ☒ Indicators and metrics for measuring progress toward goals
  ***Provided throughout the Plan****
- ☒ Address impact of plan on commerce that contributes to waste generation
  ***Discussed throughout the Plan****
- ☒ Address impacts of different parts of the system on each other
  ***Discussed throughout the Plan****

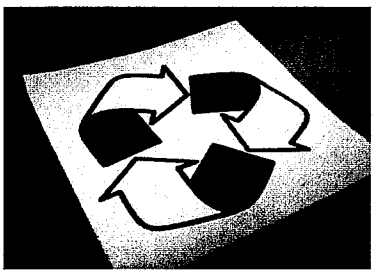
**Final Approval** *(45 days for Ecology review and approval or appeal)* – **N/A**

- ☐ Three copies of final draft plan
- ☐ Transmittal Letter requesting Final Plan Review
- ☐ All SEPA documentation
- ☐ Summary of changes from the draft plan submittal
- ☐ Copies of all interlocals agreements
- ☐ Resolutions of Adoption from all participating jurisdictions

*AGENCY REVIEW DRAFT – PRELIMINARY*

# Asotin County Solid Waste Management Plan 2010 Update





Prepared by

CH2MHILL

May 2010

# Acknowledgements

Asotin County wishes to acknowledge the following people who contributed their time and effort to the publishing of this Solid Waste Management Plan for 2009.

**Asotin County Board of County Commissioners:**

Doug Mattoon

R.E. (Buck) Lane

Don Brown

**Solid Waste Advisory Committee (SWAC) Members:**

| Name | Company/Affiliation |
|---|---|
| Mark Armstrong | Lewis Clark Recyclers, Inc. |
| Stephen Becker | Asotin County, Solid Waste Supervisor |
| Matt Horan | Lewiston Pepsi Company |
| Dan Johnson | City of Lewiston, Solid Waste Coordinator |
| John Kirkland | City of Asotin |
| Jim Martin | City of Clarkston, Public Works Director |
| James Naslund | Naslund Disposal |
| Karst Riggers | Asotin County, Building and Planning |
| Jaun Caballero | Asotin County Health District |
| Jim Wavada | Washington Department of Ecology, Eastern Regional Office |

# Mission/Vision Statement and Plan Summary

## Mission/Vision Statement

The mission of Asotin County (County) is to protect public health and the environment through efficient, effective and fiscally responsible practices while also providing stable and affordable waste management services for the community and its solid waste partners.

The County's vision is to provide collection and disposal services in a manner that will preserve the environment for future generations.

## Plan Summary

This Solid Waste Management Plan (SWMP) is an update to the County's *1973 Comprehensive Solid Waste Management Plan for Asotin County* and its addendums. It establishes a waste management framework that will guide the County and its solid waste partners in the years ahead.

The goal of this planning effort is to develop a plan that is financially achievable for its residents, maximizes waste diversion and recycling, and is environmentally sustainable. The objectives of the solid waste program are to:

- Maintain public health and safety and protect the environment
- Provide reliable and sustainable waste collection, recycling, transfer, and disposal systems for management of solid waste.
- Support the recovery of reusable and recyclable resources from the waste stream.
- Maintain the ACRL, a Subtitle D landfill, in accordance with applicable federal, state, and local health regulations.
- Control system costs and continue to keep disposal rates stable and affordable for the communities that are served by the ACRL

These fundamental objectives drive the planning for each facet of the ACRL solid waste program—from promotion of waste reduction and recycling to planning for long-term waste management. The common theme in the SWMP is to build upon the program's existing infrastructure and past successes to shape the future.

While this plan presents a framework for the future, it is not intended to be a work plan for specific policies, rate setting, programs, or capital improvements. Implementation of specific recommendations provided in the plan will be accomplished through specific planning efforts at the County and waste partner's levels, which in some cases, is dependent on grant funding assistance. For example, the County is currently underway in preparation of a strategic plan for future waste management options once the ACRL is closed under its current, permitted configuration. That planning effort will help shape the framework for the

future waste program in the County (and its waste partners) with consideration of permitting, design and financial implications.

This SWMP is organized to guide the reader through the solid waste planning process. Note that all figures discussed within the body of the plan are compiled and provided at the end of the plan as an attachment. Chapter 1 presents an overview of the planning process at the area government's level and assistance from the Solid Waste Advisory Committee (SWAC), an overview of the planning history in the area, and the plan review schedule, policies and objectives. Chapter 2 provides the reader with additional background information on the topography and geologic and hydrogeologic setting in the County and at the ACRL.

Chapters 3 through 10 discuss the various facets of the solid waste program and are generally organized under each topic starting with a discussion of the existing conditions/practices, followed by the needs and opportunities, evaluation of options, and recommendation and implementation of the options. Chapters 3 through 10 include:

- Chapter 3—Waste Characterization and Generators
- Chapter 4—Waste Reduction and Recycling
- Chapter 5—Solid Waste Programs (Energy Recovery and Incineration, Waste Collection, Transfer of Wastes, Waste Importation/Exportation)
- Chapter 6—Landfilling and Volume Reduction
- Chapter 7—Special Wastes
- Chapter 8—Moderate Risk Waste Management
- Chapter 9—Enforcement and Administration (Disposal System Administration, SWAC, Enforcement, and Financing).
- Chapter 10—Summary of Recommendations and Implementation Schedule

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**Figures (Located at the end of the document)**

# Acronyms

| | |
|---|---|
| ACHD | Asotin County Health District |
| ACRL | Asotin County Regional Landfill |
| ADC | Alternative daily cover (materials) |
| BOCC | Board of County Commissioners |
| CFC | Chlorofluorocarbons (refrigerant gas) |
| County | Asotin County |
| CPG | Coordinated Prevention Grant |
| CMSWL | Criteria for Municipal Solid Waste Landfills (Chapter 173-351 WAC) |
| Ecology | Washington State Department of Ecology |
| EPA | U.S. Environmental Protection Agency |
| GMA | Growth Management Act |
| HCI | Howard Consultants, Inc. |
| HDPE | High-density polyethylene |
| IPC | Intermediate Processing Center |
| LCRI | Lewis Clark Recyclers, Inc. |
| MRW | Moderate risk waste |
| MSW | Municipal solid waste |
| NWS | National Weather Service |
| PWTF | Public Works Trust Fund |
| PUD | Public Utility District |
| RCW | Revised Code of Washington (laws) |
| RDF | Refuse Derived Fuel |
| SDI | Sanitary Disposal, Inc. |
| SEPA | State Environmental Policy Act |
| SWAC | Solid Waste Advisory Committee |
| SWMP | Solid Waste Management Plan |
| SWOFM | State of Washington Office of Financial Management |
| WAC | Washington Administrative Code (regulations) |
| WUTC | Washington State Utilities and Transportation Commission |
| WWTP | Wastewater Treatment Plant |

CHAPTER 1

# Planning Process

## 1.1 Introduction

This 2010 Solid Waste Management Plan (SWMP) update for Asotin County, Washington is being prepared pursuant to the Revised Code of Washington (RCW) Chapter 70.95 - *Solid Waste Management - Recycling and Reduction,* and provides data through calendar year 2009. The solid waste management act requires local governments in Washington (such as Asotin County) to develop "comprehensive" solid waste management plans with periodic updates. This updated SWMP also aligns with current solid waste management practices and state laws including the *Solid Waste Handling Standards,* WAC 173-350 and the *Criteria for Municipal Solid Waste Landfills,* WAC 173-351. Additionally, the plan includes direction on how to update the plan that not only satisfies the statutory requirements, but also provides an effective framework for the operation and progression of local solid waste systems.

At the time this plan was prepared, Ecology had released the *Draft Guidelines for the Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions, Publication #09-07-072* (Ecology, October 2009). Although these guidelines had not been published as final, they were reviewed during the preparation of this SWMP update for consistency and applicability.

## 1.2 Planning Area Governments and Solid Waste Advisory Committee Membership

The SWMP is intended to include the communities in Asotin County (City of Asotin, City of Clarkston, and unincorporated Asotin County) and its solid waste partners (City of Pomeroy and Garfield County in Washington, and the City of Lewiston and Nez Perce County in Idaho). Asotin County (the County) is responsible for providing solid waste disposal for both the Washington and Idaho partners and presently operates the Asotin County Regional Landfill (ACRL), which is a permitted Subtitle D municipal solid waste (MSW) landfill located within the County. The County is the lead entity for preparation of the SWMP update and all participants are included in its application. The County has a waste services contract with the City of Lewiston through 2013 (with an option for a 3-year extension); the 1991 intergovernmental agreement between Lewiston and Asotin County (Resolution 91-49) is still in effect. [There are no waste disposal contracts or intergovernmental agreements currently in-place with the other small service areas (Garfield County, City of Lapwai, and City of Pomeroy) outside of Asotin County.]

After the Solid Waste Advisory Committee (SWAC) and the Asotin County Board of County Commissioners (BOCC) adopt the updated SWMP, it will be submitted to the other participants for adoption. SWAC members have worked with their respective communities and interest groups during the draft preparations of this SWMP update with the understanding that a resolution of adoption will need to be signed at the end of this SWMP update process.

The *Solid Waste Management – Reduction and Recycling Act* (Ch. 70.95.165 RCW) specifies the formation, roles, and membership of a SWAC. The SWAC provides a forum for the concerns and interests of constituents of the planning area to be heard and included in the planning process. The SWAC reviews and actively participates in preparation of the SWMP in an advisory capacity, and facilitates the adoption of the SWMP by jurisdictions and acceptance by the public. The SWAC may also review and comment upon proposed rules, policies, or ordinances prior to their adoption. The County has a SWAC made up of nine members, who are appointed by the county legislative authority. The SWAC represents a diverse balance of County officials and representatives from the incorporated municipalities, business, and industry, including the recycling industry and citizens at-large. The current membership is listed on the Acknowledgment page of at the beginning of this SWMP. The committee meets quarterly or when a particular need arises.

## 1.3 Planning History

On April 16, 1973, Asotin County adopted the *Comprehensive Solid Waste Management Plan for Asotin County*. An addendum was added to that plan on July 7, 1975, titled *Planning the Development of an Economical and Feasible Solid Waste System for Asotin County, Washington, Nez Perce County, Idaho Metropolitan Area*. The addendum was issued by the governments participating at that time. The following are the recommendations from that addendum and the extent to which the recommendations were implemented:

1. Main Entrance Platform scale (100 ton capacity) - implemented.
2. Incinerator—not implemented. Too expensive for the volumes generated.
3. Compost plant—not implemented. Insufficient area for volumes and too expensive.
4. Reclamation site—not implemented. Unrealistic for the volume versus expense.
5. Equipment shed—not implemented. Too expensive.

In February 1987, an updated SWMP was prepared by a group of graduate students at Washington State University but was not adopted by Asotin County at the time. Later versions of the SWMP updates were prepared, which incorporated many of the management and processing alternatives recommended in the 1987 SWMP.

Two chapter amendments (Chapter 3—Waste Reduction, and Chapter 4—Recycling and Composting) were added to the 1973 SWMP as a result of the Washington State Solid Waste Management—Reduction and Recycling Act (Chapter 70.95 RCW), which requires counties and cities to revise their comprehensive solid waste management plans to include a waste reduction and recycling element. This Act requires setting priorities for solid waste management in order to provide cost-effective solid waste management, to conserve resources and to reduce the need for landfilling waste. The Chapter 3 amendment provides discussion and evaluation of options for waste reduction programs to reduce waste disposal costs and their associated environmental impacts, improve economic performance and public image, and extend the landfill life. The Chapter 4 amendment outlines the existing recycling and composting programs in the County, and provides recommendations for supplementing these efforts in order to increase the diversion of reusable or recyclable materials from the municipal solid wastes stream.

The planning document *Asotin County-Nez Perce County Moderate Risk Waste Management Plan* (Asotin County Public Works, April 1991) focuses on moderate risk wastes (MRW), or also

known as household hazardous wastes. These are wastes generated by households or businesses in quantities too small to be regulated by the Washington State Department of Ecology (Ecology) or the U.S. Environmental Protection Agency (EPA)[1]. The *Asotin County-Nez Perce County Moderate Risk Waste Management Plan* is incorporated into this SWMP by reference.

This 2010 SWMP update incorporates the two chapter amendments (Chapter 3—Waste Reduction, and Chapter 4—Recycling and Composting). This update has also been prepared with consideration of other planning documents that have been developed and implemented in the County. One is the *Basic Policy Plan for Asotin County* that established land classification and resource development. That plan is a system of policies that define the position, attitude, and long-term perspective of the County. The County adopted a Comprehensive Plan in August 1999, as mandated by the Growth Management Act (GMA) of Washington, which incorporates present and future development regulations, as well as other elements mandated by the GMA.

More recently, the County prepared a solid waste permit reissuance application for the ACRL in 2007 to extend the solid waste permit for another 10 years. In that application, the County provided an updated operations plan for the landfill that describes how the ACRL is currently operated, and what environmental protection measures are in place for stormwater runoff control, leachate management, groundwater monitoring, and a gas control.

## 1.4 Plan Review and Revision Schedule

This SWMP will be maintained in a "current condition" and reviewed and revised periodically in accordance with RCW 70.95.110. Upon each review and subsequent update, the planning horizon for the plan will be extended to capture long-range (20-year) needs for the ACRL, and revised construction and capital acquisition programs for 6 years into the future. Each revised solid waste management plan will be submitted to the Ecology.

## 1.5 Plan Objectives and Policies

The policies developed within the County for solid waste management should reflect the overall intentions of the SWMP. The objective of this SWMP is to develop and implement an environmentally sound, flexible, and cost-effective solid waste management system. Such a system will be consistent with the prudent management and constraints of physical, environmental and financial resources as well as all applicable federal and state regulations (RCW 70.95 and WAC 173-351) and local health department (Asotin County Health Department [ACHD]) policies. Also, the SWMP should ensure the availability of long-term solid waste disposal management for both Asotin County and the solid waste partners (see Section 1.2). Asotin County is currently evaluating long-term waste management alternatives and as part of this will be seeking long-term agreements with its stakeholders (communities of Asotin County and its waste partner Lewiston).

[1] The ACRL MRW facility is permitted to collect hazardous wastes from residential households and commercial/businesses that meet the definition of conditionally except small quantity generators (CESQGs), which are exempt from the hazardous waste regulations.

CHAPTER 2

# Background

## 2.1 General Overview

Asotin County, as shown on Figure 2-1, is located in the southeastern corner of Washington State. The Snake River forms the County's eastern boundary with Idaho. The County is bounded by Garfield County to the west and northwest, Whitman County to the north, and by Oregon to the south. The County encompasses approximately 633 square miles. Approximately three-fourths of this land is range and farm land used for cattle grazing and dry-land wheat farming. The remainder (outside of the small urban areas) is forested and is also used for grazing in addition to recreation and timber production (Brown and Caldwell, 1993).

The landfill is located on the south section of County-owned Section 36 (one square mile) of Township 11 North Range 45 East (Figure 2-2).

## 2.2 Topography

Asotin County is characterized by a large central plateau lying at elevations of approximately 2,000 to 3,000 feet, which is deeply incised by drainage courses trending in a northeasterly direction. Elevations within the County range from approximately 5,000 feet in the Blue Mountains located in the southwest corner to approximately 800 feet along the Snake River in the northeast corner. Much of the County is rugged and, therefore, undeveloped. The Blue Mountains, and the Grande Ronde and Snake River canyons and sub-canyons occupy approximately half of the County's total land area.

## 2.3 Geology

The major portion of Asotin County is characterized by the presence of two types of geologic formations. The first type consists of thick, highly porous basalt flows which underlie much of the County, including the site of the Asotin County landfill. These basalt flows, the Columbia River Basalt Group, are the result of volcanic activity in eastern Washington and Oregon in the Miocene Age. Three formations are present. From oldest to youngest, these are: the Grande Ronde Formation; the Wanapum Formation; and the Saddle Mountains Formation. Aquifers within the Grande Ronde Formation are the primary source of ground water for Lewiston and Clarkston.

The second major type of geologic formation present in Asotin County is the quaternary non-marine deposits of unconsolidated loessial silt. These deposits are primarily the result of silt deposited by wind in the early Pleistocene Age, although some of the deposits could be the result of water deposition. Minor deposits also exist in the County, such as the unconsolidated alluvial deposits found along river channels and valley floors (Brown and Caldwell, 1993).

# 2.4 Soils

Soils in Asotin County are typically formed from loess and basalt residium. Three soils investigations have been performed at the ACRL site. The first was conducted by Woodward-Clyde Consultants in 1987, the second was completed by Howard Consultants, Inc., in 1992, and the third was completed by CH2M HILL in 1996.

## 2.4.1 Woodward-Clyde Soils Investigation

In May of 1987, Woodward-Clyde Consultants completed a report titled *Soils Investigation for the Proposed Asotin County Landfill Expansion.* This investigation was based on eight borings that were advanced to depths between 14 and 45 feet. In addition, 550 horizontal feet of existing landfill trench was logged up to 28 feet deep. The findings are described below.

The surface soil consists of silts and sandy silts (with occasional fine gravel) to a depth of approximately 10 to 16 feet. Portions of the upper 6 feet of silts are of aeolian origin; the remainder of the silts and sandy silts appear to be water deposited.

The upper silts and sandy silts are underlain by intermittent sandy silts with gravel, or well-graded gravel with silts and sand, to a depth of approximately 26 feet in the southeast corner of the site and to refuse depths in the remainder of the borings (depths of 14, 16, and 30 feet).

In the southeast corner of the site, the gravels are underlain by fat clays and silts to the depth explored (depths of 40 and 45 feet, or up to 19 feet of clay and silt below the gravels). In the western portion of the site, the gravels are broken by layers of sand, silt, and silty clay, which total to as thick as 11 feet.

The gravels are predominantly of basalt origin and were water deposited. The clays are carved in places and also obviously water deposited.

Geologic maps indicate that the entire site is underlain by basalt. The geologic map indicates that basalt is exposed at the surface in a small area on the southern border of the site; however, no such outcrop was observed on the site, and no basalt was encountered in the borings.

Alkali caliche cementation was observed in the logged existing trench starting at a depth of between 8 and 15 feet with thickness of up to 5 feet. A layer of caliche silt approximately one foot thick capped the caliche layer throughout the trench. This was underlain by caliche gravels and cobbles where gravels were present. The caliche gravels were underlain by highly cemented (non-alkali) gravels up to 7 feet thick.

## 2.4.2 Howard Consultants, Inc. Soils Investigation

In April 1992, Howard Consultants, Inc. completed a geotechnical evaluation and soils testing for the Asotin County Landfill Improvements Project. The purpose of the investigation was to develop information necessary to design and construct a new, lined landfill cell (Cell A) (HCI, April 1992).

### 2.4.3 CH2M HILL Soils Investigation

Sixteen test pits were excavated in October 1996, as part of the Cells B and C lateral expansion project. Eleven test pits were excavated in the immediate area of Cells B and C. The other five test pits were excavated to locate the eastern edge of the Cell A bottom liner system for tie-in. Soils observed in the test pits consisted of tan, brown, or white silty sand, sandy silt, or non-plastic silt containing occasional gravel. Caliche was encountered at several locations. Soil densities ranged from medium dense and dense for sandy materials and medium stiff to very stiff for silty materials (CH2M HILL, 1996).

## 2.5 Climate

Asotin County has a seasonal pattern of short, dry summers and long, humid winters. The average annual variations range from an average high in July of 81°F to an average low in January of 33°F in Lewiston, Idaho, the site for which records are kept by the National Weather Service (National Weather Service, 2008). Moderate snowfalls of about 8 inches occur during the winter.

The average annual precipitation recorded at the nearby Lewiston Airport is 12.9 inches[1], and the peak daily rainfall is 2.2 inches (25-year, 24-hour storm event). The ACRL receives on average approximately 30 percent less precipitation than the Lewiston Airport, based on the landfill's own weather station records(CH2M HILL, April 2005). The prevailing wind is from the northwest during the summer. During late fall and early winter, the winds are from the south. Although winds of up to 50 mph have been recorded at the landfill site, wind speed is from 0 to 3 mph 45 percent of the time (Brown and Caldwell, 1993).

## 2.6 Surface and Ground Waters

A number of perennial streams exist within Asotin County, generally trending in a northeasterly direction and discharging to the Snake River, which forms the eastern and northern borders of the County. Two streams of importance within the County are Asotin Creek and the Grande Ronde River. Surface water features in the immediate vicinity of the landfill are shown on Figure 2-2.

Asotin Creek has its headwaters in the Blue Mountains and flows northeasterly through the northern half of the County, discharging to the Snake River near the City of Asotin. Asotin Creek drains an area of 322 square miles, with peak flows of 1,000 to 1,500 cubic feet per second (cfs).

The Grande Ronde River flows through the southern portion of the County in the Blue Mountains, approximately three miles north of and parallel to the Oregon border. The Grande Ronde has incised a relatively large canyon several thousand feet deep along its lower reaches. Peak discharges up to 35,000 cfs have been recorded in the Grande Ronde system.

Groundwater is the major source of drinking water for Asotin County and also for most of Nez Perce County included within this SWMP. Groundwater in the region exists both in

[1] Average precipitation of 12.9 inches at the Lewiston Airport, based on records from August 1948 to April 2007.

alluvial deposits near the surface and in basalt aquifers hundreds of feet deep. Wells in the river valleys generally draw from the alluvial deposits. Production wells utilized by the City of Clarkston withdraw groundwater from the deep basalt aquifer.

The deep aquifers within Asotin County and the Lewiston Basin have been characterized by Cohen and Ralston in Reconnaissance Study of the "Russell" Basalt Aquifer in the Lewiston Basin of Idaho and Washington, April 1980. Prior to filling of the reservoir formed by Lower Granite Dam, a recharge area existed along the Snake River three to nine miles upstream from Clarkston and a discharge area along the Snake River downstream of Clarkston. It is postulated that filling of the reservoir eliminated this hydraulic gradient and that direction of flow is now from both above and below Clarkston to the Clarkston municipal wells.

The Grande Ronde Formation is stratigraphically the oldest of the three Columbia River Basalt formations and is also the most productive. Only the upper 800 feet of the Grande Ronde Formation basalt are used for ground water production. Ground water taken from this formation is suitable for direct use as municipal drinking water. The aquifers within this vertical section have been grouped and named the "Russell" aquifer. Overlaying the Russell aquifer are aquifers of the Wanapum and Saddle Mountains Formations.

In September of 1988 the Russell aquifer, along with other water-bearing strata of the Lewiston Basin, was designated a sole-source aquifer under the Safe Drinking Water Act. This aquifer system is now known as the Lewiston Basin Aquifer and, as a designated sole-source aquifer, is to be protected from degradation which would impact its use as a drinking water source.

At the ACRL, surface water drainage flows north into an ephemeral creek, Dry Creek, or into a nearby tributary to the east. Dry Creek then discharges into the Snake River at a location two or three miles west of Clarkston.

Howard Consultants, Inc. (HCI) completed a preliminary hydrogeologic study at the landfill in 1989. The final report, *Hydrogeologic Analysis and Monitor Well Construction for the Asotin County Landfill*, was issued in June of 1990. This report found that the landfill is underlain by the previously mentioned Russell aquifer, which is several hundred feet deep at this location. At approximately 85 feet deep, a relatively low permeability clay unit is present that ranges in thickness from 10 to 80 feet. The top of the clay dips approximately 2 degrees to the north. The clay unit defines the lower limit of the aquifers found in the Saddle Mountains and Upper Wanapum Formations. A perched groundwater system is present above the clay unit. The groundwater level contour map shows a general pattern of flow from south to north under the landfill.

A number of small springs exist in the vicinity of the landfill. The springs appear to be associated with sedimentary interbeds within the Saddle Mountains Formation. Most of the springs are stratigraphically and topographically higher than the landfill site. A small spring approximately 650 feet north of the landfill (apparently discharging to Dry Creek) is believed to be a primary discharge point for the uppermost aquifer under the landfill site.

HCI directed the installation of the current monitoring well network at the landfill. The wells were installed to monitor the perched water bearing unit on top of the clay. HCI issued the *Monitor Well Network Background Analysis Report* in May 1991. This report presents background water quality characteristics at the landfill. In summary, this analysis found no

significant differences between the upgradient and downgradient wells, although there were noticeable variations in some of the parameters.

Five water supply wells exist in the general vicinity of the landfill site. Three of these wells are private wells for residential use. One of the wells is a shallow farmstead well located 4,000 feet west of the site and is 12 feet deep. Another well is located one mile from the site and is 294 feet deep. The third private well is 7,000 feet from the site with a depth of 36 feet. The other two wells are public water supplies and are each 3,500 feet from the site. One of the wells is 1,328 feet deep, and the other well is 1,069 feet deep (Brown and Caldwell, 1993).

Following the preliminary hydrogeologic assessment and monitoring that was conducted from 1994 to 1996, routine groundwater monitoring began at the landfill site in 1997.

## 2.7 Land Ownership in the County

Asotin County is 90 percent private land. Only two percent of the County's area is devoted to urban areas, such as the City of Clarkston and the City of Asotin. Five percent of the County (approximately 50 square miles) is owned by the federal government and is operated by the National Forest Service as part of the Umatilla National Forest. The remaining three percent of the land in the County is operated by the Bureau of Land Management, the Department of Natural Resources, and Fish and Wildlife (Riggers, 2005).

CHAPTER 3

# Waste Characterization and Generators

## 3.1 Waste Quantity Projections

The majority of municipal solid waste generated within Asotin and Nez Perce counties is disposed of at the ACRL. Asotin County has a low population density of only 33.59 residents per square mile. According to the State of Washington, Asotin County is designated as "rural" (SWOFM, 2008). There are approximately 500 people in rural Asotin County that are not served by collection services or drop boxes. Most of the waste generated by these people is believed to be self-hauled to the landfill. There are also family farms that handle their own solid waste on-site in accordance with the health code standards. Other wastes disposed of on private property are primarily logging and wood processing wastes, which are produced in this region in large quantities.

The largest municipality served by the ACRL is the neighboring City of Lewiston, Idaho, with an estimated population of 31,293 (U.S. Census Bureau, *Idaho QuickFacts – Lewiston (City)*, 2006). Lewiston is not only the largest municipality served by the landfill but also the largest in Nez Perce County, Idaho. In comparison, according to the U.S. Census Bureau, the population of the entire Nez Perce County is 38,975 (U.S. Census Bureau, *Idaho QuickFacts – Nez Perce (County)*, 2008). Being the largest city in the county, Lewiston also produces the greatest quantity of waste. The city is served by curbside MSW collection by a private hauler as well as separate curbside yard waste and recycling collection. After collection, all of the MSW is taken to the Lewiston/Nez-Perce County Transfer Station and then hauled to the ACRL for disposal. The yard waste is collected and taken to the EKO Compost, Inc composting facility, located adjacent to the transfer station.

In 2009, the amount of MSW transported from the Lewiston/Nez-Perce County Transfer Station to the landfill was approximately 23,111 tons with an additional 4,770 tons from self-haulers for a total of 27,881 tons, constituting around 60 percent of the total 47,068 tons of waste disposed at the landfill for that year. Table 3-1 presents a summary of the participants and the quantity of waste each contributed over the last 5 years (2005 - 2009).

In addition to solid waste from Asotin and Nez Perce Counties, a much smaller amount of MSW from Whitman County is disposed at the ACRL. Naslund Disposal, the franchised hauler for Asotin County, also services the Port of Wilma, located just across the county border in Whitman County, as part of its franchise service area. Because the landfill is a much closer disposal site for the Port of Wilma than the Whitman County Transfer Station (where it is long-hauled to Waste Management's Columbia Ridge Landfill in Arlington, Oregon), Naslund prefers to haul waste collected from the Port of Wilma to the ACRL. Naslund estimates that the quantity of waste collected from the Port is no more than 20 tons per year, and is accounted for in the Unincorporated Asotin County category in Table 3-1.

**TABLE 3-1**
Waste Disposal Quantities for Participants (2005 – 2009) (in tons)
*Asotin County Solid Waste Management Plan, 2010 Update*

| Year | City of Asotin [a] | Asotin County [b] | City of Clarkston | Lewiston/Nez Perce Co. [c] | Unincorporated Asotin Co [a] | Pomeroy/ Garfield Co. [a] | Total |
|---|---|---|---|---|---|---|---|
| 2005 | 1,006 | 4,897 | 5,690 | 26,856 | 3,558 | 1,618 | **43,625** |
| 2006 | 1,101 | 5,951 | 6,058 | 28,286 | 3,972 | 1,681 | **47,049** |
| 2007 | 1,147 | 6,674 | 6,279 | 28,991 | 4,161 | 1,535 | **48,787** |
| 2008 | 1,100 | 6,482 | 6,128 | 29,188 | 4,439 | 1,350 | **48,687** |
| 2009 | 1,042 | 6,698 | 5,752 | 27,881 | 4,417 | 1,278 | **47,068** |

[a] Waste is picked up and hauled by Naslund Disposal. In 2009, approximately 222 ton of waste were disposed at the ACRL, in addition to the 1,278 tons listed; hauled by Four Feathers Disposal from the City of Lapwai.
[b] Majority of this waste category is contributed by private self-haulers. A small quantity is from commercial waste (such as construction contractors).

[c] Lewiston/Nez Perce Co. tonnages are a total of transfer haul from the transfer station and resident self-haul directly to the landfill. In 2009, a total of 23,111 tons of waste was hauled by transfer trucks from the Lewiston/Nez Perce Co. Transfer Station to the ACRL. The balance of 4,770 tons were self-hauled by residents of Lewiston and Nez Perce Co.

In 1991, the Cities of Lewiston and Clarkston contracted with EKO Compost a composting facility in Lewiston (adjacent to the Lewiston/Nez Perce County Transfer Station), where residents and the cities may dispose of yard waste. To encourage use of these new recycling and composting programs, Clarkston has implemented a variable-can rate. Lewiston also operates a variable-can rate. Yard waste is collected curbside in Lewiston and Clarkston, and is no longer accepted at the Lewiston transfer station.

The quantity of waste disposed at the ACRL is a function of the contributing population and the rate of recycling/diversion. The average annual increase of waste disposed at the ACRL has been approximately 2.5 percent for the last 5 years (2005 - 2009). However, the incoming waste quantity spiked with the "booming" economy from 2006 to 2007 with an increase of 7.8 percent. For the last 15 years (1995 to 2009), the annual waste growth rates have varied depending on the health of the local market and economy; the overall growth rate has averaged 1.6 percent annually since the conception of the modern landfill (Cell A) in 1993. It is assumed that annual trends of high and low growths will continue into the future but that the overall average growth rate will be on the order of 2 percent per year. Therefore, a growth rate of 2 percent is assumed for long-term future projections of the MSW disposed at the ACRL from 2009 and on until facility closure (Table 3-2).

Current waste projections indicate that Cells A-C will reach an interim closure elevation in 2017. Cell D is scheduled to be designed and permitted in 2015 and constructed in 2016, to be online in 2017 as waste disposal transfers from Cells A-C into new Cell D.

**TABLE 3-2**
Asotin-Nez Perce Counties Projected Solid Waste Quantities (2009 – 2033)
*Asotin County Solid Waste Management Plan, 2010 Update*

| Years | Est. Total Annual Waste (tons) | Est. Total Annual Volume (cu yd)[a] | Est. Cumulative Volume (cu yd)[b,c] |
|---|---|---|---|
| 2009 | 47,068 | 81,857 | 1,292,428 |
| 2010 | 48,009 | 83,495 | 1,375,922 |
| 2011 | 48,970 | 85,164 | 1,461,087 |
| 2012 | 49,949 | 86,868 | 1,547,954 |
| 2013 | 50,948 | 88,605 | 1,636,559 |
| 2014 | 51,967 | 90,377 | 1,726,937 |
| 2015 | 53,006 | 92,185 | 1,819,121 |
| 2016 | 54,066 | 94,028 | 1,913,150 |
| 2017 | 55,148 | 95,909 | 2,009,059 |
| 2018 | 56,251 | 97,827 | 2,106,886 |
| 2019 | 57,376 | 99,784 | 2,206,669 |
| 2020 | 58,523 | 101,779 | 2,308,449 |
| 2021 | 59,694 | 95,510 | 2,403,959 |
| 2022 | 60,887 | 97,420 | 2,501,379 |
| 2023 | 62,105 | 99,368 | 2,600,747 |
| 2024 | 63,347 | 101,356 | 2,702,103 |
| 2025 | 64,614 | 103,383 | 2,805,486 |
| 2026 | 65,907 | 105,451 | 2,910,936 |
| 2027 | 67,225 | 107,560 | 3,018,496 |
| 2028 | 68,569 | 109,711 | 3,128,206 |
| 2029 | 69,941 | 111,905 | 3,240,111 |
| 2030 | 71,339 | 114,143 | 3,354,254 |
| 2031 | 72,766 | 116,426 | 3,470,680 |
| 2032 | 74,221 | 118,754 | 3,589,434 |
| 2033 | 75,706 | 121,129 | 3,710,564 |

[a] Total 2009 waste tonnage is based on measured waste disposal quantities at the landfill. The subsequent years assume a 2% annual growth rate.

[b] The volume of waste assumes an in-place (effective) refuse density of 1,150 lb/cy through 2020 and 1,250 lb/cy from 2021 until closure. This assumes that density will be increasing over the years as the waste decomposes and compresses.

[c] These projected waste quantities include C&D wastes; C&D wastes are now intermingled with MSW and co-disposed in the ACRL.

## 3.2 Waste Stream Composition

Prior to 2004 construction and demolition (C&D) wastes were placed in a separate unlined cell at the ACRL. However, the current Solid Waste Handling Standards (WAC 173-350) govern

the landfill requirements for inert and demolition wastes, and now require that materials when disposed be placed within a lined landfill cell. The County elected not to construct a separate lined disposal facility for C&D waste and as such is now co-disposing the waste in the lined MSW cell. Starting in November 2009, however, the County has received grant funding to divert and recycle clean organic yard and wood waste (Section 4.1.1).

Table 3-3 presents a summary of the waste composition for 2009 collected and disposed at the ACRL. Refer to Table 4-1 for a breakout of total waste tonnages and recyclables by community/source, and Table 8-2 for types and quantities of moderate risk waste (MRW) collected and managed by Asotin County.

**TABLE 3-3**
Waste Stream Composition for 2009
*Asotin County Solid Waste Management Plan, 2010 Update*

| Waste Type/Commodity | Total Collected (tons) |
|---|---|
| **Disposables:** | |
| Asbestos, non-friable | 40.5 |
| Tires | 28[a] |
| Municipal Solid Waste | 47,068[b] |
| **Total** | **47,136.5** |
| **Recyclables:** | |
| Newspaper (and magazines) | 252.8 |
| Corrugate Paper (Cardboard) | 168.3 |
| Plastics | 73.6 |
| Aluminum | 5.1 |
| Tin | 24.9 |
| Organic Yard & Wood Wastes | 22.8[c] |
| White Goods (Appliances) | 81.4 |
| E-Wastes (Consumer Electronic Products) | 45.6 |
| Scrap Iron | 8.0 |
| **Total** | **682.5** |
| **Diverted Waste:** | |
| Used Oil | 19.3 |
| Other Moderate Risk Waste (MRW) | 34.0 |
| **Total** | **53.3** |
| **GRAND TOTAL** | **47,872.3** |

[a] Tire tonnage only includes those tires that are coded as such when they pass over the scales and charged at the higher tipping fee (refer to Chapter 7), and does not include tires that are allowed to be co-disposed with other MSW (up to 4 tires per load per day per customer).

[b] This includes incidentals such as animal carcasses.

This total was only for November and December 2009. The organic yard and wood waste program started in November 2009.

CHAPTER 4

# Waste Reduction and Recycling

This chapter and the next four chapters (Chapters 5–8) of this plan are organized into four sections as follows:

- Existing Practices
- Needs and Opportunities
- Evaluation of the Options
- Recommendations/Implementation

State regulations relating to solid waste stress the importance of reducing the amount of waste generated and increasing waste recycling activities. The State Solid Waste Management-Reduction and Recycling Act (RCW 70.95) lists the following solid waste management priorities in descending order:

1. Waste reduction
2. Recycling, with source separation of recyclable materials as a preferred method
3. Energy recovery, incineration, or landfilling of separated wastes
4. Energy recovery, incineration, or landfilling of mixed wastes

This state act requires that solid waste management plans recommend options that are available to the County for meeting these priorities. As indicated by these priorities, the intent is to reduce the waste stream and have an environmentally sound waste management system. This goal will be addressed from the aspect of how it will influence planning for the future solid waste handling and disposal needs of Asotin County.

This chapter addresses the first two solid waste management priorities, waste reduction and waste recycling. Chapter 5 addresses solid waste programs, Chapter 6 covers landfilling, Chapter 7 addresses special wastes (tires, refrigeration units, biohazard wastes, etc.), and Chapter 8 includes information on the Moderate Risk Waste (MRW) management at the ACRL

## 4.1 Waste Reduction

Waste reduction is any activity that reduces or eliminates waste entering the solid waste stream or reduces the amount of its toxicity. Waste sources include households, small businesses, industry, recreational facilities, and any other entity that puts materials into the waste stream. This section describes existing waste reduction practices in Asotin County, identifies key issues with respect to waste reduction, and presents recommendations and options that will help meet waste reduction goals.

Asotin County has established the following objectives for waste reduction:

- Reduce landfilling of solid waste through waste reuse or reduction

- Reduce the amount and toxicity of disposed waste, either by reusing materials or avoiding generation.
- Support the implementation of waste reduction measures on the national and state levels, and promote such measures on a local level.

### 4.1.1 Existing Practices

Formal waste reduction programs in place are Lewiston and Clarkston's variable-can-rate systems for MSW, recycling programs, and yard waste pickup. Lewiston has implemented both curbside pickup for recyclables and yard waste. Clarkston has curbside pick-up for yard waste with recycling drop boxes conveniently located around the city. The City of Asotin has recycling drop boxes at the Courthouse Annex and two others in the County besides the landfill. Two recycling drop boxes are located in Nez Perce County, as well as one at the transfer station. Refer to Section 4.2 for more information on recycling.

A trial organic yard and wood waste program was put in to place at the ACRL in November 2009. The program is funded with grant money from Ecology to support alternatives to open burning (and divert these types of wastes from the landfill). Under this program Asotin County, City of Clarkston, and City of Asotin residents (and other nearby Washington State residents) may dispose of certain organic yard and wood waste materials at the ACRL at no charge. These wastes are in turn processed (ground up) by a local contractor and reused or recycled in some fashion, such as wood chips, compost bulking agent, or hog fuel.

Washington now has a free, convenient and environmentally responsible recycling program for computers, monitors, laptops, televisions, and other electronic products with the new E-Cycle Washington program. Asotin County has adopted this program at the ACRL. Information on electronic waste and other special wastes recycling (such as tires, biohazard materials, etc.) is provided in Chapter 7.

Moderate risk waste (MRW) (also known as household hazardous waste) management is offered by Asotin County, whereby MRW from households and small businesses that meet certain exceptions under the state dangerous waste rules are allowed to drop off wastes at the fixed-MRW facility at the ACRL. More information on the MRW management program is provided in Chapter 8.

Solid waste programs and activities are interrelated. Waste reduction, reuse and recycling programs impact issues that should be considered in solid waste management. Much of the waste reduction activities will be described in greater detail in Section 4.2.

### 4.1.2 Needs and Opportunities

Because only limited waste reduction efforts are presently made, there is an opportunity to achieve additional collection and disposal savings, and a need to comply with Chapter 70.95 RCW. There is at this time an opportunity to heighten public awareness in concert with the present solid waste planning process. There is a continuing need for education and community outreach as the regions waste reduction program evolves. The public needs to continue to be informed and given the opportunity to take advantage of all waste reduction programs

### 4.1.3 Evaluation of the Options

Various waste reduction programs require different levels of effort by the County and their participants, in conjunction with support from local agencies, while some programs can only be effectively implemented by other public or private organizations. The region has a relatively average size population but generally limited resources available to invest in solid waste programs. More waste reduction programs that utilize both municipal funding and non-municipal funding resources to achieve their goals should be considered. These cooperative programs might include education and commercial and agency procurement standards. These programs have reasonable prospects for success in reducing wastes with only a moderate commitment of resources by the County and their participants.

Tax incentives, beverage container legislation, product bans, durable goods warranties, product labeling, and packaging standardization are unlikely to be effective options when pursued by local/rural entities. These options can be better dealt with on the state and/or national level.

#### 4.1.3.1 Public Educational Programs

The first level of waste reduction should be public information and education. Individuals and businesses can reduce the amount of waste generated by choosing to purchase durable (non-throwaway) products, buying commodities in bulk, and choosing products that are not excessively packaged. Consumers can also influence the type of packaging materials used by choosing bags or containers that are more amenable to recycling or reuse, less resource intensive, more degradable, or of otherwise less impact on the environment when disposed. Also, consumers can use their own bags that are durable enough for reuse, to lessen the need for plastic bags when shopping. An information/education program makes individuals and businesses aware of the affect their waste has on the existing solid waste systems, what they can do to reduce that impact and the benefits to them of waste reduction

The County currently has a program that produces flyers with information promoting waste reduction and recycling. This information is also available on the ACRL website at http://asotincountyregionallandfill.com/. These flyers are distributed at the landfill and other public places within the County. The County should also consider using Ecology's online Beyond Waste educational resources to further implement its public educational program. The County could target elementary and middle schools with these educational resources, in order to provide a unique opportunity for educating both children and parents. As the children are educated in these practices, they can take this newfound information home and share it with their parents.

Backyard composting of yard waste can also significantly reduce the amount of waste disposed. Public information/education is necessary in order to inform the public of these options. This type of information could be presented in the public flyer that is produced as described above. Refer also to Section 4.2.3.7 for home composting as a recycling opportunity. Asotin County could consider initiating a home composting program, similar to the one used by Stevens County, WA. The County could host home composting workshops in Lewiston and Clarkston that include reference books for starting a compost pile. The County could provide schools and businesses with compost bins, and books and videos about composting and vermicomposting (worm bins).

#### 4.1.3.2 Business and Government Programs

Business and industry can realize economic benefits from a waste reduction program. The first step is a waste reduction audit, which involves a review of purchasing, processing, or manufacturing operations, and waste disposal practices, observing waste streams and their sources, and documenting the findings. The final step is an evaluation of opportunities to reduce waste, and implementation of those which are technically feasible and make economic sense. Again, this information could be included in the public flyer and provided to businesses and industries that use the landfill.

Government agencies can also take steps to reduce the amount of waste generated. A program similar to that described above for business and industry may be easily implemented. Government should set an example for others to follow by establishing a policy of waste reduction as a desired and necessary goal.

Waste reduction programs can reduce waste disposal costs and the associated environmental impacts, improve economic performance and public image, and extend landfill life. For these reasons waste reduction is an appropriate goal for consumers, businesses, industries, and agencies.

Another aspect of commercial and industrial waste reduction is the potential for "waste" exchanges. During the waste audit, if a quantity of reusable material is identified, this can be listed in the waste exchange catalogs being used across the country for industrial and commercial waste reduction. The intent of such programs is to circulate listings of excess materials various businesses have which are "waste" for that particular business but may be a valuable commodity to another business. The receiving business may even find cost savings if the exchanged material replaces virgin resources at a lower cost. Exchange arrangements are typically made directly between the companies involved. General awareness of these free programs and services can be raised by County staff through public notification and direct business networking efforts. The second level of waste reduction requires that local, state, or federal legislative or regulatory action be taken. Such actions could include setting variable garbage can rates, procurement standards for government agencies, beverage container deposits, tax incentives, product bans, packaging requirements, enhanced product warranty requirements, or other similar actions which can influence responsible reductions in waste generation.

#### 4.1.3.3 Variable-Can Rates

Variable-can rates are implemented in Clarkston and Lewiston to provide economic incentives to reduce the amount of waste set out for collection. A small container is charged the lowest rate, with additional or larger containers charged at a higher rate. This type of rate schedule provides a powerful economic incentive to reduce the amount of waste set out for collection. Recycling at drop boxes in the County complements the variable disposal rate, by providing an acceptable way for consumers to reduce the amount of waste needing disposal. Some customers may possibly sign up for the minimum service (smallest container) and then illegally dispose of any spillover. The potential for this occurrence is difficult to evaluate but is likely to be greater when incentive disposal rate structures are implemented without workable recycling alternatives, adequate public education, and suitable enforcement of littering laws.

### 4.1.4 Recommendations and Implementation

#### 4.1.4.1 Business and Government Programs

As a first step, the County should consider implementing in-house waste reduction measures, whereby the County adopts a procurement policy for purchasing recyclable and recycled materials. Because of the limitation of funding resources, however, the County may only be able to implement this program if these types of products can be purchased at the same or lesser cost than those that are not recyclable.

#### 4.1.4.2 Public Educational Programs

Asotin County should expand its efforts by implementing a public information/education program on waste reduction and require that the other local governments and businesses who dispose of their waste at the landfill do the same. The waste reduction information program should be coordinated in conjunction with a recycling education program. The current assistant of landfill operations is also the waste reduction and recycling coordinator. This person should continue to implement public education programs to the extent that funding can be made available.

A workable program would be to encourage an educational program in local public schools as one component. Ecology has made available a curriculum, *A-Way With Waste,* which may be used to educate children about solid waste and waste reduction in particular. Brochures describing backyard composting are also available.

Other actions that may be taken to reach the general public and commercial establishments include public service announcements, newspaper articles, telephone hotlines, mass-mailing of brochures, utility bill flyers, web page information, and displays at local events. These actions should be added to the current program as local County funds and/or state grants become available

Local commercial establishments and industries that generate significant quantities of solid waste may be individually targeted to encourage waste reduction. Each such establishment could be surveyed for types and quantities of solid waste, and then specific recommendations made to reduce, reuse internally, or exchange some portion of the waste currently generated. This activity should be added to the current program as funding becomes available.

#### 4.1.2.3 Variable-Can Rates

The City of Clarkston and the City of Lewiston should continue use of variable can rates. The County should also continue to use recycling drop boxes to complement the variable disposal rate, by providing an acceptable way for consumers to reduce the amount of waste for disposal.

## 4.2 Recycling

The following are the County's recycling goals and objectives:

- Provide a cost-effective opportunity for all Asotin County citizens to recycle
- Collect and process recyclable commodities in a fashion that will enhance marketability

- Enhance the public information program to increase awareness of recycling opportunities
- Encourage the recycling of economically viable materials
- Encourage the recycling of green waste (compostable waste from yards)

## 4.2.1 Existing Practices

There are currently several local municipal programs that encourage recycling/reuse and composting. Yard waste from Clarkston and Lewiston is being co-composted with sewage sludge from the Lewiston, Clarkston, and Asotin wastewater treatment plants at the EKO Compost facility in Lewiston. Clarkston, City of Asotin, Asotin County and Nez Perce County have established drop box locations for recyclables, including a drop box at the landfill itself before costumers pass over the scales. The City of Lewiston also accepts recyclables at the transfer station, as well as providing curbside recycling. Figure 4-1 provides a map of the recycling site locations in Asotin County. Asotin County has also embarked on an organic yard and wood waste recycling/reuse program.

### 4.2.1.1 Recycling

Two private recycling companies and several municipal recycling operations are currently available in the Lewiston-Clarkston area. The private recyclers and their addresses are listed below, as well as the types of material they accept. As markets shift and change with the commodity market, the types of recyclable materials collected also change regionally and locally. As such, users are encouraged to call the recycling companies or log onto their respective websites, if available, for a current list of recyclables that are accepted, and business hours.

Lewis Clark Recyclers, Inc.
0334 3rd Street
Lewiston, ID 83501
(208) 746-1187
website: http://www.lcrecyclers.net/index.html

- Wastepaper items: cardboard, cartons, liner board, newspaper, magazines, telephone directories, catalogs, discarded mail and envelopes, white and/or colored writing and typing paper, post-it notes, computer paper, packing paper, paper cores, old documents, file folders, bound records and books.

- Plastic items: bottles and jugs only, #1-and #2-coded containers with dispenser openings less than 2 inches in diameter (curbside collection only), and #1 - #7-coded containers if dropped of at the LCRI facility. Containers must have been used to contain food, condiments, beverages, body soaps, shampoos or lotions, laundry detergents, fabric softeners or bleach, and plastic buckets (with handles removed. All containers must be residue and lid free.

- Metal items: open aluminum and tin beverage and food containers up to one gallon in size. Containers used for paint, fuel, aerosols, pesticides, herbicides, or explosive will NOT be accepted.

Pacific Steel & Recycling
604 12th Street North
Lewiston, ID 83501
(208) 743-2181
website: http://www.pacific-recycling.com/Locations/Branches/Idaho/Lewiston/index.html

- Non Ferrous Items: aluminum cans, miscellaneous cans, brass, copper, stainless steel, radiators, lead, electric motors
- Ferrous Items: automobiles, automobile parts, iron, tin, lawn mowers, machinery (small and large), appliances (washers/dryers, refrigerators/freezers, air conditioners/stoves)
- Fiber Products: cardboard, newspaper/magazines, white paper, shredded paper
- Plastic Products: milk jugs, water bottles

There are several satellite recycling drop box facilities that service the Lewiston/Nez Perce County and Asotin County area along with fixed recycling facilities at the ACRL and the Lewiston/Nez Perce County Transfer.

City of Clarkston:

- First Presbyterian Church Parking Lot: 11th and Diagonal St.
- Dollar Store: 3rd St. and Fair St.
- Arnold Park: Maple St. and Burns St.

For more information, contact:

City of Clarkston, Sanitation Department
830 5th Street
Clarkston, WA 99403
(509) 758-5541
website: http://www.clarkston-wa.com/

City of Lewiston/Nez Perce County:

- Sweetwater, ID on US 95 next to the grain elevators
- Junction of US 12 and Cottonwood Creek
- Lewiston/Nez Perce County Transfer Station

For more information, contact:
City of Lewiston, Sanitation Department
P.O. Box 617
Lewiston, ID 83501
(208) 746-1316
website: http://www.cityoflewiston.org/

Asotin County:

- Lewis Clark Saddle Club: 13th St. and Pound Ln.
- City of Asotin, Courthouse Annex Building: 2nd St. and Cleveland
- Clarkston Heights Library: 2036 4th Ave. and Appleside Blvd.
- ACRL Facility: 2901 6th Ave., Clarkston Heights

For more information, contact:
Asotin County Regional Landfill
2901 6th Avenue, Clarkston, WA 99403
(509) 758-1965
email: acrl@clarkston.com
website: http://asotincountyregionallandfill.com/

The materials accepted at each recycling facility varies, depends upon current market prices and contracts. Some recyclers are, however, storing certain materials that they collect until the market improves. Contact the local recycling agencies and governments for a current list of recyclables (and MRW materials) that are accepted.

Recycling at the ACRL currently includes appliances (through Sutton Salvage), cardboard, aluminum, tin/steel, newspaper, magazines, catalogues, and plastics #1-7. Signs at the entrance of the landfill encourage users to recycle before disposing their waste in the landfill, and a drop box at the facility allows residents to drop off recyclables before passing over the scales and into the landfill.

#### 4.2.1.2 Yard Waste Composting

In November 1990, Lewiston and Clarkston contracted with EKO Compost, Inc. to receive and co-compost their yard waste with sewage sludge. EKO accepts leaves, grass clippings, garden waste, tree limbs and bark, hay, straw, manure, and lawn and garden bark. EKO Compost also assumed the sewage sludge disposal contracts for the Lewiston and Clarkston wastewater treatment plants. These contracts will expire in December 2013. Additionally, EKO handles the sludge for the wastewater treatment facilities from the cities of Asotin, Julietta, Medical Lake, Moscow, and Orofino.

For more information, contact:

EKO Compost, Inc.
548 Down River Road
Lewiston, ID 83501
(800) 746-5947
website: http://www.ekocompost.com

In Lewiston, residents have the option to either put yard waste out for curbside collection or to self-haul to the composting facility. Residents are encouraged to use the program, because Lewiston no longer accepts yard waste at the transfer station. Lewiston residents may leave unlimited amounts of yard waste out for curbside collection in either bags or separate cans. The yard waste is picked up in a separate truck on the same day as garbage pick-up. The City of Lewiston also hauls yard waste from its own property (for example, city parks) to the composting facility. Collectively in 2009, a total of approximately 9,331 tons of yard waste were received at EKO Compost from the City Lewiston, which includes direct haul from the City and its residents, and residential curbside-collected yard waste.

In 2009, the City of Clarkston reportedly sent approximately 1,413 tons of city yard waste, curbside-collected yard waste, and self-hauled waste to the EKO Compost composting facility. The self-haul program is funded by the per-can solid-waste fees.

Residents outside of cities of Lewiston and Clarkston are allowed to self-haul yard waste to the EKO Compost facility on a per use fee. Although use by such residents is not tracked, the yard-waste contribution that these residents make to the facility is believed to be minimal. Most of these residents are rural (outside of the City of Asotin) and live on farms or small acreages on which they can dispose or compost their own yard waste, making it impractical or unnecessary for them to haul their yard waste over the long distances to the composting facility.

#### 4.2.1.3 Organic Yard and Wood Waste Program

Through grant funding by Ecology, the ACRL is conducting a trial organic yard and wood waste program whereby certain wood wastes are collected, chipped and recycled or reused. Asotin County, City of Clarkston and City of Asotin residents (and other Washington State residents) can now drop off certain organic yard and wood waste materials at the ACRL at no charge. The program was initiated in November 2009, and will be continued based on funding and community participation. Acceptable wastes are tree limbs and branches 6 inches or less in diameter, shrubs and bushes, and clean wood pallets. Users are encouraged to also call the ACRL if they have a question on acceptable or unacceptable wood wastes. At this time, unacceptable wastes are treated lumber, construction and demolition (C&D) wastes, grass clippings and leaves, and any MSW.

### 4.2.2 Needs and Opportunities

In its 1989 *Waste Not Washington Act*, the State of Washington has established recycling goal of 50 percent of the solid waste stream. In order to support this goal, Asotin County and the cooperating municipalities have made efforts toward providing cost-effective area-wide recycling opportunities, education, and outreach programs. However, due to budget constraints within Asotin County, only limited waste reduction efforts are presently made. At this time there are opportunities to achieve additional collection and disposal savings, heighten public awareness, and comply with Chapter 70.95 RCW.

Ecology recently expanded a statewide ban on outdoor burning, which includes yard wastes and land-clearing fires (Ecology, 2007). The state's ban now covers all communities with urban growth areas. This ban will likely result in a substantial increase in the amount of yard waste managed in the County.

Possible changes to existing programs in Asotin County might include:

- Implementing educational and promotional programs in the region to enhance participation and encourage proper preparation and sorting of recyclable materials.
- Encouraging buy-back centers in the region to provide additional locations for collecting recyclables and paying the public and commercial establishments.
- Adding more collection sites and material types being collected at drop-off boxes, and/or implementing a variable-can rate as an incentive for recycling in communities that don't already have this program in place,
- Changing the type of curbside recycling that is offered, or adding curbside recycling to the more rural areas of the County,

- Exploring the feasibility of a local material recovery facility to assist in recycling,
- Participating in a program with the local composting facility (EKO Compost) whereby the County pays EKO for citizens to self haul their yard waste and drop off at the facility,
- Exploring high-grade commercial recycling, and
- Exploring how to grow the yard waste recycling/composting programs in the County.

### 4.2.3 Evaluation of the Options

A number of options are available to the region to increase the level of recycling. Educational and promotional programs, buy-back centers, drop box programs, and curbside collection programs for both residential and commercial wastes are appropriate for consideration to increase recycling and waste diversion.

#### 4.2.3.1 Educational and Promotional Programs

Educational activities can be used at all levels for promotion of buy-back centers, drop boxes, or collection programs for residential and commercial materials. Education and promotion of any program will increase participation rates and encourage proper preparation of the materials. Asotin County should continue its efforts in public information/education on recycling and expand them as additional funding resources can be made available.

#### 4.2.3.2 Buy-Back Centers

Buy-back centers are a cost-effective way to collect recyclable materials because there is no cost to the local government or ratepayers. Privately operated buy-back centers typically buy recyclable materials from the public or commercial establishments, process the materials to meet market specifications, and transport and sell the materials to brokers or directly to the end-users that use the secondary materials in their manufacturing processes.

There are two buy-back companies presently serving the region, as previously described. Buy-back centers are less convenient than permanent collection centers/drop boxes, therefore, participation depends largely on economic motivation or personal enthusiasm.

#### 4.2.3.3 Increase the Number of Drop Box Collection Sites and/or Types of Materials Recycled

Another option is to provide additional drop boxes in key locations such as schools, shopping centers, libraries or government buildings, or any other centrally-located area. This option can be used in both urban and rural areas; although curbside programs will usually achieve higher participation rates due to their greater convenience. Curbside recycling may be the option of choice; however, in lower population density areas, curbside recycling is often not cost-effective.

A number of potentially feasible locations for additional drop boxes are identifiable within the region and others may be developed to expand existing opportunities for recycling. Recycling drop boxes could be used in conjunction with solid waste drop box stations. Additional bins for separated recyclables could be placed next to the waste bins. Bins for separated recyclables could be either serviced by existing contractors, or the service could be

competitively bid. Additional boxes could also be conveniently located in the City of Asotin to service that population center if curbside collection is not implemented in that community.

Drop boxes for recyclables can also be constructed and serviced by local service groups. In communities around the United States, scout organizations construct drop boxes for community use and haul the contents to recycling centers when necessary. The scouts keep all the money earned from the recyclables.

#### 4.2.3.4 Curbside Collection

Curbside collection is usually cost-effective in urban areas. Lewiston, Clarkston, Asotin, and urban areas of the counties surrounding Lewiston and Clarkston achieve the minimum service area densities. The City of Lewiston is currently providing source-separated curbside collection to its residents. Curbside recycling could be expanded to include other cities within Asotin County.

There are several types of curbside recycling programs that could be implemented in Asotin and Nez Perce Counties. They are source-separated (usually 3-bin), or single-stream (commingled), in reusable containers similar to garbage cans or in "blue bags".

New bins for residents and special collection trucks need to be purchased before implementation of source-separated recycling. Collection of source-separated recyclables can also be costly; in addition to existing garbage collection routes, new routes and personnel must be added for recyclables collection. Source-separated recycling programs typically generate the highest-quality product of all types of curbside recycling programs and require less secondary separation and processing, which can be costly.

Single-stream (commingled) programs that use reusable containers do not require specialized trucks or containers like source-separated programs, but do require a separate collection route. However, single-stream programs are easier for a resident to use and typically yield higher participation rates than source-separated programs; however, single-source programs require more costly secondary sorting and processing on the back end and may produce a lower quality material than source-separated programs.

Curbside collection of recyclables in more rural areas of the County that do not already have this service can be provided through contracted services, or individual municipal jurisdictions can offer the programs by using existing staff and equipment. The latter is presumed to be less cost effective if the municipality is not already directly involved in providing collection service for garbage. Contractors and vendors already involved in providing recycling or garbage collection services generally have equipment and resources available to perform these services at a competitive rate.

#### 4.2.3.5 Material Recovery Facility

A material recovery facility (MRF) may be needed if curbside recycling services in Asotin or Nez Perce Counties are implemented, especially if single-stream collection is implemented. A contractor could provide separate facilities for sorting and packaging of the materials, or the processing facility could be developed at the ACRL. This type of facility would sort recyclables from the residential collection system ("clean" MRF), which can either be based

on a commingled system (all materials placed in a single bin or blue bag), or a system allowing more segregation of materials in multiple bins.

The recovery of additional recyclable materials from the waste stream through a mixed waste processing facility (co-mingled refuse and recyclables - "dirty" MRF) may be a feasible way to further decrease the amount of waste requiring disposal and extending landfill life. This mixed waste processing facility could also provide baling or shredding unit processes needed for achievement of higher density fill.

Concepts for a receiving and processing facility located at the landfill capable of providing separation and packaging of commingled recyclables, as well as supplemental recovery of recyclables from the mixed waste stream, have been previously studied by Asotin County. A report prepared by Brown and Caldwell, entitled "*Municipal Solid Waste Processing and Material Recovery Facility, Preliminary Design Report,*" dated January 1992, has been issued and contains preliminary designs for such a facility.

#### 4.2.3.6 High-Grade Commercial Recycling

Commercial high-grading programs generally require the solid waste collector to reroute specific commercial collection vehicles to selected commercial establishments that have a significant portion of recoverable materials in the currently disposed waste stream. Routes designed to facilitate high-grading should include generators with relatively clean loads of materials such as corrugated containers, high grade paper, plastics, metal or other materials, and should avoid generators of substantial quantities of food wastes or other potential sources of contaminants. A high grading program can operate in conjunction with an intermediate processing center (IPC), buy-back center, recycling center/transfer station or mixed waste processing facility.

For successful programs, it is necessary to create an incentive for the hauler to optimize routes for high-grading. This can be accomplished through providing reduced rates for high-grade loads. As a practical matter, the mixed waste facility should be at a location where scales are in use and a weight-based fee system is already in place, or where such systems can be readily implemented.

Ideal participants in the high-grade recycling program would be businesses and manufacturing facilities that have a large volume of high quality recyclable materials. These establishments would include retail outlets with large amounts of cardboard and factories with surplus recyclables from the manufacturing process.

If high-grade recovery activities can be accomplished in conjunction with the material sorting facility necessary for the Lewiston-Clarkston curbside program, little or no additional capital costs would be involved. Existing collection trucks can still be used on collection routes and handpicking aided by use of the mechanical separation equipment in the facility is the method for recovering material from this type of operation.

#### 4.2.3.7 Yard Waste Collection and Composting/Co-Composting

There are several alternatives for yard waste processing. One is to rely on residents to compost yard and garden wastes at home. In rural parts of the region, it is appropriate to encourage backyard composting through an educational program. This approach can be implemented at low cost (refer to Section 4.2.1).

Another alternative is to collect the wastes separately from garbage and recyclable materials for separate processing at one or more centralized locations. As described earlier in this chapter, the latter alternative has been implemented by the cities of Lewiston and Clarkston. Both Lewiston and Clarkston have established curbside collection programs for yard waste. The curbside program in Lewiston operates year-round. The curbside program in Clarkston operates during the spring and summer months of the year. Residents of Lewiston and Clarkston may also self-haul their yard waste to the EKO Compost facility year-round at no cost. The yard waste that is received at the facility is chipped, mixed with wastewater treatment plant sludge/biosolids and hog fuel, and composted. There are markets for the finished compost, and numerous uses exist.

The bagging plant at EKO Compost came on-line in March 1992. Compost is sold to wholesalers and distributors for retail purchase. The compost helps divert both yard waste and wastewater sludge from the landfill. The major benefits of the centralized composting facility are that yard waste materials are being recycled into new, useable products, and that valuable landfill space is being conserved. The wastewater treatment plants are also enjoying the avoided costs of incineration, long-haul, or other high-cost sludge disposal and management practices.

This program would involve the County contracting with EKO to receive and process county residents' yard waste in its composting facility. The program would basically be an expansion of the curbside and self-haul programs into other County residents, which have been successful in both Lewiston and Clarkston. Attempts would need to be made to categorize or quantify the amount of yard waste currently being disposed in the landfill in order to determine quantities that could be diverted and cost estimates for this program.

With the statewide burn ban now in place in Washington, increasing yard wastes volumes are likely to become more of a concern in Asotin County. In order to encourage the diversion of yard wastes from the municipal solid waste stream, Asotin County has implemented a trial organic yard and wood waste program that was put in to place in November 2009 by the ACRL. The program is funded with a grant money from Ecology to support alternatives to open burning. Under this program Asotin County, City of Clarkston and City of Asotin residents (and other Washington State residents) may dispose of certain organic yard and wood waste at the ACRL at no charge.

Another alternative would be also separate yard wastes from the municipal solid waste stream at the ACRL, and develop a separate processing area at the landfill for this material. The tipping fee would need to be less for these waste streams as an incentive for the customers to separate them for easy collection and handling at the landfill. There are several options for managing these wastes, which may include:

- The County hauls these separated yard wastes collected at the ACRL to the EKO Compost facility for processing (likely an expensive option that would rely on subsidies from the tipping fee to help fund),
- The landfill builds and operates a composting process that diverts all yard waste from the landfill, with chipped wood waste to use as a bulking agent in the composting process. The material is then either sold to local companies to market or sold directly to the public for use in their yards and gardens.

These alternatives would help to divert wastes from the municipal solid waste stream without having to solely rely on residents to compost at home or self-haul their yard waste to EKO.

## 4.2.4 Recommendations and Implementation

Based on the potential to increase recycling and the evaluation of the alternatives previously presented, the following recommendations are made with an implementation discussion.

### 4.2.4.1 Enhance Educational and Promotional Programs

Programs should be developed and should include information about the existing and new recycling and yard waste composting opportunities currently available in the area. These programs should include outreach through public workshops and forums, development of a webpage on the County's website, and education programs at the local public schools. Facilitating these programs can be time consuming and sometimes can require a fully funded part-time position to execute them effectively. The County should continue to apply for grants through the state to help support these programs at a level that they can afford.

### 4.2.4.2 Encourage Residential Recycling

The amount of recyclable materials remained relatively steady through the reporting period (2005–2009), depending on the communities that had data available (Table 4-1). It will be important in the coming years to further encourage residential recycling, and continue to track recycling tonnages.

**TABLE 4-1**
5-Year Trend for Recycling/Waste Diversion (2005 – 2009) (in tons)
*Asotin County Solid Waste Management Plan, 2010 Update*

| Year | Category | City of Asotin/ Asotin Co./ Unicorporated Asotin Co. [a] | City of Clarkston | Lewiston/Nez Perce Co. | Pomeroy/ Garfield Co. [b] | Total |
|---|---|---|---|---|---|---|
| 2005 | Waste Disposed | 9,461 | 5,690 | 26,856 | 1,618 | **43,625** |
| | Waste Recycled/Diverted | 497 | 1,852 [d] | 13,038 | 0 | **15,387** |
| | Total Waste Generated | 9,958 | 7,542 | 39,894 | 1,618 | **59,012** |
| | %Waste Recycled/Diverted | 5.0% | 24.6% | 32.7% | 0% | **26.1%** |
| 2006 | Waste Disposed | 11,024 | 6,058 | 28,286 | 1,681 | **47,049** |
| | Waste Recycled/Diverted | 623 | ND | 12,306 [d] | 0 | **12,929** |
| | Total Waste Generated | 11,647 | --- | 40,592 | 1,681 | **59,978** |
| | %Waste Recycled/Diverted | 5.3% | --- | 30.3% | 0% | **21.6%** |
| 2007 | Waste Disposed | 11,982 | 6,279 | 28,991 | 1,535 | **48,787** |
| | Waste Recycled/Diverted | 598 | 1,336 [d] | 10,184 [d] | 0 | **10,782** |
| | Total Waste Generated | 12,580 | 7,615 | 39,175 | 1,535 | **59,569** |
| | %Waste Recycled/Diverted | 4.8% | 17.5% | 26.0% | 0% | **18.1%** |
| 2008 | Waste Disposed | 12,021 | 6,128 | 29,188 | 1,350 | **48,687** |
| | Waste Recycled/Diverted | 617 | 1,454 [d] | 10,765 [d] | 0 | **12,836** |
| | Total Waste Generated | 12,638 | 7,582 | 39,953 | 1,350 | **61,523** |
| | %Waste Recycled/Diverted | 4.9% | 19.2% | 26.9% | 0% | **20.9%** |

**TABLE 4-1**
5-Year Trend for Recycling/Waste Diversion (2005 – 2009) (in tons)
*Asotin County Solid Waste Management Plan, 2010 Update*

| Year | Category | City of Asotin/ Asotin Co./ Unincorporated Asotin Co. [a] | City of Clarkston | Lewiston/Nez Perce Co. | Pomeroy/ Garfield Co. [b] | Total |
|---|---|---|---|---|---|---|
| 2009 | Waste Disposed | 12,157 | 5,752 | 27,881 | 1,278 | **47,068** [e] |
| | Waste Recycled/Diverted | 736 | 1,753 [d] | 10,453 [d] | 0 | **12,942** |
| | Total Waste Generated | 12,893 | 7,505 | 38,334 | 1,278 | **60,010** |
| | %Waste Recycled/Diverted | 5.7% | 23.4% | 27.3% | 0% | **21.6%** |

[a] Waste category includes the City of Asotin and Unincorporated Asotin County (both hauled by Naslund Disposal), and Asotin County (self-haul) collected at the ACRL. The total waste recycled/diverted under this category also includes Moderate Risk Wastes (also known as Household Hazardous Wastes) that are collected at the ACRL MRW Facility and those that are also collected at the Lewiston/Nez Perce County Transfer Station (and managed by Asotin County under contract with Lewiston).

[b] Waste is picked up and hauled by Naslund Disposal.

[c] This total includes estimates of recycled waste collected at the Lewiston/Nez Perce County transfer station.

[d] Includes curbside-collected yard waste and self-hauled waste to the EKO composting facility. Does not include wastewater plant sludges.

[e] Approximate 222 tons of waste hauled from the City of Lapwai, Idaho in 2009 are not accounted for in the waste disposed tonnages for 2009.

ND = No data available.

As shown in Table 4-1, the City of Lewiston/Nez Perce County is the largest recycling contributor, fueled by its curbside recycling program. The City of Lewiston is currently the only partner that is providing curbside collection to its residents. Curbside collection of recyclable materials should continue in Lewiston, expansion of these services should be considered for the other cities, especially the City of Clarkston. Where curbside recycling is not feasible, a program to encourage residents to recycle more of the waste stream should be implemented. Other municipalities should implement a program to encourage residents to recycle more of the waste stream at drop-off box sites. The City of Asotin, Asotin County, and Nez Perce County should continue the operation of the recycling drop-off box locations.

Recyclable materials from programs conducted within the region could be processed at one facility, rather than numerous facilities, to avoid redundancy in expenditures and thus reduce costs. A regional material recovery facility (MRF) for single-stream (commingled) materials could be developed by Asotin County at the landfill, or by a collection contractor at a private site. This facility should be capable of handling the residential recyclables as well as materials from high-grade commercial collection programs.

Prior to implementing any of these collection programs, an understanding of market conditions (and volatility), quantity of recyclables available locally and regionally, and packaging or preparation requirements must be established. Commitments for purchase of anticipated quantities should be established with end-users or brokers, to the extent possible.

### 4.2.4.3 Encourage High-Grade Commercial Recycling

The County should continue discussions with the franchised haulers to optimize collection routes for high-grading. Incentive rates for encouraging this activity should be explored and developed.

This collection and recovery method can be initiated upon completion of a processing facility for recovery of corrugated containers and other selected materials once markets have been secured.

#### 4.2.4.4 Enhance the Yard Waste Collection and Composting Program

With the statewide burn ban now in place, the amount of yard wastes coming to the ACRL is likely to increase. The County should continue its organic yard and wood waste collection program at the landfill. The County should also consider implementing a yard waste diversion program that captures other yard wastes such as yard clippings and leaves. This would involve either contracting with EKO Compost to receive and process self-hauled county residents' yard waste in its composting facility, installing a compost processing system at the ACRL, or County transfer of collected yard wastes to EKO.

It is recommended that Asotin County perform a study to categorize and quantify the amount of yard waste types currently being generated in the County and disposed in the landfill (including clean wood currently collected in the trial program), and evaluate the cost versus benefits of installing these types of systems. Composting can be time consuming, costly, and an overall difficult undertaking that can produce objectionable odors that can result in complaints from the nearby residents. Typically a compost facility is not a cost effective operation unless there is a strong local market for the sale of the compost. Further evaluations, however, should be done as part of the study to evaluate the different composting techniques available and determine the feasibility of composting, especially when the EKO Compost facility is already established in the community.

The Cities of Lewiston and Clarkston should continue their yard waste operations with EKO. Areas not currently served by the composting program should be examined for the possibility of collection. Backyard composting, especially in rural areas, should be encouraged through the educational outreach programs.

Asotin and Nez Perce Counties (outside of Clarkston and Lewiston) should work with EKO in developing local markets for their compost product to help drive the demand of the product up. Final closure of approximately 30 acres at the landfill may require a large quantity of soil amendment for the topsoil layer. The availability of economical quantities of the EKO product will be evaluated at the time of closure.

CHAPTER 5

# Solid Waste Programs

The programs and methods of energy recovery, collection, transfer, and import/export in this chapter continue to support solid waste management system priorities leading up to the consideration of landfilling.

## 5.1 Energy Recovery and Incineration

### 5.1.1 Existing Conditions

Incinerators are used to recover the energy value of MSW and waste generated by several of the local wood product processors as well as wood wastes imported from neighboring areas. Typically, the fuel source is fed into an industrial hog fuel boiler, where it is incinerated and steam is produced. Clearwater Paper Corporation presently combusts wood waste at its plant, near Lewiston on the Clearwater River. Clearwater Paper produces lumber, pulp and paper, and other wood products at the Lewiston plant. Wood waste generated at the plant, such as bark, is burned in a hog fuel boiler to generate process steam and electricity. Waste paper generated on-site as trim or cull or from support operations is also combusted. The steam and electricity is used to meet plant needs; none is exported. Other wastes generated at the Clearwater Paper facility are collected at a central transfer station onsite and long-hauled to a regional MSW landfill such as the Arlington Landfill operated by Waste Management.

There are no municipal solid waste incinerators within the two-county region (Asotin and Nez Perce Counties). The closest incinerator is in Spokane County.

Asotin County has started the process of evaluating the quantity and quality of landfill gas extracted from the ACRL for energy recovery. The County plans to continue its efforts towards eventually installing a landfill gas-to-energy system, once landfill gas extraction rates and quality are sustained at a level that ensures an economically, viable project. The County has recently embarked on a joint-venture with the local power utility company to co-fund a study for energy recovery at the landfill.

### 5.1.2 Needs and Opportunities

Although incinerators are available in sizes that would match the waste quantities received at the ACRL, incinerating has not been shown to be cost effective when relatively inexpensive landfills are still available. For example, Spokane is using an MSW incinerator to reduce the amount of its solid waste by 90 percent. The remaining 10 percent of the MSW is ash, requiring disposal in a landfill. If Asotin County were to send solid waste to Spokane, the cost of disposal in Asotin County would include the cost of transportation and the tipping fee at the incinerator. The 2010 tipping fee for disposal of MSW at Spokane's solid waste-to-energy plant is around $98 per ton. In comparison, the tipping fee at the ACRL for 2010 is only $36.49 per ton, covering the cost of disposal and all solid waste program costs, including recycling.

#### 5.1.2.1 Co-Combustion at Clearwater Paper Corporation

A number of considerations must be addressed regarding co-combustion at the Clearwater Paper facility. First, it is improbable that only a refuse-derived fuel (RDF) product would be suitable for combusting in the existing boilers, and that Clearwater Paper would be interested in co-combustion of MSW with their controlled hog fuel source. This would require that a processing facility be constructed in order to produce an RDF product of uniform size and enhanced BTU value from the heterogeneous MSW.

Secondly, modifications to the fuel feed system would be required in order to handle the RDF. Thirdly, disposal requirements of the residual ash that would contain both wood ash and MSW ash would need to be determined. Finally, there would likely be a need to provide additional air pollution control equipment to control emissions generated as a result of burning MSW.

#### 5.1.2.2 New Dedicated Incinerator

A new facility constructed to combust only MSW could be either a mass burn facility (where unsorted MSW is burned as it is received), or a refuse-derived fuel (RDF)-burning facility, whereby the MSW is first sorted and processed. The second option would require that a RDF processing facility be constructed in addition to the incinerator. The RDF processing facility would also allow for recovery and recycling of certain materials rather than combusting them as would be done in a mass burn plant.

### 5.1.3 Evaluation of the Options

Several factors affect why in-county MSW incineration, with or without energy recovery, is not a reasonable alternative for rural counties. The comparatively low prices paid for electricity in the Northwest and the high costs of an incinerator's environmental controls head the list. Another factor for Asotin County is the relatively low landfilling cost. Development of a small facility for incinerating MSW in Asotin County does not appear to be practical. The exception may be co-combustion of RDF at an existing boiler, such as the Clearwater Paper plant.

The cost of transporting and disposing waste in Spokane is more than double the cost of landfilling at the ACRL. The current cells at the ACRL (Cells A-C) have approximately one million cubic yards remaining. With the future Cell D expansion, the ACRL has a total remaining capacity of approximately 3 million cubic yards, eliminating the Spokane alternative as a need and viable option at this time.

#### 5.1.3.1 Co-Combustion at Clearwater Paper Corporation

Co-combustion at the existing Clearwater Paper plant would require construction of an RDF facility by the County and possibly modifications to existing facilities at Clearwater Paper. Existing facilities that may need modification include fuel storage and handling, fuel feed, ash handling, and air pollution control. At this time Clearwater Paper has not shown any interest in a waste to energy project at their facility.

#### 5.1.3.2 New Dedicated Incinerator

Although incinerators are available in sizes that would match the waste quantities received at the ACRL, incinerating has not been shown to be cost effective. An additional concern with

MSW incineration is the problem of ash disposal. In May 1990 Ecology finalized regulations, Chapter 173-306 WAC, which govern MSW ash disposal. These regulations require that the ash be disposed in a dedicated ash monofill with double liner and leachate detection.

### 5.1.4 Recommendations and Implementation

Incineration of MSW is not recommended for Asotin County because of the availability of relatively inexpensive landfill space, the relatively small volume of waste generated in the County, and the unavailability of nearby incinerators that would make this option economically viable.

There are no implementation plans required for the County to establish an incineration facility because the landfill operation best suits current needs.

## 5.2 Waste Collection

### 5.2.1 Collection—City of Clarkston

#### 5.2.1.1 Existing Conditions

The City of Clarkston operates a municipal collection service within the city limits that includes household garbage, yard waste and site specific recycling bins. Residential solid waste collection is done Monday through Friday using two twenty five cubic yard rear loading trucks. Commercial collection is performed on the same days for one half of the day using the same trucks.

Commercial collection at larger facilities using onsite compaction systems are served by the City of Clarkston with a twenty two foot long rail hoist truck. The same truck is used for the collection and disposal of demolition waste using ten and twenty cubic yard containers. These containers can be rented from the City by the week or the month.

The City of Clarkston has a residential yard waste collection program that operates year round. Yard waste is picked up from residents' curbside weekly on the designated garbage pick-up day. This curbside service is available to all Clarkston residents at no extra cost. The residential yard waste is accomplished with a semi-automated system. The City provides 95 gallon rolling containers that work with the system to allow the protection of the crew and the ability to lift the heavy yard waste. Residential yard waste is collected with one or two trucks per route, depending on the time of year. Clarkston residents also are allowed to self-haul yard waste to the EKO composting facility at no additional charge. Additionally, the City of Clarkston maintains an active recycling program. Four recycling drop box receptacles are conveniently located around the city for residents to drop off their recyclables.

For information on collection rates and container rental fees, contact:

City of Clarkston, Sanitation Department
830 5th Street
Clarkston, WA 99403
(509) 758-5541
website: www.clarkston-wa.com/

#### 5.2.1.2 Needs and Opportunities

The City of Clarkston does not have a formal projection of future waste volumes; however, the average annual growth rate from 2001 through 2007 was approximately 2.7 percent[1]. The growth rate, however, has leveled off in the last 5 years. The City of Clarkston expects the residential demand to remain relatively constant with a slight increase in commercial accounts. Future development plans within the city include continued expansion of the port area. As the population density in the city increases, the need for curbside recycling should continue to be evaluated. The ease of curbside versus drop box recycling will encourage recycling rates to increase in the city and divert more waste from the landfill.

#### 5.2.1.3 Evaluation of the Options

Participation in existing recycling and yard waste composting programs provides a way for a household to use fewer garbage containers, and therefore enjoy a lower fee on the variable-can rate schedule. Participating in a curbside yard waste collection program could further reduce residential waste disposal. Overall revenues from the variable-can rates, however, must still cover the full costs of collection and disposal services, including the net costs of providing drop box collection for recyclables.

#### 5.2.1.4 Recommendations and Implementation

Clarkston should continue operating and promoting the satellite recyclables drop-off facilities and yard waste collection program to reduce the amount of waste disposed at the landfill. Additionally, as the population density grows in the city, the need for curbside recycling should continue to be evaluated to help encourage recycling.

### 5.2.2 Collection—City of Asotin

#### 5.2.2.1 Existing Conditions

The City of Asotin is served by Carroll-Naslund Disposal Service, Inc., a private local operation commonly known as Naslund Disposal. The residential pickup is at curbside every Thursday, and customers are billed per can on a monthly basis. Commercial customers, including the town which has two dumpsters in the park, are billed on a rental rate for the size of dumpster plus a per trip pickup charge.

The rate schedule for disposal services includes an extra charge per can, above a single can. This cost helps to encourage some waste reduction and recycling in order to reduce the monthly garbage bill.

The City of Asotin has a drop box receptacle at the Courthouse Annex Building to collect recyclables and several also nearby in the county.

For information on collection rates and container rental fees, contact:

City of Asotin
Public Works Department
121 Cleveland Street
Asotin, Washington 99402
(509) 243-4411
website: http://cityofasotin.org/

[1] These rates are based on annual disposal tonnages as documented in Table 3-1.

#### 5.2.2.2 Needs and Opportunities

Similar to Clarkston, the City of Asotin expects its demand for collection to remain relatively constant. There are centrally-located containers for drop-off for recyclable materials at the Courthouse Annex in the city and two others in addition to the landfill within the County. There are currently no plans for initiation of curbside recycling services, although this service could potentially be implemented in conjunction with the nearby Lewiston program and any future Clarkston programs.

#### 5.2.2.3 Evaluation of the Options

The current centrally-located drop-off centers provide a range of containers for several kinds of recyclables, and are an appropriate recycling alternative for a town the size of Asotin. However, it may be relatively easy to provide curbside recycling in the City of Asotin in conjunction with any future Clarkston program. Asotin also could join Clarkston in utilizing the yard waste composting program by providing drop boxes and/or curbside collection of yard waste.

#### 5.2.2.4 Recommendations and Implementation

The City of Asotin should continue to evaluate the need for both curbside recycling and yard waste pickup as the population density grows in the city. These programs could be interfaced with other nearby communities as an alliance (such as the City of Clarkston) to help justify the need for these programs on the basis of financial payback among other reasons.

Continued operation of the recycling drop station at the Courthouse Annex and the other nearby locations within Asotin County is recommended. Monitoring of recycle commodities and size of the drop boxes should continue, to optimize the existing program to the extent possible.

### 5.2.3 Collection—Unincorporated Asotin County/City of Pomeroy and Garfield County/Port of Wilma in Whitman County

#### 5.2.3.1 Existing Conditions

A portion of unincorporated Asotin County, City of Pomeroy and Garfield County are also served by Naslund Disposal. Naslund's franchise territory is shown on Figure 5-1. Naslund Disposal does not have a service contract with the City of Clarkston, but it does with the City of Asotin. In addition to the City of Asotin, Naslund serves the majority of businesses in Clarkston Heights and approximately three-quarters of the County residents outside of, and adjacent to, Clarkston. Customers use dumpsters or one of the 96-gallon two-wheeled carts available to residents in the area.

The Port of Wilma in Whitman County also is serviced by Naslund Disposal. Less than 20 tons of solid waste per year is collected in containers at the Port of Wilma and disposed of at the ACRL.

With the ACRL serving three counties, a large part of the region lies a considerable distance from either the landfill or the Lewiston/Nez Perce County transfer station. Some Nez Perce County residents live 30 miles from the transfer station, and some Asotin County citizens

reside more than 40 miles from the landfill. In the city impact areas of Nez Perce County, residents enjoy the convenience of garbage pick-up at more than 1,500 driveways. Other more remote areas in the county are served by bulky-waste site pick-ups, at either Sweetwater, Idaho on US-95 next to the grain elevators, or at Junction of US-12 and Cottonwood Creek These facilities are open every other week, alternating between the two locations. Waste is picked up by Sunshine Disposal & Recycling [also known as Sanitary Disposal, Inc. (SDI)] and transported to the Lewiston/Nez Perce County Transfer Station. Recyclables also are collected at these bulky-waste disposal sites.

With the installation of the scale at the landfill, Asotin County residents who take their garbage directly to the landfill are charged on the basis of weight as part of an equitable system of dumping fees.

A unique situation exists at the Rogersburg area (also known as Hellers Bar) located at the mouth of the Grande Ronde River, and along the 25-mile stretch of Snake River shoreline between Asotin and Rogersburg. Rogersburg is a popular launching and take-out point for boaters using the Hells Canyon National Recreation Area. A sign is posted advising users to haul and dispose of their own trash. This does not always occur.

Along the Snake River shoreline between Asotin and Rogersburg are many popular beaches and informal camp sites. No litter barrels or dumpsters are provided at these sites. Signs have been posted to discourage illegal trash dumping and encourage users to pack their waste out. The Asotin County Litter Crew and the Youth Corps from Ecology perform summer trash clean-up along the shoreline in this area. These programs are funded by grants from Ecology. Several years ago, the Game Department installed trash collection dumpsters along this shoreline. However, the dumpsters were abused and, as a result of insufficient funding, this was found to be impractical.

Asotin County also has two drop box receptacles, conveniently located around the County to collect recyclables (in addition to the receptacle at the courthouse in the City of Asotin).

For information on collection rates, contact:

Asotin County Regional Landfill
2901 6th Avenue, Clarkston, WA 99403
(509) 758-9230
email: ACRL@clarkston.com
website: www.co.asotin.wa.us/public_works_landfill.htm

#### 5.2.3.2 Needs and Opportunities

The residents of southern and western Asotin County continue to have a need for some type of regular waste disposal service. Uncontrolled dumping may not appear to be a pressing issue, but it can present a real hazard to public health and safety, besides being unsightly. There were several well-established illegal dump sites at Grouse Flats and Anatone. Most long-term illegal dumping, however, has been eliminated through increased enforcement by ACHD. Although these sites have been cleaned up, no refuse or recycling bins and regular collection services have been provided at these sites to help prevent future dumping.

#### 5.2.3.3 Evaluation of the Options

Several approaches could be taken to help discourage illegal dumping. An increased emphasis on prosecution could be made but would be expensive and of doubtful success. The official policy of Asotin County, like other recreational areas, is "Pack In, Pack Out." That is, individuals who use these recreational facilities are required to be responsible for the hauling of their own waste out of the sites. Dumpsters or litter barrels might assist the County in enforcing this policy. However, residents themselves will be required to be diligent about collection of their own waste.

#### 5.2.3.4 Recommendations and Implementation

It is recommended that the County enforce any applicable litter prevention laws. Evaluate expanding the service area by Naslund Disposal for MSW collection.

### 5.2.4 Collection—City of Lewiston

#### 5.2.4.1 Existing Conditions

The City of Lewiston contracts with a private waste disposal firm, Sunshine Disposal & Recycling [also known as Sanitary Disposal, Inc. (SDI)]. Residential and commercial collections are both performed by Sunshine Disposal & Recycling. Sunshine Disposal & Recycling uses semi-automated and fully-automated trucks for residential and commercial mobile cart service and semi-automated for other commercial services.

Residential and commercial customers eligible for mobile cart service may choose from a 32-gallon, 64-gallon, or 96-gallon cart service. The contracted service provider owns the mobile cart. However, residential and commercial customers may purchase and use their own cart so long as it is compatible with service provider's equipment. Residential customers must contact the City (www.cityoflewiston.org/index.aspx?nid=307) to start or stop mobile cart service. Commercial customers must also contact the City to inquire if they are eligible for mobile cart service. Residential and commercial customers will be delivered a mobile cart upon receipt of request to start mobile cart service. The Lewiston City Council sets the rates for mobile carts and all sanitation services. The residential rates for mobile carts include solid waste and yard waste collection and curbside recycling. Commercial rates for mobile carts do not include yard waste collection.

The City of Lewiston also operates a residential yard waste collection program. This curbside service is available to all Lewiston residents at no extra cost. The collection is performed weekly on the same day as garbage collection. There is no limit on the number of approved containers that residents may put out for collection. Collection is year-round. From the last full calendar week in March through November, yard waste is collected one time per week on the garbage collection day. From December up to the last full calendar week in March, yard waste is collected once per month on the scheduled garbage collection day. Plastic bag use is limited to November through March. Reusable disposal cans, with 20-32 gallons of capacity, are used year-round, as are 50-gallon paper bags.

Lewiston residents also are allowed to self-haul yard waste to the EKO facility at no additional fee. Additionally, the City of Lewiston maintains an active recycling program. Biweekly curbside recycling service is available to all mobile cart users and some commercial can and dumpster users, depending upon location. Residents who subscribe to this voluntary

program receive one 14-gallon blue bin to be used for recyclables. Eight commodities are collected in the program, including newspaper, cardboard, mixed waste paper, magazines/catalogues, aluminum cans, steel cans, and all colors of glass. The program has about a 70 percent participation rate from the Lewiston community. Recycling drop off also is provided at the Lewiston/Nez Perce County Transfer Station (and the ACRL entrance facility) for those residents that self-haul their waste.

For information on collection rates and container rental fees, contact:

City of Lewiston, Sanitation Department
P.O. Box 617
Lewiston, ID 83501
(208) 746-1316
website: www.cityoflewiston.org/index.aspx?nid=307

#### 5.2.4.2 Needs and Opportunities

Lewiston has a curbside recycling program, in addition to the curbside yard waste collection.

#### 5.2.4.3 Evaluation of the Options

The curbside recycling and yard waste collection programs should be kept in service and encouraged to be used.

#### 5.2.4.4 Recommendations

The City of Lewiston should continue to encourage recycling and yard waste collection among the residents. Asotin County and the City of Lewiston should collaborate in the development of a comprehensive plan for encouraging participation in the recycling and yard waste collection programs. In the long term, weekly recycling pickup should be considered as more households begin to participate and recycle more materials. Additionally, single-stream recycling should also be considered to make recycling more convenient.

### 5.2.5 Collection—Nez Perce County

#### 5.2.5.1 Existing Conditions

In Nez Perce County, as in Asotin County, solid waste collection is accomplished through contracts with the private sector. Sunshine Disposal & Recycling also serves Nez Perce County residents through a system of County-owned dumpsters. The entire County is served by this system with the exception of the towns of Lapwai, Culdesac, and Peck. Officials in these communities have contracted with haulers who take the waste to various neighboring landfills for disposal. As of 2009, Lapwai contracted with Asotin County for waste disposal at the ACRL. Culdesac takes its refuse to a landfill in Grangeville (Idaho County), and the waste from Peck is transported to a landfill in Orofino (Clearwater County). Additionally, Latah Disposal operates waste collection and recycling services (in coordination with Moscow Recycling) at sites in Sweet Water and Myrtle Beach. Recycling in Nez Perce County also is offered at two drop box sites, in addition to the transfer station.

#### 5.2.5.2 Needs and Opportunities

When lines at the transfer station are long, or whenever it is convenient, some city residents are known to deposit their refuse in the nearest available County-owned dumpster. Enforcement of the County-only use of these dumpsters is difficult and, therefore, almost non-existent.

Nez Perce County currently owns the dumpsters. If costs of bin and site maintenance are substantial, there may be a cost advantage to the County if the dumpsters were privately owned. In that case, maintenance of the dumpsters would become the responsibility of the waste collector and maintenance of the sites could be transferred over as well.

There is a possibility that in addition to Lapwai, the communities of Culdesac and Peck could eventually be included in the collection system for waste disposal at the ACRL. There are approximately 1,400 residents in these three communities.

#### 5.2.5.3 Evaluation of the Options

The County could step up enforcement efforts if use of County-owned dumpsters by city residents is perceived as a serious problem. This would likely expend resources without much reduction in illegal usage. Nez Perce County must determine what level of enforcement makes economic sense.

Private ownership and maintenance of the dumpsters might result in reduced cost to the County, particularly in a competitive situation. Cost reductions would likely result because the same crew emptying the dumpster could pick up litter and perform minor maintenance. The current situation requires the County to assign personnel to travel the same routes as the collection vehicles in order to service the dumpster sites.

There is no apparent advantage to the County of including Lapwai, Culdesac, and Peck in the County system. Inclusion of these three towns would increase the amount of waste landfilled in Asotin County and utilize a small portion of its valuable capacity, which would otherwise be available to current users.

#### 5.2.5.4 Recommendations and Implementation

Nez Perce County may wish to consider a cost study regarding private versus public ownership of the dumpsters and responsibility for site maintenance. This should be done at the convenience of the County, depending on the perceived need and potential cost savings.

## 5.3 Transfer of Wastes

### 5.3.1 Existing Conditions

Transfer of wastes may be defined as waste collection at a central location and transfer from both transfer stations and drop boxes. In this SWMP, drop boxes are discussed in the previous section on collection. This section is focused on transfer stations. Transfer stations generally receive waste from public users and/or commercial collection vehicles, and then consolidate the wastes in large transfer trailers for haul to a landfill or another type of waste management facility.

There is one transfer station within the region that transfers waste to the ACRL. The Lewiston/Nez Perce County Transfer Station, which opened in 2001, serves the City of Lewiston and those residents in the Nez Perce County solid waste collection system. The transfer station is operated by the City of Lewiston. Residents can dispose of refuse at the transfer station in addition to recycling, at no additional charge. The facility is located at 560 Downriver Road, adjacent to the EKO Compost facility. The transfer station facility also serves as a central collection point for the commercial haulers that collect garbage in the Lewiston/Nez Perce County solid waste collection system before it is consolidated and transferred to the ACRL for disposal[1].

Recyclable materials also are collected at the transfer station. Certain household hazardous waste materials, such as used oil, oil-based paints and batteries, are also collected at the facility, and are then transferred to the MRW facility at the ACRL or collected directly by a certified waste hauler. The costs of operation of the transfer station are shared between the City of Lewiston and Nez Perce County, based on proportionate population. No transfer stations are located in Asotin County.

### 5.3.2 Needs and Opportunities

There is presently no need or opportunity for a transfer station in Asotin County. The population density, haul distance, and waste loads at this time do not currently substantiate the need.

### 5.3.3 Evaluation of the Options

None required.

### 5.3.4 Recommendations and Implementation

It is recommended that the City of Lewiston continue to perform recycling operations at the transfer station, and continue to publicize satellite recycling and yard waste composting throughout Nez Perce County. Lewiston should also ensure that the transfer station provide the necessary capacity to receive and handle projected future solid waste quantities, and also comply with solid waste handling facility standards for the State of Idaho.

## 5.4 Waste Importation/Exportation

### 5.4.1 Existing Conditions

The transfer of waste from Lewiston/Nez Perce County to the ACRL, although across the state line, involves only a short haul distance. The current practice of drop box pickup from more distant areas of Nez Perce County and (the assumed) implementation of drop box pickup from distant areas in south Asotin County might be considered long haul in a sense, but is more appropriately looked at in terms of normal waste collection and centralization pickup from less densely populated areas. Rural drop boxes and their role in collection activities are further discussed in Section 5.2.

[1] Asotin County holds a 7-year service contract (with a 3-year optional extension) with Lewiston for transferring waste from the transfer station to the ACRL and disposing of the waste at the landfill.

No waste is exported out of either county, except for the small towns of Culdesac, Peck, Sweetwater, and Myrtle Beach in Nez Perce County that send their waste to other Idaho counties for disposal. The choice of transporting wastes to other Idaho counties for these towns rather than to the Lewiston transfer station in Nez Perce County is primarily determined by shorter haul distances and lower costs when using other available waste collection programs.

The City of Pomeroy and surrounding areas of Garfield County (and as of 2009 the City of Lapwai – served by Four Feathers Disposal) import their solid waste into Asotin County. They are served by Naslund Disposal, who collects approximately 1,500 tons of waste from the area per year. A small quantity of solid waste generated in Whitman County is imported into Asotin County. The franchise area of Naslund Disposal extends from Asotin County into Whitman County to include service to the Port of Wilma. Because the Whitman County Transfer Station is approximately 40 miles away from the Port, Naslund hauls the waste collected at the Port to nearby ACRL, which is only a few miles away. The quantity of waste from the Port is estimated to be no more than 20 tons per year.

### 5.4.2 Needs and Opportunities

The current collection and disposal practices that have evolved in the Asotin County region are the result of landfill availability, transfer and import/export costs, and tipping fees within the region. These may be viewed as market forces that will continue to shape haul practices in the region. A number of changes in local market forces, including anticipated closure of several smaller landfills, increased tipping fees due to substantial necessary upgrading of remaining landfills, and other potential changes, could affect waste disposal and import of more waste to ACRL. Changes that would lead to major export of wastes from the region are less likely to occur.

It is the view of most people involved in solid waste planning in the region that the ACRL will remain open for many more years to come and that waste will continue to flow to the landfill from Lewiston and Nez Perce County[1].

Potential waste export options for the Asotin County region, in the event of a premature closure of the landfill, include long haul transport options by road, rail or barge to one of three large regional landfills, Columbia Ridge Landfill located near Arlington, Oregon, Roosevelt Regional Landfill in Klickitat County in south central Washington, and Finely Butte Landfill in Morrow County, Oregon (near Boardman, Oregon). However, it is expected that the cost of transport to, and disposal at any of these landfills will make waste export an expensive option by comparison.

### 5.4.3 Evaluation of the Options

There is no identified need for the current participants to change any major aspect of current transport and disposal operations or to consider long haul disposal options.

Waste export would be more costly (likely on the order of $80 to $100 per ton or more), which includes tipping fee, transportation, and capitalization of the necessary waste

[1] Asotin County's contract with Lewiston (and the other Nez Perce County participants) was recently renewed in 2007 to provide services through 2013 with an optional 3 year extension.

receiving, loading and transferring facilities. The cost of fuel is rising and is expected to continue in the future. This would not be a viable economic option for the County so long as the existing landfill is available for disposal.

If wastes from Lewiston and the other Nez Perce County participants were to be landfilled elsewhere, other than the ACRL, the financial impact to the landfill could result in part-time operations of the ACRL and/or the possible need to take refuse from other local communities.

### 5.4.4 Recommendations and Implementation

It is recommended that waste export not be considered as a regional disposal alternative unless changes occur that would preclude continued use of the existing landfill. The County should re-evaluate waste export options in conjunction with other disposal alternatives, in the event that system changes occur that would seriously reduce use or service life of the landfill.

CHAPTER 6

# Landfilling and Volume Reduction

## 6.1 Existing Facilities and Practices

The ACRL is the only permitted MSW landfill actively in operation in the Asotin County and Nez Perce County area. The landfill is located approximately 3 miles southwest of Clarkston and is adjacent to 6th Avenue, near the intersection with Evans Road (Figure 2-2).

The landfill is located in Section 36 of Township 11 North Range 45 East. The County purchased all of Section 36 from the Department of Natural Resources. Prior to this land acquisition, the landfill site was leased from the Department.

The 126.5 acre landfill site is bounded by farmland (wheat) to the north and west, and rural residential to the south and east. The landfill facility is comprised of the old closed landfill on the west side and the new modern active landfill on the east. The area currently permitted for waste fill in the new landfill area (Cells A-D) is approximately 30 acres. Access to the landfill is via an entrance road off of 6th Avenue. A site plan of the landfill is shown on Figure 6-1.

### 6.1.1 Facilities

The entire landfill facility is fenced. Since the last update to this SWMP (September 1993), the landfill has had a number of capital improvements including development of two lateral modern expansion cells (Cells B and C), a new scalehouse/administration building, moderate risk waste (MRW) facility, various upgrades/expansion of the landfill gas control system, and other general site improvements (such as new fencing, waterline, truckfill station modifications, etc.).

### 6.1.2 Equipment

Equipment located permanently at the landfill includes the following:

- 2008 AlJon 81k compactor
- 2004 Chevy half-ton pickup
- 1997 Chevy three-quarter ton pickup
- 1999 GMC Sanoma
- 2002 Ford Crew Cab pickup
- 1999 International multi-lift truck
- 2010 International multi-lift truck
- 2000 Clark forklift GPS 15
- 1991 L Michigan loader
- 1999 AlJon 81k compactor
- 2004 D6 Caterpillar Series II Waste Handler
- 2001 Cat 623-G scraper
- 2001 1240 Massey Ferguson tractor
- Water wagon

### 6.1.3 Utilities

Water, electricity, sewer, natural gas, and telephone services are provided at the landfill. Broadband wireless internet is also available at the landfill. Asotin County Fire District No. 1 provides fire protection service at the landfill.

### 6.1.4 Nuisance Control and Health Measures

Windblown dust is an occasional nuisance at the landfill during the summer. Sprinkling with the water wagon is the primary method of control. A commercial dust-suppressant is used on roadways. Vectors, flies, and birds have not been a problem. Noise is not a problem because of the relatively great distance to the nearest residences.

### 6.1.5 Environmental Controls

There are several environmental controls in place within the active landfill area (Cells A-C and future Cell D). These landfill areas are lined with a composite liner to collect and transmit leachate to a leachate pump station, where it is discharged to the sanitary sewer. Landfill gas also is actively collected from both new landfill areas and the old landfill, which is located west of Cell A. Horizontal gas collectors are positioned within the confines of the new landfill area waste profile, whereby blowers extract landfill gas and route it to the flare station to be thermally oxidized. Rainwater is segregated from leachate by use of interim cover soils. Stormwater run-off from the old landfill area and areas of the new landfill that are filled above the rim are collected and routed into the dry creek drainage area.

Routine groundwater monitoring began at the landfill site in 1997 and continues in accordance with the requirements of WAC 173-351.

### 6.1.6 Landfill Operations

The landfill uses the waste-fill lift method of operation. Public and commercial traffic is separated from transfer trucks hauling waste from the Lewiston/Nez Perce County Transfer Station. General public dump their waste in roll-off dumpster bins in the entrance area of the facility after passing over the scales (refer to Figure 6-1). Public haulers and commercial traffic are kept separated from one another for dumping.

The ACRL is currently operated in accordance with the *1997 Operations Plan* (Chapter 3 of the permitting document package) and the Operations Permit. The plan is currently being updated, to reflect current operational practices. The new plan will be submitted to Ecology and ACHD for their reference and approval as part of permit renewals. The plan covers waste disposal operations, maintenance, personnel, general procedures, record keeping, environmental controls and monitoring, and safety. The 1997 *Closure and Post-Closure Plan* (Chapter 6 of the permitting document package) also is being updated for the upcoming permit renewals.

### 6.1.7 Volume Reduction

The ACRL employs typical waste compaction practices for landfills. These practices include using of a large trash compactor making several passes over the waste, limiting daily cover to a minimum to meet cover requirements, and controlling lift thickness. Additionally, Moderate Risk Waste (MRW) products, recyclables, and now clean wood wastes are

collected at the landfill entrance to divert these types of waste from the landfill. Other types of volume reduction technologies exist such as use of water addition, alternative daily covers (ADC's) to limit the amount of non-waste materials taking up airspace, and waste shredding and baling. Waste shredding and bailing technologies, however, tend to be relatively expensive in terms of equipment investment, maintenance and labor. Often times, just employing good waste compaction at the working face with use of an ADC is the most efficient and cost effective means to achieve volume reduction in a landfill.

### 6.1.8 Waste Diversion/Recycling

The County maintains an active recycling and moderate risk waste (MRW) collection facility at the entrance of the ACRL. Customers are able to deposit their recyclables and MRW materials in the appropriate bins and drop-offs and dispose of certain organic yard and wood waste free of charge. There is, however, no present yard (green) waste collection or recycling/composting at the landfill other than for clean woody debris that is recycled through the trial yard and wood waste program. Those residents that do not live in Clarkston or Lewiston (where yard waste is picked up curbside) must self-haul their yard waste to EKO Compost for a fee if they choose to recycle/compost. Otherwise, yard waste is co-mingled with garbage and disposed at the landfill.

## 6.2 Needs and Opportunities

Currently, the only permitted site for disposal of MSW in the Asotin County and Nez Perce County region is the ACRL. While waste reduction/diversion and recycling programs reduce the volume of the waste stream, they do not eliminate the need for landfills. In-place compaction is necessary to achieve cost-effective disposal of MSW in the landfill.

There is a national trend toward stricter siting and design criteria for landfills as they have had a history of causing environmental problems such as contamination of groundwater and surface water resources. On the state level, WAC 173-351, *Criteria for Municipal Solid Waste Landfills* contains specific criteria for the siting of any new or expanded landfill facilities. These regulations require the use of available and reasonable technology in the planning, development, and final closure of solid waste facilities.

The current operating cells at the ACRL (Cells A-C) are predicted to fill to an interim closure elevation of 1270 feet in year 2016. Cell D is anticipated to come online by 2016, to extend landfilling until 2033. The landfill currently uses in-place compaction of MSW to achieve an average effective density of approximately 1,050 pounds per cubic yard. Although soil cover is readily available at the ACRL site, the use of an alternative daily cover (ADC) material (such as, spray-on slurries) could be considered in coming years to help reduce the amount of landfill space taken up by soil covers, thus increasing the in-place effective density of the waste.

Asotin County should continue to evaluate the need for a yard waste collection (other than clean woody debris that are currently collected and chipped) at the landfill entrance. Currently, areas in the County outside of Clarkston have no means to recycle/compost yard waste other than self-haul to the EKO facility and pay a disposal fee.

## 6.3 Evaluation of the Options

Asotin County has been using the ACRL site for disposal of MSW since the early 1970s. The current modern landfill cells (Cells A-C) have an estimated remaining interim closure capacity of around one million cubic yards of airspace. Based on current growth and recycling projections, and with the addition of one lateral expansion cell (Cell D), the ACRL in its current configuration is estimated to be in operation for the next 23 years (until 2033).

Waste baling and shredding technologies tend to be more reasonable when there is a lack of available landfill capacity. Shredding could provide somewhat higher in-place densities, but it also would require significant capital and maintenance expenditures. Baling also would have high start-up and operational costs and could provide even higher in-place densities than shredding. The cost of site preparation, baler, bale handling, and operating costs typically exceed in-place compaction of MSW. With adequate landfill capacity and good in-place waste compaction, neither shredding nor baling appear to be viable volume reducing techniques for the ACRL.

Additionally, the need to use ADCs may not be realized until the cost of airspace rises. The current practice of applying daily soil cover, in accordance with the Operations Plan, is the most cost effective means of covering the refuse in terms of operating costs. In the future as airspace becomes more valuable, the County should continue to think about alternative ways to cover the waste. In the interim, another option for the County to consider would be to peel off the daily cover material each morning and fill directly on top of the previously day's placed waste. Some of the cover soil would be lost as the soil fills the void space of the refuse, but the majority could be captured. This would require more operational effort (and cost), but in the long run could save on the order of up to 10 to 15 percent (by volume) of airspace. This alternative, however, could cause more odor and vector attractions (flies, birds) and would need to be weighed against the cost savings.

The County also should consider installing a yard waste collection bin or stockpile area at the landfill entrance to encourage customers to divert these wastes from the landfill, pending funding. The County may also consider composting yard waste at the ACRL, but should carefully evaluate this option weighing the costs and disadvantages against any advantages or money making opportunities. Additional discussion of composting at the landfill is presented in Section 4.2.3.7.

## 6.4 Recommendations and Implementation

The County should continue to own and manage the landfill in accordance with federal, state, and local health department regulations. In order to satisfy the requirements of WAC 173-351, various environmental protection techniques are being performed at the landfill. These include groundwater monitoring, landfill gas control, leachate management, and operations that control vectors and provide for higher levels of safety for workers, the public, and environment. These systems need to continue to be operated in an optimal manner.

Alternative daily cover options should be evaluated by the County to help save airspace that would otherwise be taken up by soil. The County should first evaluate the option of

peeling off daily soil cover while also continuing to evaluate the use of ADCs, and determine the overall impact on effective density.

A waste study/pilot program could be implemented at the landfill entrance area by tracking yard waste quantities (other than clean woody debris that is currently recycled as part of the trial yard and wood waste recycling program) that could be diverted from the landfill simply by having customers deposit the materials in designated roll-off containers or stockpiles before entering the scale. Funding of this program (for both infrastructure and operations) would need to be supplemented with either state grant money or the tipping fee.

CHAPTER 7

# Special Wastes

Some wastes generated in the region such as used tires, refrigeration units/ chlorofluorocarbons (CFC's), electronics, bio-hazardous wastes (medical wastes), and grit material from nearby wastewater treatment plants are dealt with separately from the general MSW waste stream, either because of their impact on the system or because their nature creates additional problems. (Moderate risk wastes are addressed in Chapter 8.) Tires, refrigeration units, and white goods require additional handling at the landfill. These items are not only expensive to handle, but in some cases, occupy a greater amount of landfill space. Asotin County will continue to work with the SWAC to assess the methods and costs of handling these special wastes.

## 7.1 Tires

### 7.1.1 Existing Conditions

Littering, fire hazards, and problems with mosquitoes are associated with improper disposal of tires. Compaction of tires in the landfill also presents some complications that the County would rather not deal with. As such, the County has implemented a higher tipping fee at the ACRL for tire disposal as compared to other MSW waste materials. The higher tipping fee applies to large tractor tires (tires larger than standard passenger vehicle tires) and to customers that dispose of more than four tires per load per day. Otherwise, customers are charged the standard MSW tipping fee for tire disposal, which is co-mingled with the rest of the MSW. The landfill does not receive a lot of tires, as the tipping fee for that item is so high. In 2009, only 12.5 tons of tires were collected and disposed in the landfill[1].

Most of the tires sold in Asotin County come from larger retailers that also collect used tires and manage them separately from the regional waste stream.

### 7.1.2 Needs and Opportunities

Tires in the landfill neither compact well nor stay buried, but tend to float to the surface, causing handling problems. Ecology and the Washington State Recycling Association are looking into possible uses for used tires. One option would be to contract with a regional tire recycling company for exportation of the tires to Spokane. However, the exportation costs for the tires would be about $2/tire, which is not a viable option for Asotin County at this time.

Another option includes tire shredding and use of the material for cover or perforated drainage materials. Bioreactor landfills, for example, that require a large number of leachate and landfill gas control lines have used shredded tires in place of drain rock material. This

[1] This tonnage is for large tractor tires and those customers that dispose of more than 4 tires per load per day. Other tires are co-disposed with MSW and are not tracked separately.

alternative is not yet been proven and still has several concerns with strength and biological fouling to name a few. Although the ACRL is not operated as a bioreactor landfill, there may be some opportunities in the future to use shredded tires in place of drain rock for the landfill gas collection lines. The use of shredded tires for landfill-related operations in the industry should continue to be monitored for proven reliability.

### 7.1.3 Evaluation of the Options

Pyrolysis and incineration techniques are becoming more common as the technology becomes reliable over time and the tire disposal issue is addressed more thoroughly by governmental agencies, including Ecology, and the public. Tire shredding also is an alternative means for recycling tires.

Tire pyrolysis, also called destructive distillation, is the technique for thermal decomposition of the complex compounds to their less complex and lighter components. The pyrolysis processes are becoming more reliable and can process large quantities of used tires.

Similarly, specialized tire fuel incineration is an emerging technique for recovering the energy value in tires. Tires are incinerated for their energy value in dedicated facilities and as a supplemental fuel in hog fuel boilers. Stringent air quality standards in Washington State make tire incineration costly, primarily because the equipment needed is expensive. Shipping tires to neighboring jurisdictions with less stringent air quality standards is not a cost-effective option. An additional problem with incineration is that the ash may be classified as a dangerous waste.

Tires do not compact well and therefore occupy a large amount of space in a landfill. Asotin County may wish to shred tires before allowing final disposal in its landfill. Shredding them potentially could be a cost-effective method for preserving landfill space, if shredded tires could be used for base construction of roads, gravel pack supplements for gas pipe trenches, etc., within the landfill.

Tire shredding would require purchase of onsite equipment, equipment rental or hiring a contractor to perform these services. This type of equipment is not yet readily available in the market place and thus would make it difficult to evaluate.

### 7.1.4 Recommendations and Implementation

In Asotin County, sophisticated mechanical or chemical processing systems are not feasible because of the relatively low numbers of used tires being generated. If a local tire recycling company is contracted for exportation of tires, the County should consider tire diversion for that purpose. Meanwhile, the County will continue to encourage tire dealers to use alternative disposal sites and to divert tires from disposal at the ACRL.

## 7.2 Refrigeration Units/Chlorofluorocarbons

### 7.2.1 Existing Conditions

The *1990 Amendments to the Clean Air Act* established programs to regulate the use and disposal of substances, including chlorofluorocarbons (CFCs), which are harmful to the ozone layer. The prohibition on releasing of refrigerants into the atmosphere went into

effect on July 1, 1992. Landfills that accept air conditioners, freezers, or refrigerators (any refrigeration unit) must recover all CFCs before disposal (or recycling). The landfilling of any refrigeration unit with refrigerants still in the system is considered an illegal release and is punishable by law.

Refrigeration units are accepted at the landfill. The refrigerants can be recovered and recycled by ACRL certified refrigerant removal technicians. Solid waste haulers collect refrigeration units, subsequently separated for processing at the landfill. Beginning in 2006, an ACRL operator hauls all refrigerants and appliances to a local recycler, Sutton Salvage.

### 7.2.2 Needs and Opportunities

No needs or opportunities exist in addition to the current practice.

### 7.2.3 Evaluation of the Options

CFCs are extracted and recovered. Bottles of recovered CFCs are sent to a recycler who reclaims the CFCs.

### 7.2.4 Recommendations and Implementation

The County should continue to process refrigeration units that contain CFCs, or direct the public to use the services of a refrigeration service center.

## 7.3 Electronics

### 7.3.1 Existing Conditions

Many electronics, especially TVs and computers, contain toxic materials such as lead, cadmium and mercury. Reuse and proper recycling keeps these toxic chemicals out of our landfills and incinerators and recovers valuable resources. The E-Cycle Washington program is a new program paid for by electronics manufacturers that provides responsible recycling for unwanted consumer electronic products such as TVs, computer monitors, and desktop computers and laptop computers. These types of products are referred to by the state as covered electronic products (CEPs). As of January 1, 2009, manufacturers in Washington are required to provide recycling services for this equipment at no cost to households, small businesses, charities, schools, and small governments in Washington State. Many other electronic products (such as cell phones, DVD players, electronic games, etc.) can also be recycled. Some collectors who participate in the E-Cycle Washington program will recycle other electronic items, but may charge a fee. Find a location to recycle these materials by visiting http://1800recycle.wa.gov or calling 1-800-RECYCLE.

Electronic equipment collected through this program will be disassembled into separate materials including glass, plastic, metal and toxic chemicals. All processing is done according to the *"preferred performance standards"* established by Ecology.

This program is required under a Washington State law (Chapter 70.95N RCW) that was passed in 2006. The new law is an example of *Producer Responsibility,* where the company that makes a product is responsible for minimizing the product's environmental impact throughout all stages of the products' life cycle, including end of life management. The law

requires that manufacturers set up a recycling program, but gives them flexibility to figure out how best to do so. The Washington Materials Management & Financing Authority (WMMFA) is the organization that 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 negotiates with collection sites throughout the state to provide recycling services. Collection sites are required, at a minimum, in every county and every city in the state with a population of 10,000 or more, including Asotin County.

For more information on this program, users are encouraged to visit Ecology's website (www.ecy.wa.gov/programs/swfa/eproductrecycle/).

Before disposing of e-wastes, a consideration for repair or reuse should be made. There are several ways to pass on electronic items for reuse by:

- Contacting charities or non-profits in your area to see if they would be able to use or resell your electronic piece of equipment.
- Calling your local solid waste or public works office to find out what options are available in your community for donating or reuse.
- Selling your item through local classifieds or use an online website.
- Asking if a participating E-Cycle Washington collector will donate or resell your item.

For more information on opportunities for reuse of electronic equipment, users are encouraged to visit Ecology's website (http://www.ecy.wa.gov/programs/swfa/eproductrecycle/reuse.html).

### 7.3.2 Needs and Opportunities

No needs or opportunities exist in addition to the current practice.

### 7.3.3 Evaluation of Options

No additional options exist beyond the current practice.

### 7.3.4 Recommendations and Implementation

The County should continue implementing the *E-Cycle Washington* program by working closely with Ecology for reporting and future expansion of the program to include other e-waste types.

## 7.4 Bio-Hazardous and Wastewater Treatment Wastes

### 7.4.1 Existing Conditions

At the present time, only minor amounts bio-hazardous wastes (medical wastes) are being accepted for disposal in the landfill if certain conditions are met. Hospital wastes in the area are contracted through private providers for disposal.

All sharps are to be placed in special plastic disposal containers. Human tissue from hospitals is not being disposed at the landfill, but animal tissue is being received. Small

carcasses are compacted with the other MSW load in the landfill, and large carcasses are sent to the active landfill face and covered immediately (Schenck, 2008).

Sludges in the region are generated from lagoon systems, septic tanks, wastewater treatment plants, and industry. In January 1991, Lewiston joined with Clarkston to contract with EKO Compost, Inc. to co-compost their sludge (biosolids) with yard waste. The grit materials from the Lewiston and Clarkston treatment plants, however, are disposed at the ACRL.

### 7.4.2 Needs and Opportunities

Disposal of bio-hazardous waste from hospitals needs to continue to follow current standards, to not pose risks to landfill workers.

### 7.4.3 Evaluation of the Options

No other options are under consideration for the disposal of bio-hazardous wastes at this time. If current bio-hazardous waste disposal practices require modification, training and education for both the public and landfill workers could be provided.

Grit material should continue to be tested on a routine basis as non-dangerous wastes before it disposed in the landfill. Grit is not accepted by EKO for composting as it is a raw, putrescible material.

### 7.3.4 Recommendations and Implementation

The following actions will lessen the risks of processing bio-hazardous waste at the ACRL:

- Provide public outreach to clinics and laboratories to educate them about proper disposal techniques.
- Provide handouts to local pharmacies, clinics, and hospitals regarding safe disposal of sharps.
- Provide updated blood-borne pathogen training and vaccinations for landfill workers.
- Provide training to landfill workers in identification of improperly disposed bio-hazardous waste.

The County could include educational information on bio-hazardous waste in their flyers and other educational programs on waste reduction (see Section 4.1). The County would also need assistance from Ecology and the ACHD to develop public outreach and training programs, and to evaluate existing programs.

Composting of the WWTP sludge is the best option for both wastewater treatment plant sludge and residential septage. The County and ACHD should work together to assure that wastewater treatment plants continue to contract with EKO Compost to co-compost their sludge with residential yard waste. The City of Lewiston should also consider expanding their contract with EKO to include their grit chamber waste material.

CHAPTER 8

# Moderate Risk Waste Management

## 8.1 Introduction

### 8.1.1 Regulations

Local governments are required by the Washington State Hazardous Waste Management Act (HWMA, Chapter 70.105 RCW) to address moderate risk waste (MRW) management in their jurisdictions. Moderate risk wastes are hazardous wastes produced by households [household hazardous waste (HHW)], and by businesses and institutions in small quantities that do not exceed conditionally-exempt small quantity generator (CESQG) state regulatory limits as follows:

- 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

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

In response to the HWMA and local needs, the initial MRW Plan was completed in 1991, and was adopted in April 1991 by Asotin County and Nez Perce County, and each municipality within the counties. The MRW Plan was designed to improve the management of MRW, thereby promoting better regional protection of public health and the environment. The MRW Plan contributed to the Legislature's goal "...to establish a comprehensive statewide framework for the planning, regulation, and management of hazardous waste..."as outlined in the HWMA (RCW 70.105.007). This update to the Asotin County Solid Waste Management Plan incorporates the original 1991 MRW Plan by reference and builds on the plan to include current MRW-related management activities by the County and its waste partners. The MRW Plan proposes a comprehensive program for household and business education and technical assistance, MRW collection, and disposal compliance. Asotin County prepared this MRW Management chapter with the guidance and assistance of Asotin County's consulting engineering staff, technical and management staff from county and municipal departments, the Asotin County SWAC, local elected officials, and interested citizens.

### 8.1.2 MRW Management Goals

MRW management goals are to:

- Satisfy state priorities for waste management, which emphasize waste reuse and reduction over disposal.

- Maintain MRW monitoring and regulatory procedures that include tracking the types and quantities of MRW disposed and recycled.
- Provide for efficient collection and transfer of MRW, including opportunities for competition to reduce costs of collection, transfer, and processing; and promote MRW recycling and associated businesses. Establish guidelines and strategies for managing specific MRW types.
- Continue public outreach and education efforts regarding MRW reuse, reduction, and disposal.

## 8.2 Existing Conditions

This section summarizes the various MRW management programs underway in Asotin County and Lewiston (and Nez Perce County), municipalities, and private businesses. Furthermore, the CESQG program is discussed including education, collection, assessment, and transporters in Asotin County.

### 8.2.1 Moderate Risk Waste

Asotin County primarily has responsibility for MRW management within Asotin County and Lewiston; however, Asotin County, in cooperation with the hazardous waste contractor for collection and disposal, has sponsored special collection events for area rural farmers and CESQGs to promote and encourage MRW diversion from the MSW waste stream.

#### 8.2.1.1 Asotin County Moderate Risk Waste Program

**Asotin County Education Program.** Asotin County provides MRW education for residences and businesses located in Asotin County and Nez Perce County through a variety of approaches.

Residents often have questions concerning the management of household hazardous wastes, particularly used motor oil, batteries, and paints. Information and education about hazardous waste is received primarily by telephone calls and customer visits at the landfill. Callers are given assistance over the phone, and a hazardous waste brochure is given to landfill customers. Approximately 35 brochures are distributed each month to customers and approximately 5 telephone calls per day at the landfill are hazardous waste related. Waste reuse, recycling, and MRW components are integrated within Asotin County's education program. That is, whenever general educational information is presented by Asotin County staff, every topic regarding waste and disposal is conveyed at the same time. Information on the MRW program is also provided on the County's landfill website (http://asotincountyregionallandfill.com/).

**Asotin County Household Hazardous Waste Collection Events.** Asotin County to-date has not sponsored any MRW specific collection events for general household residents. All MRW received at the fixed-MRW facility at the landfill is self-hauled by residents of Asotin County and Lewiston (and Nez Perce County).

### 8.2.1.2 Asotin County Fixed Facility Collection Site

In 1993, Asotin County constructed a permanent MRW fixed facility located at the ACRL and opened in 1994. This made MRW disposal significantly more convenient for citizens. The MRW fixed facility was upgraded in late-2008. The upgrades provided total enclosure of the facility including the main handling area and the back storage area, installation of overhead sectional doors, ventilation, cooling and heating, lighting, and flammable gas monitoring. Additionally, the old emergency shower/eye wash station was removed and a new one installed inside of the facility with heated water (served by a hot water heater in a new enclosure on the backside of the building).

The MRW facility is open Wednesdays of each week and also the first and third Saturdays of each month, except on major holidays. The facility receives all types of MRW. Radioactive wastes (except smoke detectors) are excluded, along with explosives and critically unstable materials. Refer to the ACRL website for a current list of MRW materials that are accepted at fixed MRW facility at the ACRL (www.co.asotin.wa.us/public_works_landfill.htm).

Trained staff operate the collection program at the ACRL. The program is paid for in part by solid waste tipping fees and grant funding by Ecology. Typical types of MRW, such as used motor oil, antifreeze, and automobile batteries, are accepted at the Lewiston/Nez Perce County Transfer Station by Lewiston and Nez Perce County residents. Refer to the Lewiston/Nez Perce County Transfer Station website for a current list of MRW materials that are accepted at the Lewiston/Nez Perce County Transfer Station (www.cityoflewiston.org/index.aspx?NID=336).

Staff accept, sort, and bulk MRW delivered by the public. The fixed facility has three separated concrete compartments to keep wastes separate: flammable material, poisonous material and corrosive material. Within each compartment, chemicals are stored on shelves, and up to five 55-gallon drums are placed for lab packing, loose packing, or bulking. Also within the fixed facility, waste oil is stored in an above-ground storage tank. There is also a storage locker inside the facility for flammable materials. Antifreeze is collected and stored in a 55-gallon drum behind the facility but still enclosed, and auto batteries are stored on a spill pallet located outside of the facility. Many of the MRW materials collected are ultimately recycled or used as fuels. Waste management methods are evaluated periodically and are subject to change.

**Asotin County MRW Collection Participation.** Since the original Moderate Risk Waste Management Plan was published in 1991, citizen participation in the MRW program has had a general increasing trend, except for 2007, a smaller number of users used the facility. Table 8-1 shows the participation between 2005 and 2009.

**TABLE 8-1**
Participation Over Time at Asotin County Fixed MRW Facility
*Asotin County Solid Waste Management Plan, 2010 Update*

| Year | Users |
|---|---|
| 2005 | 1,075 |
| 2006 | 1,052 |
| 2007 | 907 |
| 2008 | 1,276 |
| 2009 | 1,820 |

Records have been kept of the types and quantities of waste handled through the fixed MRW collection facility, Table 8-2 summarizes the quantities of materials handled from 2005 through 2009.

**TABLE 8-2**
Types of MRW Collected and Quantities in Tons
*Asotin County Solid Waste Management Plan, 2010 Update*

| Type of MRW | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|
| Antifreeze | 2.50 | 2.60 | 3.20 | 1.86 | 1.20 |
| Automobile Batteries | 8.10 | 8.50 | 8.30 | 5.29 | 5.20 |
| Corrosives | 0.64 | 0.96 | 0.14 | 0.40 | 0.29 |
| Alkaline Batteries | 0.43 | 0.30 | 0.31 | NR | NR |
| Flammables | 12.70 | 8.10 | 6.10 | 5.11 | 13.61 |
| Pesticides/Poisons | 1.50 | 1.70 | 4.40 | 2.64 | 0.82 |
| Latex Paint | 10.80 | 8.30 | 9.0 | 3.60 | 12.87 |
| Used Oil | 18.30 | 12.30 | 10.40 | 7.90 | 19.3 |
| **Total** | **55** | **43** | **42** | **27** | **53** |

NR = not recorded; recent recommendations by Ecology is to dispose of alkaline batteries in the landfill rather than collect them at the MRW facility based on cost-benefit evaluations. The exorbitant cost of transport and processing for recycling alkaline batteries far outweighs the environmental benefit; alkaline batteries contain very low levels of hazardous waste. Latex paints in household containers from this point forward will also be disposed in the ACRL at the recommendation of Ecology.

As indicated by the above quantities, used oil and flammables account for the largest portion of the total MRW stream. Based on available information, these waste streams are being managed well through existing private and public sector efforts.

**Universal Wastes.** According to WAC 173-303-573, universal wastes (including mercury batteries, lamps, thermostats and other like equipment and materials) must be handled separately from the municipal solid waste stream. Mercury waste can be found in the residential waste stream in the form of mercury thermometers, light ballasts [including low energy compact fluorescent lights (CFLs)], or other waste. Asotin County presently allows

residents to bring waste products with mercury (such as mercury thermometers or thermostats) to the MRW facility for management.

Asotin County also recently entered into a partnership with Avista to be a centralized collection site for CFLs as part of Avista's CFL Recycling Program. Avista is encouraging the use of these types of lamps as part of their energy efficiency efforts to save energy. The program educates and encourages CFL users to recycle spent lamps rather than dispose of them in the solid waste stream. Avista has hired a CFL recycling specialty contractor (Total Reclaim, Inc.) to manage and recycle the wastes. Total Reclaim provides the MRW facility with a 16-gallon bin for collection of CFLs and pre-paid shipping boxes for shipment of the spent lamps. This program continued to be sponsored in 2010 by Avista.

#### 8.2.1.3 Asotin County Services to Neighboring Cities/Counties

Asotin County has an contract with neighboring Lewiston to dispose of MRW. Lewiston (and Nez Perce County) residents may deliver wastes to the Asotin County MRW fixed facility for bulking, lab-packing, and shipment. This service, provided by Asotin County at no additional cost to users, helps encourage proper management MRW in the region. Citizens of Lewiston (and Nez Perce County) may also drop off more standard types of MRW at their transfer station.

#### 8.2.1.4 Asotin County Health and Safety Program

Asotin County has developed an in-house employee training program, prepared for solid waste facility personnel as well as for MRW facility technicians. Full-time hazardous waste technicians responsible for supervision and specialized waste handling receive HAZWOPER 40 hour training. These staff members are involved in lab-packing certain wastes (such as poisons, corrosives, and oxidizers) and bulking other wastes. The technicians receiving 40-hour training must also receive an annual 8-hour refresher course in hazardous materials training to maintain certification.

Part-time hazardous waste personnel complete a 24-hour hazardous materials training course. The course includes instruction on a variety of topics, including hazard determination, hazard communication, physical and health hazards of chemicals, use of personal protective equipment, hygiene, work procedures, basic chemistry and toxicology, information on blood borne pathogens, waste characterization, medical monitoring, emergency response, decontamination, and storage and handling of incompatible or reactive wastes.

All solid waste employees receive first aid and emergency response training as needed to maintain certification.

#### 8.2.1.5 Asotin County Compliance and Enforcement

During implementation of the MRW Plan, emphasis has been given to expanding collection opportunities, as well as providing education and technical assistance to businesses in Asotin County and Nez Perce County, to improve MRW management. If serious or imminent threats to public health or the environment are identified through complaints or onsite visits to businesses, Asotin County will refer such problems to the appropriate regulatory agencies.

A primary focus of Asotin County's compliance effort has been to assure the quality of the waste stream arriving at the landfill and the MRW fixed facility. A load inspection program has been established to identify non-acceptable wastes, including asbestos, regulated quantities of hazardous waste, infectious waste, large containers, recyclables, large quantities of liquids, contaminated soils, and sludges. All scale operators, landfill equipment operators and MRW facility technicians are trained to identify unacceptable wastes at the scale, at the filling areas of the landfill, and at the MRW facility. If unacceptable wastes such as hazardous waste are discovered through load inspection, an effort is made to identify the source of the waste. Responsible parties will be notified, if possible, and arrangements will be made for proper waste disposal.

The quality control program also includes an emergency response plan. The plan identifies procedures for response to injuries, fires and explosions, hazardous material spills, and release of toxic gases. As described in the preceding section, training on first aid and emergency response procedures is provided to all landfill employees.

#### 8.2.1.6 Asotin County Program Evaluation

Asotin County tracks and reports expenditures, activities, and accomplishments associated with the MRW management program. Reports are routinely provided to Ecology and the Asotin County Health District (ACHD). Asotin County also compiles detailed information on its MRW and CESQG waste collection programs on a quarterly basis for grant funding reimbursement and annually as required by Ecology.

### 8.2.2 Conditionally Exempt Small Quantity Generator (CESQG)

#### 8.2.2.1 CESQG Education

CESQGs are assisted in minimizing the production of hazardous waste and properly managing wastes that are produced. Information and disposal options are provided to CESQGs primarily by a telephone call or by a visit to the landfill to discuss hazardous waste management at their business, and are available on the County's landfill website (http://asotincountyregionallandfill.com/).

#### 8.2.2.2 CESQG Hazardous Waste Collection

CESQG waste is accepted at the Asotin County MRW fixed facility by appointment only. Businesses bring their waste to this facility for proper management. The businesses pay Asotin County for disposal based on the type and quantity of waste, and receive a record showing that they are properly managing their hazardous waste. Services are provided to CESQGs with minimal workload for MRW staff, and at little cost to Asotin County.

The CESQG waste collection program had 36 participants in 2009 and delivered a total of approximately 5.2 tons of hazardous waste. Table 8-3 shows the tonnages collected from 2005-2009. Note these tonnages are included in the total MRW for the facility as summarized in Table 8-2.

**TABLE 8-3**
Conditionally Exempt Small Quantity Generator Hazardous Waste Collection Count

| Asotin County Fixed | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|
| Quantity (tons) | 3.3 | 4.7 | 1.9 | 2.4 | 5.2 |
| Participants | 28 | 24 | 17 | 19 | 36 |

# 8.3 Key Issues

The Guidelines for the Development of Local Solid Waste Management Plans and Plan Revisions, published in 1999, specifically address reducing the toxicity of the waste stream. The guidelines require that each jurisdiction plan and implement programs in five areas of toxicity reduction. These required program areas are:

- Household and public education
- Moderate risk waste collection
- Business technical assistance
- Business collection assistance
- Enforcement

# 8.4 Alternatives and Recommendations

Options for reducing the toxicity of disposed wastes are presented within the five areas of toxicity reduction.

## 8.4.1 Expanded Household and Public Education

### 8.4.1.1 Expanded Public Education

For education, current household hazardous waste efforts appear to be comprehensive, although these efforts need to be continued on an ongoing basis to reach new residents. One segment of society that could benefit from targeted educational efforts is where English is used as a second language. For example, in Yakima County (Washington), Ecology developed a used oil/filter recycling program for Spanish speaking businesses, employers, and residents. The program has been well received, with many businesses owners requesting the information in both English and Spanish to distribute to their employees and customers.

### 8.4.1.2 Education on Alternative Products

The moderate risk waste brochure not only has information about proper disposal of household hazardous waste, but also includes information about giving the unused portion to someone else to use and alternative products to use instead of using hazardous household products. Asotin County should review these brochures periodically to see if there is any additional information that could be included. Much of this type of information can be found on the Washington Toxics Coalition's Home Safe Home Program website. The Home Safe Home Program has produced a series of fact sheets that identify hazards with various types of products and suggest alternatives. More information available at: http://www.watoxics.org.

## 8.4.2 Expanded Household Hazardous Waste Collection

Expanded collection capabilities and increased collection events may help extend opportunities for proper disposal to more rural residents. Several opportunities exist for Asotin County to expand its current household collection capabilities.

### 8.4.2.1 Collection Events

The Department of Agriculture sponsors a collection event once a year at the ACRL. Mostly agricultural type businesses and farmers participate in this event. Additional events of this type could be scheduled if determined to be warranted.

### 8.4.2.2 Use Mobile Collection Centers to Target Rural Areas

In addition to permanent collection facilities, many communities use mobile facilities that travel to areas where residents do not have easy access to permanent facilities. Residents can bring their household hazardous waste to the mobile facility when it is in their community. Often communities will place a limit on the amount of waste that may be brought in by an individual, usually 5 gallons or 50 pounds total per vehicle per trip. This service is typically expensive, but with grant funding assistance, Asotin County could consider offering this type of service in the rural areas of the county.

## 8.4.3 Universal Waste Education and Outreach

Asotin County should continue to provide education and outreach to residents on the risks associated with mercury laden wastes, and the availability of MRW collection sites and recycling businesses for the alternate methods of processing along with proper handling and disposal of this waste. These educational outreach efforts can be included with other waste reduction efforts described in Section 4.1.

## 8.4.4 Business Technical Assistance

Asotin County currently provides free technical assistance to businesses wanting to learn how to reduce and manage hazardous waste and has developed an educational brochure. However, the opportunity exists to provide additional educational materials to businesses, as well as local government agencies, to foster markets for used oil and provide recognition for businesses for their environmental achievements.

### 8.4.4.1 Business Collection Assistance

Asotin County currently provides for collection of wastes generated by Conditionally Exempt Small Quantity Generators. Asotin County should continue to provide these services.

### 8.4.4.2 Enforcement Efforts

With respect to businesses generating hazardous wastes, Asotin County has relied primarily on educational efforts and collection opportunities to obtain compliance with state laws. Asotin County also uses a load inspection program to identify wastes at the scale and wastes that are received at the MRW fixed facility for disposal. Asotin County should continue with these efforts.

CHAPTER 9

# Enforcement, Administration, and Financial Assurance

The operation of any solid waste program requires coordination between the operator and the users. There should be communication between the County (and its participant users), franchised haulers, contractors, other users, and regulators to ensure that the needs of customers and applicable regulations are considered in any major decisions. The SWAC can enhance this communications process by maintaining an active role in the planning of solid waste programs.

Under the requirements of WAC 173-351, Asotin County is required to provide financial assurance for closure and post-closure care of the ACRL. This chapter also provides information on the financial assurance program with updated construction and capital acquisition programs for 6 years into the future in accordance with RCW 70.95.110.

## 9.1 Disposal System Administration

### 9.1.1 Existing Conditions

The Asotin County Public Works Department administers the County's solid waste disposal facilities. The public works director and solid waste supervisor report to the BOCC on all solid waste issues.

### 9.1.2 Recommendations

The County should continue to administer the landfill, recycling, and MRW waste programs.

## 9.2 Solid Waste Advisory Committee (SWAC)

By law, the SWAC must represent a balance of interests including public interest groups, business, the waste management industry, local elected officials, and citizens-at-large. The role of this diverse group is to assist in the development of programs and policies concerning solid waste handling and disposal. Although solid waste programs are regulated by the ACHD, the Washington Utilities and Transportation Commission (WUTC), and Ecology, an additional role of SWAC is to review and comment upon proposed rules, policies, or ordinances, prior to their adoption. It is important that decisions regarding rules and policies be reviewed by the SWAC. This requires that the SWAC be permanently established as an integral part of the Asotin County solid waste administration.

### 9.2.1 Existing Conditions

The establishment of a permanent SWAC is required by law (RCW 70.95.165) and is defined as follows, "Each county shall establish a local solid waste advisory committee to assist in the development of programs and policies." The regulation further states that, "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, business, the waste management industry and local elected public officials." The prescribed membership for the Asotin County SWAC includes the entities shown in the front of this plan.

### 9.2.2 Needs and Opportunities

The SWAC has been active during the preparation and implementation of this updated Solid Waste Management Plan.

### 9.2.3 Recommendations

It is recommended that the SWAC continue to be actively involved in the development and direction of solid waste programs in Asotin County, and with the participants that are disposing of waste at the ACRL. The next update of the SWMP should begin early in the fourth year after the adoption of this plan, so that the update is completed in a timely manner.

### 9.2.4 Implementation

The SWAC should continue to meet regularly and make recommendations to the BOCC.

## 9.3 Enforcement

### 9.3.1 Existing Conditions

The enforcement of solid waste regulations in Asotin County is the joint responsibility of Ecology, ACHD, and the Asotin County Sheriff's Department.

Ecology is responsible for setting standards for solid waste facilities (both design and operation), inspection of facilities for compliance with regulations, and for final concurrence with permits issued by ACHD.

ACHD is responsible for inspection of solid waste facilities for compliance with permit conditions regulations and the operating plan, determining the need for monitoring programs, providing funding for the enforcement programs, and for granting permits and variances, with the approval of Ecology.

ACHD also issues the operations permit for the landfill. It is the responsibility of the ACHD to ensure that the solid waste permit conforms to the approved solid waste management plan and all applicable laws and regulations. It inspects the site annually to determine if the permit should be renewed. If the site is in violation of the regulations, the department may enforce the regulations by suspending or declining to renew the permit. The site must also be in compliance with state and local fire, zoning, water and air pollution, nuisance, and aesthetics regulations. Control of littering is the responsibility of the agency or persons transporting waste to the landfill site. A county-wide ordinance for unsecured loads on the roadways should be passed so that the Sheriff's Department.

Illegal dumping is a misdemeanor under RCW 70.95.240, but enforcement of this regulation in the past in southern Asotin County has proven difficult.

### 9.3.2 Needs and Opportunities

The primary enforcement need in Asotin County concerns compliance with regulations at the landfill. Regulations require the landfill site to comply with WAC 350 and WAC 351.

A final enforcement need concerns the budget and staffing of the health department. At present, the health department consists of two employees, the health inspector and solid waste enforcement officer. The health inspector has responsibility for both Garfield and Asotin Counties. The solid waste enforcement officer has the responsibility for solid waste inspection and enforcement. The health inspector has the responsibility for inspection and enforcement activities for schools, water supply systems, septic tanks, restaurants, taverns, and grocery stores.

### 9.3.3 Evaluation of the Options

ACHD has several options to improve solid waste handling. It can monitor illegal dumping through the complaint process by using the process as a tool to identify areas where illegal solid waste dumping is occurring. It also can investigate reports of illegal dumping. Furthermore, it can control solid waste handling by the following methods:

- Educate the public and local industry on proper handling and disposal methods, in conjunction with the Public Works (Solid Waste) Department
- Pass a county-wide ordinance mandating covered loads

### 9.3.4 Recommendations

It is recommended that the County provide enforcement of litter prevention laws and pass a county-wide ordinance for secured waste hauling loads on the roadways.

### 9.3.5 Implementation

ACHD should communicate regularly with the SWAC to address general solid waste handling issues.

Asotin County and ACHD need to work together to educate residents on proper disposal of MSW. Public Service Announcements with local radio stations may be used to devise a public awareness campaign to encourage responsible disposal of solid waste and increase reporting of illegal dumping.

The County solid waste personnel need to work with County administration to get a county-wide ordinance passed that mandates covered loads.

## 9.4 Financial Assurance

### 9.4.1 Existing Conditions

The existing structure of solid waste fees and grants provide adequate resources to maintain a successful solid waste program at the ACRL. The current agreements with the City of Lewiston, which sets the tipping fee for all users, provides for an annual adjustment of the

tipping fee based on market conditions (consumer and product price indices), through the end of the contract period (2013).

### 9.4.2 Needs and Opportunities

A stable source of financing is necessary to protect the environment by providing reliable and affordable solid waste disposal. Financial resources are necessary to provide for the continuation of recycling and hazardous waste diversion programs and for complying with new and more stringent rules and regulations governing solid waste management. These resources may be provided by taxes, solid waste tipping fees, grants, or any combination of these sources.

### 9.4.3 Evaluation of the Options

Waste reduction, recycling, moderate risk waste diversion, and solid waste planning can be partially funded by grants that are available from Ecology. The County works closely with Ecology to secure grant funding where possible. A recent example of this is funding that ACRL received for improvements to their MRW facility in 2008 and funding to support the organic and yard waste program in 2009/2010.

The majority of the of the solid waste tipping fee goes toward paying for the day-to-day operating costs of the landfill, including the cost of the recycling program and the handling and disposing of MRW. The small remaining amount of the tipping fee is set aside for new construction, closure, and post-closure costs of landfill cells and future landfill management services and incidentals. WAC 173-351 requires that landfills have accounts or trust agreements established to ensure that the closure and post-closure operations are adequately funded. Financing for solid waste disposal traditionally has come from user fees at the landfill.

### 9.4.4 Financial Evaluation

The last financial model update was done in late-2009. The results of this latest modeling are provided herein through the required 6-year planning horizon (through 2015 including this year) as specified by RCW 70.95.110. This evaluation includes forecasts of ongoing administrative and operating activities, contract operations, closure and post-closure care funds, and planned major capital expenditures at the landfill.

#### 9.4.4.1 Limitations

The engineering consultant, CH2M HILL, assisting in this SWMP update has used generally accepted professional consulting principles and practices in the development of costs and economic evaluations presented in this section. The services were performed consistent with the agreement with Asotin County and with County provided and endorsed data and information. This report is solely for the use and information of Asotin County and its constituents. Any reliance by an outside third party is at such party's risk.

Economic evaluations were prepared based on County input of their account status, finances, and goals. Cost estimates are rough order-of-magnitude (ROM) in November 2009 dollars, unless otherwise noted, and are considered Class 4 estimates as defined by the American Association of Cost Engineering (AACE). Class 4 estimates have a typical accuracy of -30% to +50%. The cost estimates have been prepared for guidance in project

evaluation and implementation from the information available at the time of the estimate. Actual construction and engineering services costs will depend on competitive market conditions, actual labor and material costs, actual site conditions, productivity, project scope, final design and schedule, and other factors. As a result, the final project costs will vary from the estimates presented. Because of this, project feasibility and funding needs must be carefully reviewed prior to making specific financial decisions to help ensure proper project evaluation and adequate funding. It should be recognized that material prices are highly subject to variation as a result of shortages resulting from natural disasters, the economy, etc. Certain construction material commodities continue to increase or escalate in material pricing and are subject to market volatility. No other warranty, express or implied, is made.

### 9.4.4.2 Financial Inputs and Assumptions

Table 9-1 presents the key financial inputs and assumptions used in the evaluation.

**TABLE 9-1**
Financial Inputs and Assumptions
*Asotin County Solid Waste Management Plan, 2010 Update*

| | | Source |
|---|---|---|
| Interest Rate on Invested Funds: | | |
| Operations | 2.5% | County |
| Closure and Post-Closure | 2.5% | County – (1.5% through 2015) |
| Inflation Rate for Operations | 2.5% | County |
| Adjustable Service Fee Rates: | | |
| Tipping (Disposal) Fee: [a] | 1.5% | Average rate increase |
| Waste Haul Fee: | 0.5% | Approximate average [b] |
| Waste Haul Contract Fee: | 0.5% | Match Waste Haul Fee [c] |
| Disposal Growth Rate | 2.0% | CH2M HILL, based on historical data |
| Public Works Trust Fund Loan: | | None – pay out-of-pocket in full |
| Post-Closure Fund Collection | $1.50/ton | Assumes collection at this rate through Contract period with Lewiston (2013) |
| Enterprise Fund End-of Year 2009 Account Balance | $950,000 | County |

[a] This is an assumed combined annual rate increase based on the current contract with Lewiston, which allows 150% markup on the annual April to April chained CPI (all items less food and energy) for general operational labor costs and 100% markup on the PPI (#2 diesel fuel) for fuel.

[b] The County also holds a contract with Lewiston as part of the waste disposal services contract to haul MSW from the Lewiston Transfer Station to the ACRL. The markups of 150% and 100% for chained CPI and PPI also apply.

[c] The County negotiated a contract with the waste hauler (M.L. Albright) which was setup in the financial model to reflect the same markup rates on labor and fuel; proportionately this resulted in an assumed combined average annual rate increase of 2.2% compared to the County's 1.8%. Although not reflected in the model, additional negotiations took place in early 2008 adjusting the combined rate increase to 3.2% for the waste haul hauler (based on the 2008 adjustment).

### 9.4.4.3 Financing of Major Construction Projects (Future)

Table 9-2 presents the costs and financing assumptions for the major construction project expected to occur during the economic evaluation period:

- Development of Cell D and LFG Manifold Extension
- Flare station control upgrades and expansion

The table shows the engineer's opinion of cost in November 2009 dollars and in year of expenditure dollars where costs have been escalated at a rate of 2.5 percent per year for inflation. It is assumed that the County will pay for these capital improvements out-of-pocket and will not need to apply for a loan from the Washington State Public Works Trust Fund (PWTF)[1].

**TABLE 9-2**
Financing of Major Construction Projects
*Asotin County Solid Waste Management Plan, 2010 Update*

| Description | 2009$ | Year of Expenditure | Year of Expenditure Cost |
|---|---|---|---|
| **Cell D Development and LFG Manifold Extension:**[a] | | | |
| Design/Permitting | $176,000 | 2014 | $195,000 |
| Development Costs | $1,870,000 | 2015 | $2,008,000 |
| Construction Management Services | $265,000 | 2015 | $298,000 |
| **Flare Station Upgrades/Expansion:** | | | |
| Design/Permitting | $68,000 | 2024 | $92,000 |
| Development Costs | $610,000 | 2025 | $837,000 |
| Construction Management Services | $103,000 | 2025 | $141,000 |

[a] Assumes that extension of the LFG manifold will occur concurrent with the Cell D development project.

### 9.4.4.4 Closure and Post-Closure Fund Contributions

Separate financial fund models were developed for closure and post-closure care to meet financial assurance requirements under the stated rules. Closure and post-closure care cost estimates were updated for this evaluation in November 2009 dollars. Fund balances accrued at an assumed annual rate of return of 2.5 percent.

Contributions are calculated so that the fund balance is built to provide sufficient funds to pay for post-closure activities when the landfill closes and through the 30-year post-closure care period. The post-closure fund also has been setup for annual contributions every year through full development of the landfill. In the event that a premature closure were to happen, surplus operational funds that would be otherwise used for development of Cell D would be transferred to the post-closure fund to make it fully funded through the 30-year care period. It is estimated that over $2 million dollars would be in the operations account at

[1] The County would like to retain the option of applying for and receiving a PTWF in case of unexpected changes in cash reserves. The debt service for these loans is typically over a 20-year term at an interest rate of 1.0 percent. Typically, municipalities need to provide a down payment of at least 20 percent to qualify for these loans. Another option is to receive a bank loan for the municipality at an assumed rate of 5% for a 20 year term.

the end of 2015 if design/permitting and construction of Cell D did not occur. Of that, an estimated $840,000 dollars would be needed at the time to fully fund the post-closure account; this assumes that annual contributions of $1.50 per ton for post-closure account contributes continue through the contract period with Lewiston (2013).

Forecast closure and post-closure cost summaries for the landfill are shown in Table 9-3. The current closure account has been set up to fund closure of Cells A-C (the current cells that are open), in the event the landfill needs to prematurely close. Premature closure funding has been set up to occur 2015, without any further account contributions between now and then.

The final closure system assumed for this economic evaluation update is the standard, prescribed composite cover system. The County will continue to pursue the possibility of using an alternative [evapotranspiration (ET)] cover in lieu of the standard cover. Any potential costs savings of using an alternative cover will be evaluated as discussions for use of the alternative cover system progress with the regulatory agencies.

**TABLE 9-3**
Closure and Post-Closure Care Costs
*Asotin County Solid Waste Management Plan, 2010 Update*

| | Cost Estimate | Year of Expenditure | Year of Expenditure Cost |
|---|---|---|---|
| **Closure:** | | | |
| Premature (Cells A-C)[a] | $3,938,000 (2009$) | 2015 | $4,435,000 |
| Full Buildout (Cells A-D) | $5,502,000 (2009$) | 2033 | $8,850,000 |
| Annual Account Contributions: | | | |
| Initial Year: | --- | 2015 | $71,212 |
| Final Year: | --- | 2033 | $101,708 |
| **Post-Closure [a]:** | | | |
| Annual Account Contributions: | | | |
| Initial Year | $165,000 (2004$) | 2034 | $298,875 |
| Final Year | $134,000 (2004$) | 2063 | $431,037 |

[a] Premature closure is included as it relates to closing the ACRL prematurely (early) under its current development extent (Cells A-C). Once future Cell D is open, closure costs will begin accruing again for closure of the full landfill buildout (Cells A-D). The closure account balance at the end of 2008 was approximately $4,051,000. It is anticipated that this balance will grow with interest to more than $4,524,000 in the year of the proposed expenditure (2016), and therefore, no additional closure fund contributions are scheduled until after Cell D is opened and starts filling with waste in 2016.

[b] Post-Closure costs are in 2004$ and are for two separate periods: Years 1-10 and Years 11-30. It is assumed that oversight and monitoring will decrease after the first 10 years of post-closure care. Post-closure costs are assumed to be the same for both the full buildout and premature closure scenarios.

### 9.4.4.5 Financial Forecast Summary

A summary of the financial forecast through 2015 is presented in Table 9-4. The forecast projects actual revenues and expenses per year.

### 9.4.5 Recommendations

Financing of the solid waste system should continue to be through user fees at rates that will support current and future development, in accordance with this plan. These fees should be supplemented through any available grants and sale of recyclable commodities.

In summary, it is recommended that the County continue with routine updates of the financial model to evaluate impacts on the operations account balance, accounting for planned and unplanned expenses and revenues, in-coming tonnages, price indices (tipping and hauling fees), contract conditions with their regional partner Lewiston, and any other factor that would impact the financial status and outlook for the County. **Discussions with Lewiston should be initiated as soon as possibly to start planning for the future Cell D development without having to secure financing. If the market continues to be depressed, there is a strong possibility that funds in the account will not be sufficient to cover the development costs for future Cell D.** As such, routine annual updates to the model are critical, especially in the near term (next 5 years) planning horizon.

### 9.4.6 Implementation

The solid waste disposal system is supported by revenues from user fees. The County will continue to apply for grant monies to support solid waste management activities such as recycling, MRW diversion, litter programs, and community education programs, where applicable. Continue discussions with regional solid waste partners for setting rate schedules that will allow the next phase of development (Cell D) to be financed by the solid waste account, rather than a public works trust fund or bond of some sort, to help keep tipping fees down over the long-term and affordable for all users.

**TABLE 9-4**
Solid Waste Fund Financial Forecast (2010-2015)
*Asotin County Solid Waste Management Plan, 2010 Update*

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| **Beginning Cash** | **$950,000** | **$876,520** | **$1,106,133** | **$1,433,313** | **$1,797,837** | **$1,963,604** |
| **Revenues** | | | | | | |
| **Grants** | | | | | | |
| CPG DOE Grant | $100,000 | $25,000 | $25,000 | $25,000 | $25,000 | $25,000 |
| Refuse Tax Collected | $46,600 | $48,200 | $49,900 | $51,700 | $53,500 | $55,400 |
| Subtotal Grants/Refuse Tax | $146,600 | $73,200 | $74,900 | $76,700 | $78,500 | $80,400 |
| **Fees and Charges** | | | | | | |
| Tipping Fees - Daily (cash) – 15% of Fee | $258,750 | $267,900 | $277,350 | $287,100 | $297,300 | $307,800 |
| Tipping Fees - Charge Accts. – 85% of Fee | $1,466,250 | $1,518,100 | $1,571,650 | $1,626,900 | $1,684,700 | $1,744,200 |
| Subtotal Fees and Charges | $1,725,000 | $1,786,000 | $1,849,000 | $1,914,000 | $1,982,000 | $2,052,000 |
| Haul Contract Fees | $216,648 | $222,086 | $227,660 | $233,374 | $239,232 | $245,237 |
| **Total Revenues** | **$2,088,248** | **$2,081,286** | **$2,151,560** | **$2,224,074** | **$2,299,732** | **$2,377,637** |
| **Expenses** | | | | | | |
| **Landfill Operating Expenses** | | | | | | |
| Administration | $66,000 | $68,000 | $69,000 | $70,000 | $72,000 | $73,000 |
| Onsite Maintenance | $27,000 | $27,000 | $28,000 | $28,000 | $29,000 | $29,000 |
| Heavy Equipment Rental - no inflation | $386,000 | $393,000 | $401,000 | $409,000 | $417,000 | $426,000 |
| Labor and Benefits | $299,000 | $305,000 | $311,000 | $317,000 | $323,000 | $330,000 |
| Supplies | $13,000 | $14,000 | $14,000 | $14,000 | $14,000 | $15,000 |
| Office Equipment Rental | $6,000 | $6,000 | $6,000 | $6,000 | $7,000 | $7,000 |
| Utilities (Gas, Electricity, Phone, Internet, etc.) | $13,000 | $14,000 | $14,000 | $14,000 | $14,000 | $15,000 |
| Miscellaneous | $4,000 | $4,000 | $4,000 | $4,000 | $4,000 | $5,000 |
| Communication/PBX | $5,000 | $5,000 | $5,000 | $5,000 | $6,000 | $6,000 |
| County Prosecuting Attorney | $8,000 | $8,000 | $8,000 | $9,000 | $9,000 | $9,000 |
| Interfund - Land Lease | $44,000 | $45,000 | $46,000 | $47,000 | $47,000 | $48,000 |
| Sewer Treatment Fee | $22,000 | $23,000 | $23,000 | $24,000 | $24,000 | $25,000 |

**TABLE 9-4**
Solid Waste Fund Financial Forecast (2010-2015)
*Asotin County Solid Waste Management Plan, 2010 Update*

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| County Professional Services | $12,000 | $12,000 | $13,000 | $13,000 | $13,000 | $14,000 |
| Insurance | $78,000 | $79,000 | $81,000 | $82,000 | $84,000 | $86,000 |
| Data Processing | $42,000 | $43,000 | $44,000 | $44,000 | $45,000 | $46,000 |
| **Moderate Haz Waste** | | | | | | |
| Labor and Benefits | $49,000 | $50,000 | $51,000 | $52,000 | $53,000 | $54,000 |
| Supplies | $8,600 | $8,700 | $8,900 | $9,100 | $9,300 | $9,500 |
| Equipment Rental | $2,100 | $2,200 | $2,200 | $2,300 | $2,300 | $2,400 |
| Maintenance | $3,300 | $3,300 | $3,400 | $3,500 | $3,500 | $3,600 |
| Miscellaneous | $2,100 | $2,200 | $2,200 | $2,300 | $2,300 | $2,400 |
| Disposal | $26,000 | $26,000 | $27,000 | $27,000 | $28,000 | $28,000 |
| Capital Outlay | $2,600 | $2,600 | $2,700 | $2,700 | $2,800 | $2,800 |
| Engineering Professional Services | $2,500 | $2,600 | $2,600 | $2,700 | $2,700 | $2,800 |
| **Groundwater Monitoring** | | | | | | |
| Labor and Benefits | $35,000 | $35,000 | $36,000 | $37,000 | $38,000 | $38,000 |
| Supplies | $2,200 | $2,300 | $2,300 | $2,400 | $2,400 | $2,500 |
| Lab Services | $25,600 | $26,100 | $26,600 | $27,200 | $27,700 | $28,300 |
| Equipment Rental | $1,000 | $1,000 | $1,100 | $1,100 | $1,100 | $1,100 |
| Miscellaneous | $2,100 | $2,200 | $2,200 | $2,300 | $2,300 | $2,400 |
| Capital Outlay | $1,000 | $1,000 | $1,100 | $1,100 | $1,100 | $1,100 |
| Engineering Professional Services | $40,000 | $41,000 | $42,000 | $42,000 | $43,000 | $44,000 |
| **Landfill Gas Monitoring** | | | | | | |
| Labor and Benefits | $30,000 | $31,000 | $31,000 | $32,000 | $32,000 | $33,000 |
| Supplies | $3,200 | $3,200 | $3,300 | $3,400 | $3,400 | $3,500 |
| Equipment Rental | $1,000 | $1,000 | $1,100 | $1,100 | $1,100 | $1,100 |
| Electricity | $3,200 | $3,200 | $3,300 | $3,400 | $3,400 | $3,500 |
| Maintenance | $3,200 | $3,200 | $3,300 | $3,400 | $3,400 | $3,500 |

**TABLE 9-4**
Solid Waste Fund Financial Forecast (2010-2015)
*Asotin County Solid Waste Management Plan, 2010 Update*

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| Miscellaneous | $2,100 | $2,200 | $2,200 | $2,300 | $2,300 | $2,400 |
| Capital Outlay | $31,800 | $65,000 | $0 | $0 | $137,800 | $0 |
| Engineering Professional Services | $22,000 | $23,000 | $23,000 | $24,000 | $24,000 | $25,000 |
| **Waste Haul** | | | | | | |
| Labor and Benefits | $4,200 | $4,300 | $4,400 | $4,400 | $4,500 | $4,600 |
| Contract (M.L. Albright) Payment | $161,813 | $165,874 | $170,038 | $174,306 | $178,681 | $183,166 |
| Equipment Rental | $14,000 | $15,000 | $15,000 | $15,000 | $15,000 | $16,000 |
| Maintenance | $11,000 | $11,000 | $12,000 | $12,000 | $12,000 | $12,000 |
| Capital Outlay | $80,000 | $5,400 | $5,500 | $5,600 | $5,700 | $5,800 |
| **Subtotal Landfill Operating Expense** | **$1,595,613** | **$1,585,574** | **$1,552,438** | **$1,581,606** | **$1,750,781** | **$1,650,466** |
| **Bond Payment, Taxes, Interest, Permit Fees** | | | | | | |
| Refuse Tax | $46,600 | $48,200 | $49,900 | $51,700 | $53,500 | $55,400 |
| Operating Permit | $12,000 | $12,000 | $12,000 | $12,000 | $12,000 | $12,000 |
| Operating Permit – Ecology | $14,500 | $14,500 | $14,500 | $14,500 | $14,500 | $14,500 |
| Intergovernmental Tax/Use - B&O | $25,875 | $26,790 | $27,735 | $28,710 | $29,730 | $30,780 |
| **Subtotal Bond Payment, Taxes, Interest, Permit Fees** | **$98,975** | **$101,490** | **$104,135** | **$106,910** | **$109,730** | **$112,680** |
| **Capital Expenditures** | | | | | | |
| Labor & Benefits | $6,300 | $6,500 | $6,600 | $6,700 | $6,800 | $7,000 |
| Supplies | $6,300 | $6,500 | $6,600 | $6,700 | $6,800 | $7,000 |
| Equipment | $6,300 | $6,500 | $6,600 | $6,700 | $6,800 | $7,000 |
| Capital Improvements | $7,700 | $7,800 | $8,000 | $8,100 | $8,300 | $8,400 |
| Landfill Gas Flare System Retrofits/Improvements (Routine) | $10,000 | $10,200 | $10,400 | $10,600 | $10,800 | $11,000 |
| Capital Expenditures | $2,100 | $2,200 | $2,200 | $2,300 | $2,300 | $2,400 |
| Cell D/LFG Construction (No PWTF assumed - Pay in Full) | $0 | $0 | $0 | $0 | $0 | $2,008,725 |

**TABLE 9-4**
Solid Waste Fund Financial Forecast (2010-2015)
*Asotin County Solid Waste Management Plan, 2010 Update*

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| Landfill Development/Planning - Engineering & SDC | $140,000 | $50,000 | $51,000 | $52,000 | $194,782 | $298,016 |
| Landfill Entrance Improvements/ Studies (Clearwater Power) | $15,000 | $0 | $0 | $0 | $0 | $0 |
| Old Landfill RI/FS and Remedial Cleanup Actions | $200,000 | $0 | $0 | $0 | $0 | $0 |
| Subtotal Capital Expenditures | **$393,700** | **$89,700** | **$91,400** | **$93,100** | **$236,582** | **$2,349,541** |
| **Landfill Closure/Post-Closure** | | | | | | |
| Landfill Closure | $0 | $0 | $0 | $0 | $0 | $71,200 |
| Landfill Post-Closure | $73,440 | $74,909 | $76,407 | $77,935 | $36,873 | $37,611 |
| Subtotal Landfill Closure/Post-Closure | $73,440 | $74,909 | $76,407 | $77,935 | $36,873 | $108,811 |
| Total Expenditures | **$2,161,728** | **$1,851,673** | **$1,824,380** | **$1,859,551** | **$2,133,966** | **$4,221,497** |
| *Revenues Minus Expenditures* | *-$73,480* | *$229,613* | *$327,180* | *$364,524* | *$165,766* | *-$1,843,860* |
| **Ending Balance** | **$876,520** | **$1,106,133** | **$1,433,313** | **$1,797,837** | **$1,963,604** | **$119,743** |
| Total Landfill Disposal Amount (tons)[a] | 48,960 | 49,939 | 50,938 | 51,957 | 52,996 | 54,056 |
| Tip Fee ($/ton) | $36.50 | $37.05 | $37.60 | $38.17 | $38.74 | $39.32 |
| Lewiston Disposal Amount (tons) [a] | 24,480 | 24,970 | 25,469 | 25,978 | 26,498 | 27,028 |
| Haul Fee ($/ton) | $8.85 | $8.89 | $8.94 | $8.98 | $9.03 | $9.07 |
| Contract Fee (for M.L. Albright Haul of Lewiston Waste) | $6.61 | $6.64 | $6.68 | $6.71 | $6.74 | $6.78 |

[a] These tonnages are slightly different than those forecasted in Chapter 3 (Table 3-2) as these projection in the financial model were based on 2008 tonnages and pro-rated forecasts for 2009 when the model was prepared in late-2009.

CHAPTER 10

# Summary of Recommendations and Implementation Schedule

In Chapters 4 through 8, each element of the solid waste system was examined in detail, and various options and actions were evaluated and recommended. This summary presents the recommendations for the next 6 years (Table 10-1). The recommendations and planning requirements for the next 20 years are outlined in Table 10-2.

An overview of the findings and recommendations of this SWMP update are contained in the following sections. It is organized in the same sequence as the plan.

## 10.1 Waste Reduction and Recycling

Waste reduction and recycling are the first two solid waste management priorities and, as such, many options and potential actions were evaluated. The County should consider applying in-house waste reduction measures and finding educational waste educational resources to further implement its public educational programs. However, waste reduction and recycling will primarily be supported and encouraged by providing a recycling opportunity for all residents. The recycling collection program is based on the drop box collection program outlined in the 1993 and 2005 SWMP and this updated 2010 SWMP.

Yard wastes from the communities of Lewiston and Clarkston through their curbside pickup programs will continue to be recycled by EKO. Areas not currently served by the recycling program will be examined for the possibility of collection. Cost estimates for a county-wide waste diversion program will be investigated, and additional funding sources (such as grants) for this program will be sought.

## 10.2 Solid Waste Programs

### 10.2.1 Trial Organic Yard and Wood Waste Program

The trial organic yard and wood waste program that was put in to place in November 2009 in an effort to curtail open burning of wood wastes and to divert these wastes from the landfill has demonstrated to be a viable program so far. Residents are bringing in a steady stream of wood wastes daily to the ACRL. The County should continue administering this program and inform and educate residents of this program and what wastes are accepted. There is a heavy incentive for residents to use this program as there is no charge for disposal of these types of wastes. When grant funding runs out, a tipping fee may need to be instituted for these waste types but should be considerably lower than the standard MSW tipping fee to continue to provide incentive for the residents to use the program.

### 10.2.2 Energy Recovery and Incineration

Incineration of MSW is not recommended because of the relatively small volume of waste generated in the County and the high cost of incinerators. Yard waste and sludge should continue to be diverted away from the ACRL and processed at the EKO composting facility.

### 10.2.3 Waste Collection

The current system appears to be functioning adequately. However, the County should continue to work with local communities to help evaluate the need for curbside collection of recyclables and yard waste, to encourage diversion of the waste from the ACRL.

### 10.2.4 Transfer of Wastes

The improvements made to the transfer station in Lewiston should serve the City of Lewiston and Nez Perce County residents for the next several years. No transfer stations for Asotin County are currently planned or are warranted in the next several years. Long-range planning (beyond the closure of the landfill in 2033) is evaluating the option of transfer and long-haul of waste to a regional repository, among other waste management options.

### 10.2.5 Waste Exportation/Importation

The County should continue to provide waste disposal services for its current waste partners that dispose of waste at the ACRL. Importation of other wastes should be carefully considered as this will affect the landfill service life. Export of waste should not be considered until the need for closure of the ACRL, unless there are system changes or regulatory drivers that would necessitate an early closure of the landfill.

## 10.3 Landfilling and Volume Reduction

The County should continue to own and manage the current landfill, in accordance with federal, state and local health district regulations. In order to satisfy the requirements of WAC 173-351, various environmental protection measures are being implemented at the landfill. These include groundwater monitoring, landfill gas management, leachate control, and operations that control vectors and provide for higher levels of safety for workers, the public, and the environment.

The County should evaluate the need for use of alternative daily cover (ADC) materials and peeling off daily cover soil to help reduce the airspace taken up by soil. Additionally, the County should consider installing a yard waste collection bin or building a stockpile of some kind near the entrance facility to recycle yard waste (excluding organic and yard wood waste) rather than disposing it in the landfill.

## 10.4 Special Wastes

### 10.4.1 Tires

Sophisticated mechanical or chemical processing systems are not currently feasible because of the relatively low numbers of used tires being disposed at the landfill (economy of scale).

Tires are not currently considered a problem at the ACRL as a result of the high tipping fee for excessive tire disposal by residents and businesses.

### 10.4.2 Refrigeration Units/Chlorofluorocarbons

The County should continue to process refrigeration units that contain CFCs, or direct the public to use the services of a refrigeration service center.

### 10.4.3 Electronics

The County should continue to implement the E-Cycle Washington program as required under a Washington State law (Chapter 70.95N RCW), and work with local recycling agencies and Ecology to expand the types of e-wastes collected under the program.

### 10.4.4 Bio-Hazardous and Wastewater Treatment Wastes

Only minor amounts of bio-hazardous wastes are disposed at the ACRL. Most major hospitals and clinics in the area contract with private entities for disposal of these waste types. The current process of co-composting the domestic wastewater treatment sludge with yard waste at the EKO facility is the best option for managing these wastes. Wastewater treatment sludges are co-composted with yard waste at EKO. The end-product is a beneficial reuse material that can be used for soil amendments, planting, and agricultural purposes. Continue to provide disposal services for the minor amounts of bio-hazardous and grit materials that are disposed at the landfill.

## 10.5 Moderate Risk Waste Management

Continue to provide MRW waste collection services to divert these types of waste from the landfill. Options to enhance this program include expanding the household and public education outreach, expanding the collection sites with additional sponsored events, and continuing to provide technical assistance to businesses (and management of waste for CESQG).

## 10.6 Enforcement, Administration, and Financial Assurance

The County should continue to administer the landfill, moderate risk waste, and recycling programs. It is recommended that the SWAC continue to be actively involved with the development and direction of solid waste programs. The next update of the SWMP should begin early in the fourth year after the adoption of this plan, so that the update can be completed in a timely manner.

Asotin County should continue to investigate solid waste complaints. Public education on proper disposal of solid waste should be enhanced in an effort to reduce illegal dumping. ACHD should work closely with the County to assure that facilities are operated in compliance with applicable rules. This should include permitting, periodic inspections, and assistance with adequate monitoring and operational procedures. The County should also consider passing a county-wide mandate for securing loads that will require the Sheriff's Department to enforce a secured load ordinance.

The landfill user tipping fee should continue to finance the operation of the waste disposal system and should be supplemented as possible by the sale of recyclable commodities and state grants. The County should continue with routine updates of the financial model to evaluate impacts on the operations account balance, accounting for planned and unplanned expenses and revenues, in-coming tonnages, price indices (tipping and hauling fees), contract conditions with their regional partner Lewiston, and any other factor that would impact the financial status and outlook for the County. Discussions with Lewiston should be initiated as soon as possibly to start planning for the future Cell D development without having to secure financing. If the market continues to be depressed, there is a strong possibility that funds in the account will not be sufficient to cover the development costs for future Cell D. As such, routine annual updates to the model are critical, especially in the near term (next 5 years) planning horizon.

## 10.7 Summary

This solid waste management plan update has been prepared to comply with the *Washington State Solid Waste Management–Recovery and Recycling Act* (Chapter 70.95 RCW). Asotin County and its waste partners have implemented several beneficial methods to curb waste from entering the waste stream and ultimately entering the landfill. The County and its partners have managed to reduce waste through curbside recycling, curbside yard waste pick up, and centralized drop stations for recyclables.

Table 10-1 provides a summary of recommendations and implementation schedule of opportunities over the next 6 years (through 2015). Table 10-2 presents a list of future projects that are on the horizon for the next 20 years.

**TABLE 10-1**
Summary of Recommendations and Implementation Schedule for 6 Years
*Asotin County Solid Waste Management Plan, 2010 Update*

| Element of the Solid Waste System | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| **A. Waste Reduction, Recycling, and Special Wastes** | | | | | | |
| 1. Waste reduction programs to motivate use of waste reduction techniques | X | X | X | X | X | X |
| 2. Seek Ecology grants with support from communities | X | X | X | X | X | X |
| 3. Encourage recycling and those recyclers to recycle additional items | X | X | X | X | X | X |
| 4. Recycling drop box collection | X | X | X | X | X | X |
| a. Evaluate effectiveness of existing drop box locations in the County and optimize | X | X | X | X | X | X |
| b. Add additional recyclable collection as they become more of a commodity with market conditions | X | X | X | X | X | X |
| **B. Collection, Transfer, and Import/Export** | | | | | | |
| 1. Interlocal agreements/contracts with adjacent counties should be negotiated for wastes coming into or going out of County | X | X | X | X | X | X |
| 2. Encourage recycling at all drop box sites | X | X | X | X | X | X |
| **C. Landfilling and Volume Reduction** | | | | | | |
| 1. County should continue to own and manage the current landfill | X | X | X | X | X | X |
| 2. Encourage the use of recycling opportunities at all solid waste stations | X | X | X | X | X | X |
| 3. Evaluate the need for ADCs and other means to maximize landfill airspace | X | X | | | | |

**TABLE 10-1**
Summary of Recommendations and Implementation Schedule for 6 Years
*Asotin County Solid Waste Management Plan, 2010 Update*

| Element of the Solid Waste System | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| 4. Evaluate the feasibility of installing yard waste collection bins or stockpiles at the landfill entrance for other types of yard waste (and composting), or hauling to EKO | X | X | | | | |
| 5. Continue the organic and yard waste (clean wood) recycling program at the ACRL. | X | X | X | X | X | X |
| **D. Special Wastes** | | | | | | |
| 1. Look for alternatives for tires (shredding, recycling, etc.) as technology advances | X | X | X | X | X | X |
| 2. Continue to recover CFCs from refrigerators | X | X | X | X | X | X |
| 3. Closely monitor disposal of bio-hazardous wastes and sludges | X | X | X | X | X | X |
| 4. Evaluate the potential to dispose/recycle of other special wastes, if a need arises | X | X | X | X | X | X |
| **E. Moderate Risk Waste Management** | | | | | | |
| 1. Continue to develop public outreach programs to support MRW diversion from the landfill waste stream | X | X | X | X | X | X |
| 2. Continue to look at ways to expand the MRW collection, with continued sponsorship of collection events and mobile collection systems | X | X | X | X | X | X |
| **F. Enforcement, Administration and Financial Assurance** | | | | | | |
| 1. The SWAC should continue to actively review and comment upon the planning administration of the solid waste system. | X | X | X | X | X | X |
| 2. Financing of solid waste disposal system should continue to be from user fees, grants, surcharges (as appropriate), and the sale of recyclables. | X | X | X | X | X | X |
| 3. Continue routine updates of the financial model for financial assurance and work closely with the waste partners for setting tipping rates in the near term to pay for the development of Cell D out of the solid waste account rather than financing | X | X | X | X | X | X |

**TABLE 10-2**
20-Year Future Project Needs, 20010-2029
*Asotin County Solid Waste Management Plan, 2010 Update*

| Task | Year(s) |
|---|---|
| Cell D Construction (and CM) | 2015 |
| Flare Station Upgrades (and CM) | 2025 |
| Update Solid Waste Management Plan | 2015 |
| Update Solid Waste Management Plan | 2020 |
| Update Solid Waste Management Plan | 2025 |

CHAPTER 11

# References


Asotin County. *Asotin County-Nez Perce County Moderate Risk Waste Management Plan.* April 1991.

Asotin County. 1975. *Comprehensive Solid Waste Management Plan for Asotin County,* and addendum, *Planning the Development of an Economical and Feasible Solid Waste System for Asotin County, Washington, Nez Perce County, Idaho Metropolitan Area.* July 1975.

Asotin County. *Municipal Solid Waste Processing and Material Recovery Facility, Preliminary Design Report.* January 1992.

Brown and Caldwell. *Asotin County-Nez Perce Regional Solid Waste Management Plan.* 1993.

CH2M HILL. 1995. *Asotin County Regional Landfill – Cell D Preliminary Design Report.* April 1995

CH2M HILL. 1996. *Asotin County Regional Landfill Conceptual Layout and Cell B Preliminary Design Report.* December 1996.

Howard Consultants, Inc. (HCI). 1990. *Hydrogeologic Analysis and Monitor Well Construction for the Asotin County Landfill.* June 1990.

Howard Consultants, Inc. (HCI). 1991. *Monitor Well Network Background Analysis Report.* May 1991.

Howard Consultants, Inc. (HCI). 1992. *Geotechnical Site Evaluation and Permeability Testing,* April 1992.

National Weather Service. Online Weather information. Spokane, Washington. March 2008. http://www.nws.noaa.gov/

State of Washington Revised Code of Washington (RCW) Chapter 70.95 – *Solid Waste Management – Recycling and Reduction.*

State of Washington, Washington Administrative Code, *Solid Waste Handling Standards,* WAC 173-350

State of Washington, Washington Administrative Code, *Criteria for Municipal Solid Waste Landfills,* WAC 173-351.

State of Washington Office of Financial Management (SWOFM). *Counties with Population Density Less Than 100 Persons per Square Mile* [online]. Olympia, Washington. Accessed in March 2008 from http://www.ofm.wa.gov/.

U.S. Census Bureau, 2007, *Idaho QuickFacts – Lewiston (city)* [online], Washington, D.C. Accessed in March 2008 from http://quickfacts.census.gov/qfd/states/16/1646540.html.

U.S. Census Bureau, 2007, *Washington County Selection Map* [online], Washington, D.C. Accessed in March 2008 from http://quickfacts.census.gov/qfd/maps/washington_map.html.

Washington Department of Ecology. 2009. *Draft Guidelines for the Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions, Publication #09-07-072.* October 2009.

Woodward-Clyde Consultants. 1987. *Soils Investigation for the Proposed Asotin County Landfill Expansion.* 1987.

# Figures

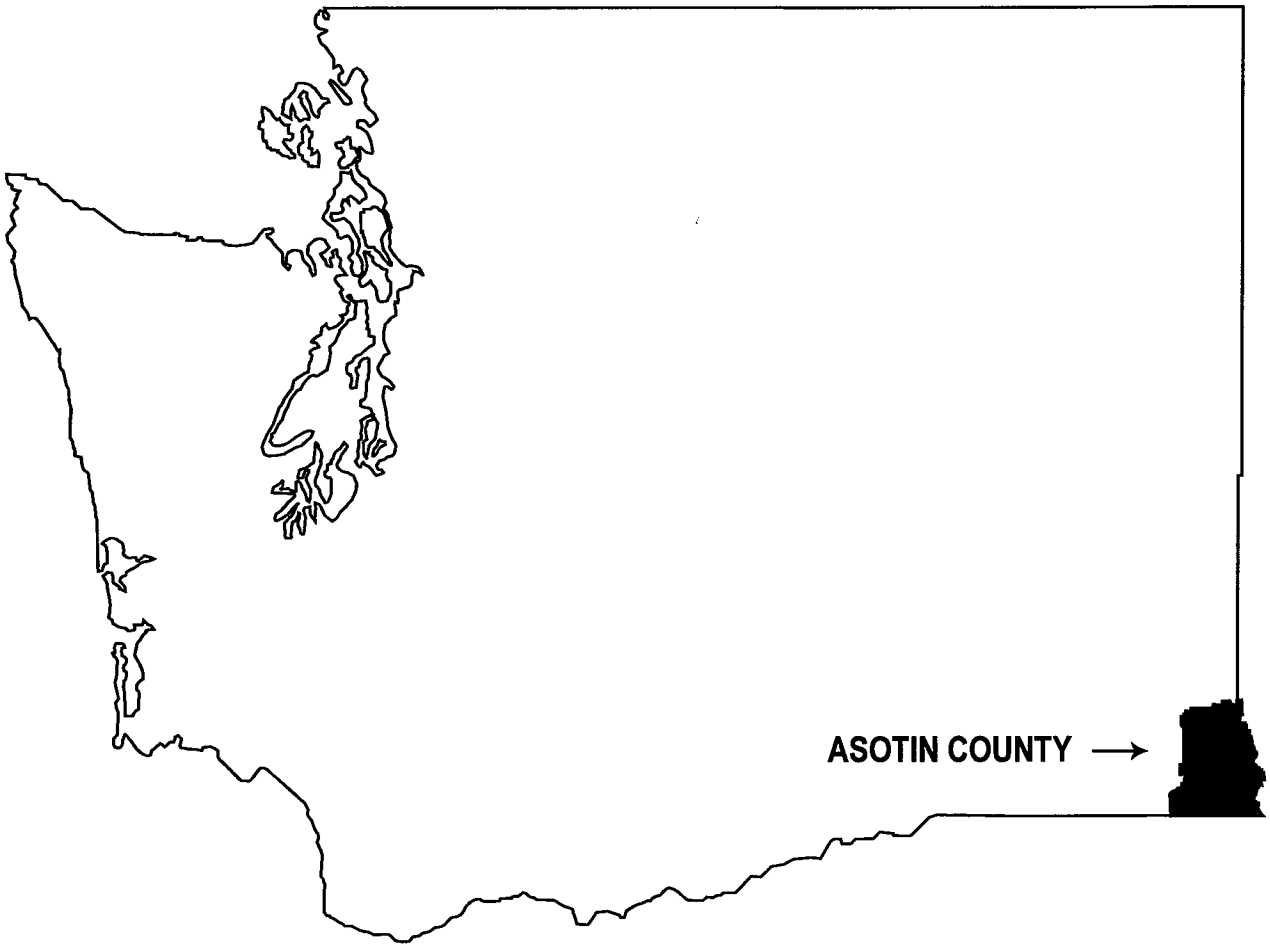



**FIGURE 2-1**
**Location of Asotin County in Washington State**
*Asotin County Solid Waste Management Plan, 2010 Update*

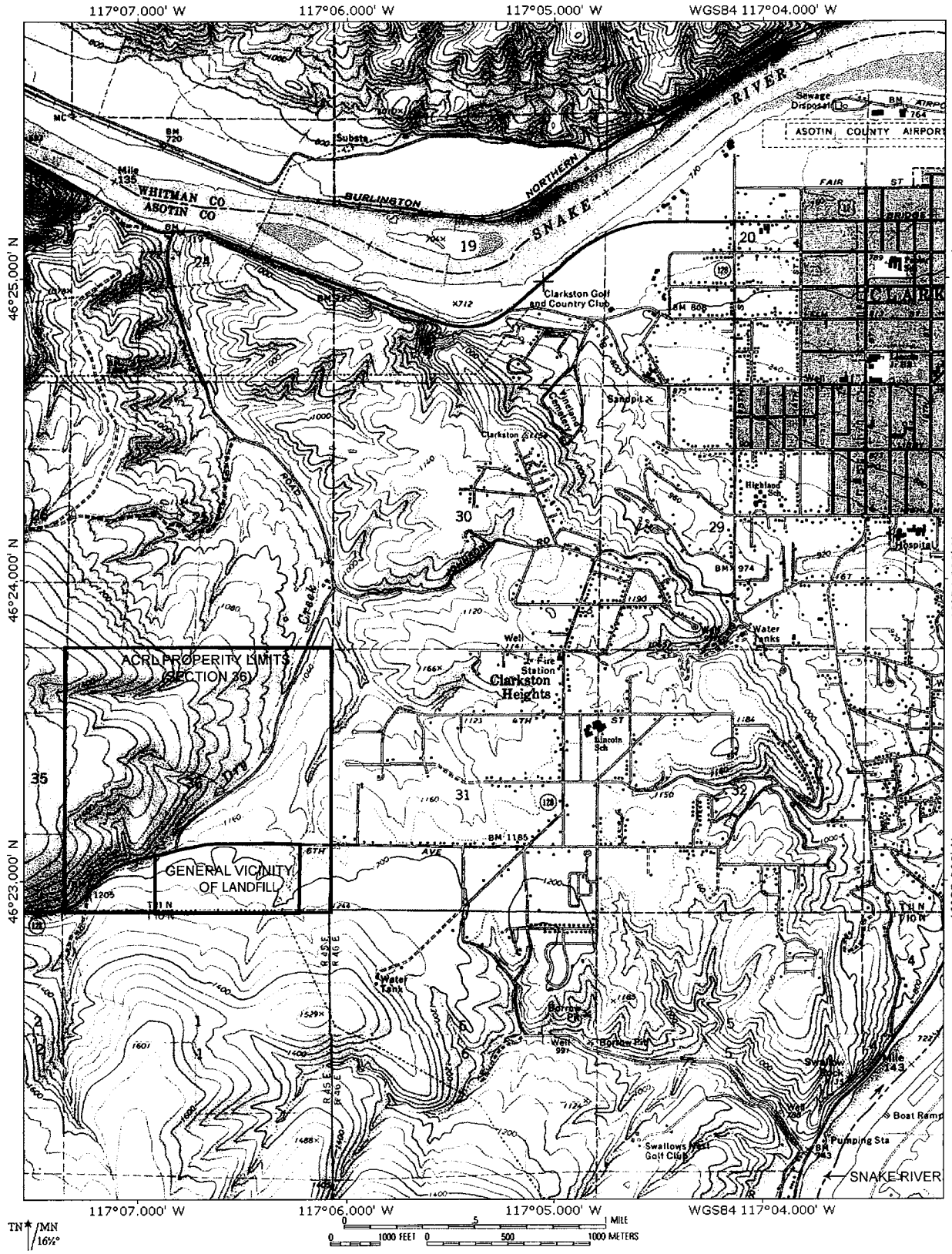



**FIGURE 2-2**
**Vicinity Map of Asotin County Regional Landfill**
*Asotin County Solid Waste Management Plan, 2010 Update*

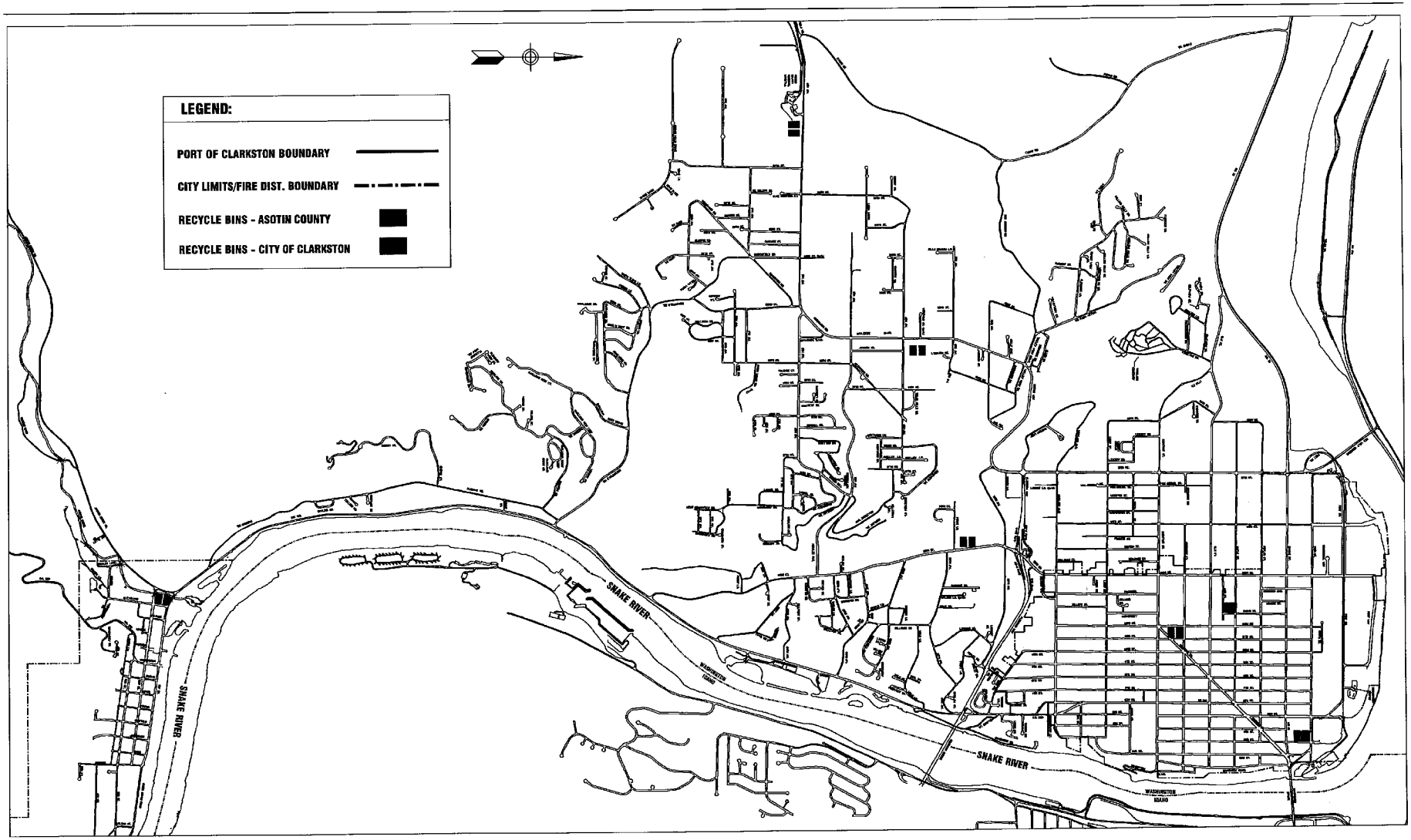



**FIGURE 4-1**
**Location of Recycling Sites in Asotin County**
*Asotin County Solid Waste Management Plan, 2010 Update*

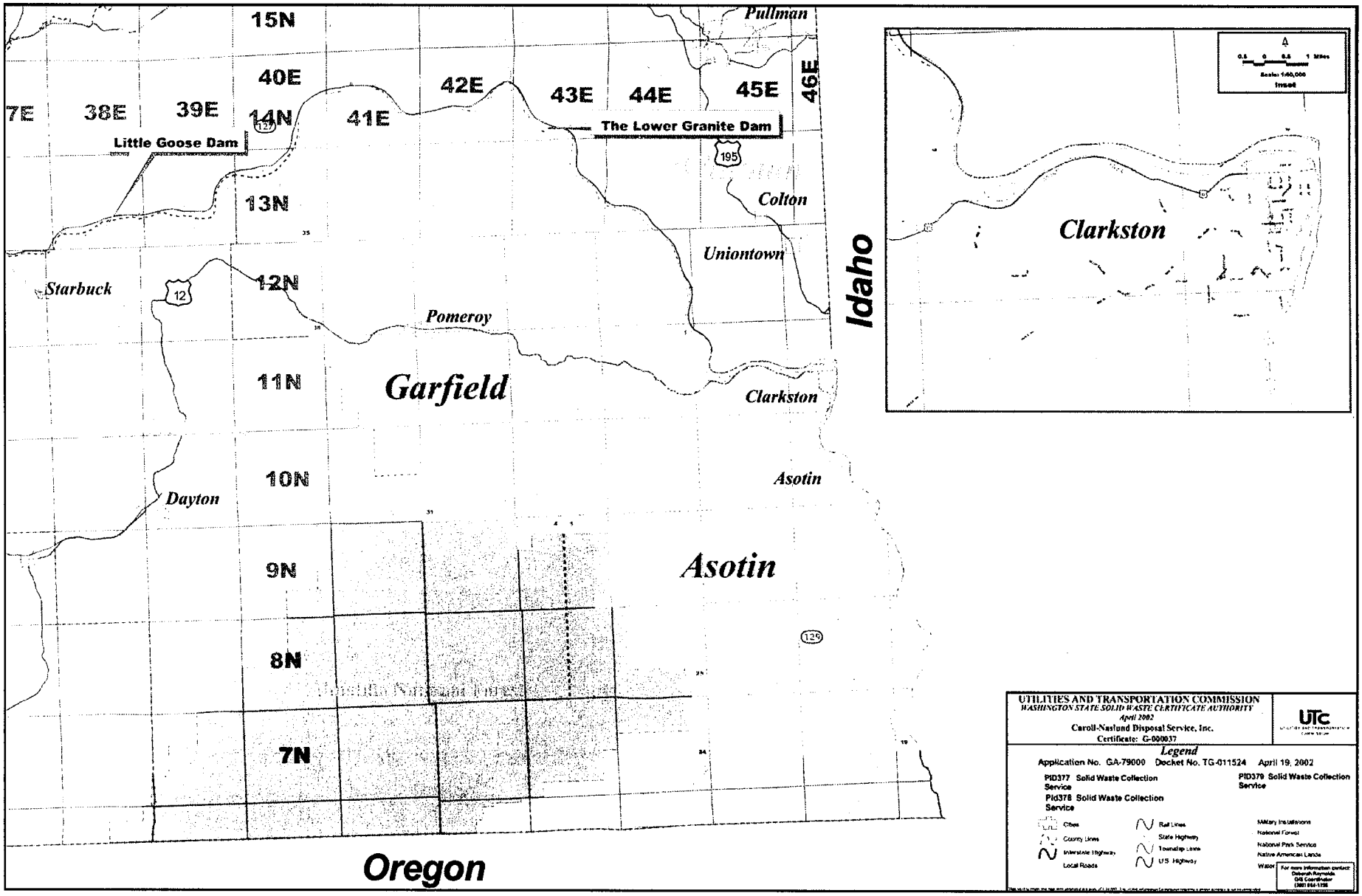
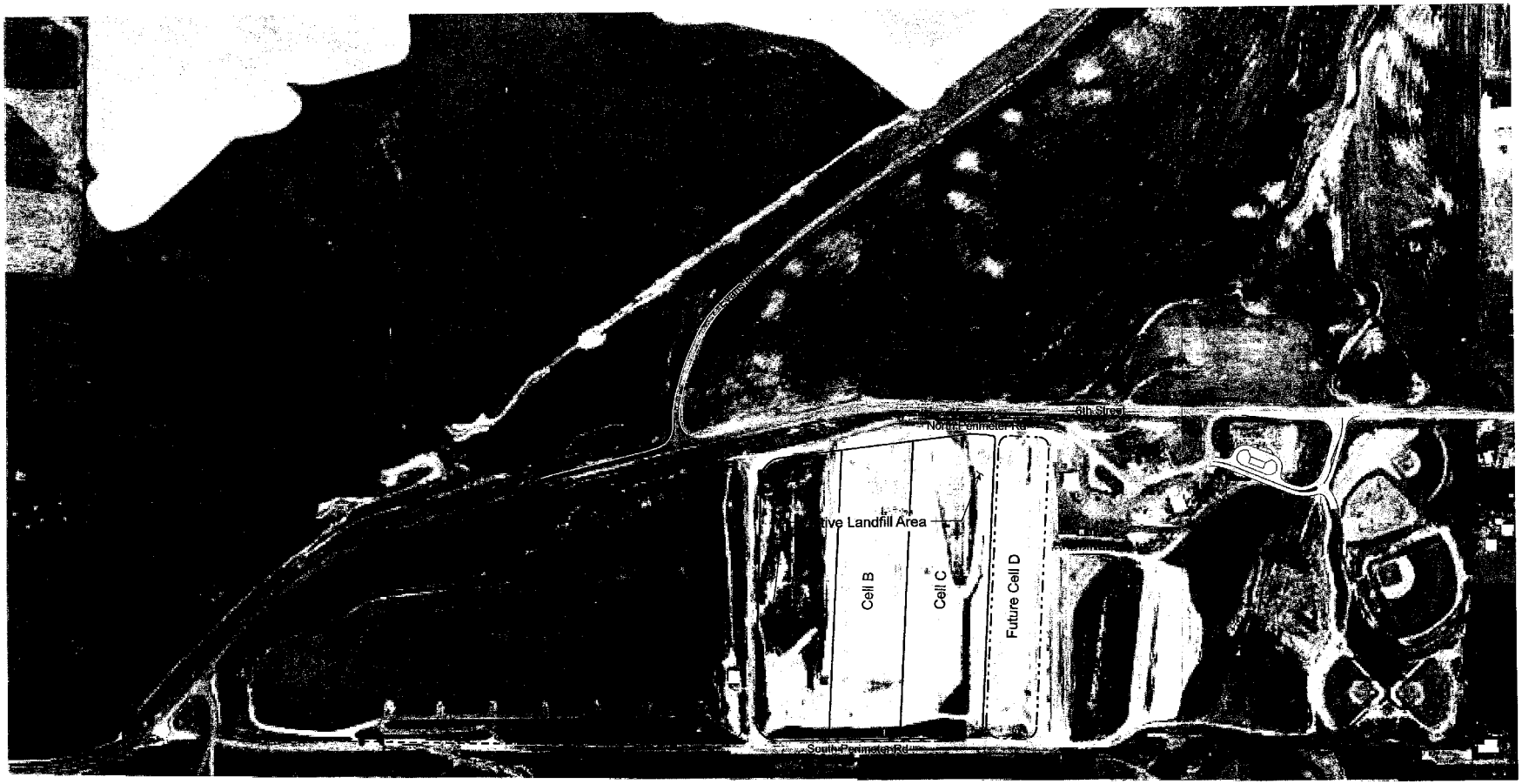



**FIGURE 5-1**
**WUTC Map of Franchise Haulers**
*Asotin County Solid Waste Management Plan, 2010 Update*




North

0 200 400 600

Approximate scale in feet

**FIGURE 6-1**
**Landfill Site Plan**
*Asotin County Solid Waste Management Plan, 2010 Update*

# WUTC COST ASSESSMENT QUESTIONNAIRE
## for local solid waste management planning

Please provide the information requested below:

**PLAN PREPARED FOR THE COUNTY OF:** *Asotin*

**PREPARED BY:** *CH2M HILL (as reviewed and approved by Asotin County)*

**CONTACT TELEPHONE:** *(509)758-1965 <Steve Becker/Asotin Co.>* **DATE:** *May 2010*

**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 *2009.*
YR.3 shall refer to *2011.*
YR.6 shall refer to *2014.*

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?
1.1.2

YR.1 *21,500* YR.3 *21,721* YR.6 *22,057*

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: *62,204* YR. 3: *62,838* YR. 6: *63,801*

*These estimates include populations for the major contributors, and include Asotin County, Nez Perce County, and the City of Pomeroy in Garfield County. The other minor (incidental) contributors (City of Lapwai and Port of Wilma in Whitman County) are not included in this estimate. Census data for these areas were not readily available. See Section 3.1 of the 2010 SWMP Update for a more detailed discussion of population under the jurisdiction area.*

**1.2 References and Assumptions**

*Population growth is based on intermediate forecasts from the Washington State Office of Financial Management, the U.S. Census Bureau, and waste projections from current estimates to Year 6 using average growth population growth rates between the 2000 census data and the last population estimate published.*

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: 12,942 YR.3: 13,202 YR.6:13,602

**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: 47,068 YR.3: 48,009 YR.6: 48,970

**2.3 References and Assumptions**
*Recycling rate projections assume a 1% annual growth rate.*
*Waste disposal projections assume a 2% annual growth rate.*

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.) *<Plan sections are referenced>*

**Implemented:**

- ***Variable-Can-Rate Systems:***
  - City of Lewiston
  - City of Clarkston
- ***Recycling Drop-Boxes***

*Waste reduction, reuse and recycling programs impact issues that should be considered in solid waste management. Much of the waste reduction activities are described in greater detail in Section 4.1 and 4.2 of the 2010 SWMP Update.*

**Proposed:**

- ***Internal Waste Reduction Practices:***
  - Implement in-house waste reduction programs and practices
- ***Waste Reduction Education:***
  - School and youth education
  - Business and institution education
  - Brochures and Publications
  - Displays at Local Events
  - Newspaper Articles
  - Web-page information
  - Assess providing recognition for waste reduction successes

3.1.2 What are the costs, capital costs and operating costs for waste reduction programs implemented and proposed?

IMPLEMENTED
*Waste reduction programs are currently funded by city hauler programs.*

PROPOSED
*Proposed programs would be implemented with limited funding resources available under current city hauler programs, unless additional funding sources become available.*

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 city hauler programs.*

PROPOSED
*Proposed programs would be implemented with limited funding resources available under current city hauler programs, 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

- Yard Waste Composting With EKO Systems
- ***Recycling Drop-Boxes***

*See Section 4.2 of the 2010 SWMP Update.*

PROPOSED

- ***Implement Community Recycling Program***
- ***Enhance Yard Waste Collection and Composting Program***
- ***Explore Additional Curbside Recycling Programs***
- ***Encourage High-Grade Commercial Recycling***

3.2.2 What are the costs, capital costs and operating costs for recycling programs implemented and proposed?

IMPLEMENTED

*The minor cost for the current recycling program is included in the overall landfill operating costs.*

*Recycling programs will be funded by a combination of tipping fees and CPG Grants from the Washington State Department of Ecology.*

PROPOSED
*Proposed programs would be done with limited operating budgets used for current implementation of programs unless additional funding sources become available.*

3.2.3 Please describe the funding mechanism(s) that will pay the cost of the programs in 3.1.2.

IMPLEMENTED
*Recycling programs will be funded by a combination of tipping fees and CPG Grants from the Washington State Department of Ecology.*

PROPOSED
*Proposed programs would be done 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:** ***Carroll-Naslund Disposal Service, Inc.***
**G-Permit # G-37**

YR. 1 *6,737* YR. 3 *7,009* YR. 6 *7,438*

**RESIDENTIAL**
- 5 Communities (City of Asotin, Unincorporated Asotin County, City of Pomeroy and Garfield County, and Port of Wilma in Whitman County) – estimated 10,000 customers
- Tonnage Collected: 4,737*tons (YR. 1)*

**COMMERCIAL**
- 1 Community (City of Asotin) – estimated 4,000 customers
- Tonnage Collected: *~2,000 tons (YR. 1)*

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:** ***Sanitary Disposal Inc. (SDI) <City of Lewiston>***

YR. 1: *27,881** YR.3: *29,007* YR.6: *30,783*

**Includes the approximate 23,111 tons hauled from the Lewiston/Nez Perce County Transfer Station to the ACRL in Year 1 (2009) by M.L. Albright & Sons through contract with Asotin County; the difference of 4,770 in Year 1 (2009) is self-haul from these Idaho customers.*

**Hauler Name:** ***City of Clarkston***

YR. 1: *5,752* YR.3: *5,984* YR.6: *6,351*

***The remainder of the MSW is self-hauled directly to the landfill for disposal***

YR. 1: *6,698* YR.3: *6,969* YR.6: *7,395*

**3.4 Energy Recovery & Incineration (ER&I) Programs**
*Asotin 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.

**Landfill Name:** *Asotin County Regional Landfill*
**Owner:** *Asotin County*
**Operator:** *Asotin County*

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.[1]

*Tonnages:*

YR. 1 *6,737* YR. 3 *7,009* YR. 6 *7,438*

*<Carroll-Naslund Disposal Service, Inc.* (G-Permit # G-37)>

[1] Compacted cubic yards will be converted at a standard 600 pounds per yard. Loose cubic yards will be converted at a standard 300 pounds per cubic yard. Please specify an alternative conversion ratio if one is presently in use in your jurisdiction.

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: *40,331* YR.3: *41,000*YR.6: *41,532*

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:*$1,921,000* YR.3: *$1,852,000* YR.6: *$2,134,000*

This includes all estimated expenditures for landfill operations. 2010.<Refer to Section 9.4 of the 2010 SWMP Update>

3.5.5 Please describe the funding mechanism(s) that will defray the cost of this component.
*Operating costs will continue to be funded by a combination of tipping fees and CPG Grants from the Washington State Department of Ecology.*

## 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 Costs:

YR.1:*$665,000* YR.3: *$692,000* YR.6: *$732,000*

*Estimate includes all labor and benefits for landfill operations, recycling and MRW facility operations.*

Funding Source
*Administration costs will continue to be funded by a combination of tipping fees and CPG Grants from the Washington State Department of Ecology.*

3.6.2 Which cost components are included in these estimates?
*Majority of costs are related to staff needed to operate programs.*

3.6.3 Please describe the funding mechanism(s) that will recover the cost of each component.
*Administration costs will continue to be funded by a combination of tipping fees and CPG Grants from the Washington State Department of Ecology.*

## 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.
*N/A*

**3.8 References and Assumptions** (attach additional sheets as necessary)

**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 Ton | Transfer Station Location | Final Disposal Location | Total 2009 Tons Disposed | Total Revenue Generated (Tip Fee x Tons) |
|---|---|---|---|---|---|---|
| Asotin County Regional Landfill | Landfill | $37.66 | --- | Asotin County Region Landfill | 47,068 | $1,772,581 |
| | | | | | | |
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## Table 4.1.2 Tip Fee Components

| Tip Fee by Facility | Surcharge | City Tax | County Refuse Tax | Transportation Cost | Operational Cost | Administration Cost | Closure/Post-Closure Costs |
|---|---|---|---|---|---|---|---|
| $37.66 | --- | --- | $1.32 | $3.54 | $17.18 | $14.12 | $1.50[a] |
| | | | | | | | |
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| | | | | | | | |

Notes:
a. This cost is for post-closure costs only. Closure costs are fully funded for the active cells A-C.

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| Dept. of Ecology | | | | | CPG DOE Grant | $25,000 | | | | |
| Tipping Fee | | | | | | | $1,773,000 | | | |
| Refuse Tax | | | | | | | | $50,000 | | |
| Haul Contract Fees | | | | | | | | | $225,000 | |
| | | | | | | | | | | |
| | | | | | | | | | | |

## Table 4.1.4 Tip Fee Forecast

| Tip Fee per Ton by Facility | Year One (2009) | Year Two (2010) | Year Three (2011) | Year Four (2012) | Year Five (2013) | Year Six (2014) |
|---|---|---|---|---|---|---|
| Asotin County Regional Landfill | $37.66 | $36.49 | $37.05 | $37.60 | $38.17 | $38.74 |

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 (2009)**

| Component | Tip Fee % | Grant % | Bond % | Collection Tax Rates % | Other % | Total |
|---|---|---|---|---|---|---|
| Waste Reduction | 50 | 50 | | | | 100% |
| Recycling | 50 | 50 | | | | 100% |
| Collection | NA | | | | | 100% |
| ER&I | NA | | | | | 100% |
| Transfer | 100 | <transfer station to landfill> | | | | 100% |
| Land Disposal | 100 | <landfilling> | | | | 100% |
| Administration | 100 | | | | | 100% |
| Other/MRW | 100 | | | | | 100% |

**Table 4.2.2 Funding Mechanism by Percentage**

**Year Three (2012)**

| Component | Tip Fee % | Grant % | Bond % | Collection Tax Rates % | Other % | Total |
|---|---|---|---|---|---|---|
| Waste Reduction | 50 | 50 | | | | 100% |
| Recycling | 50 | 50 | | | | 100% |
| Collection | NA | | | | | 100% |
| ER&I | NA | | | | | 100% |
| Transfer | 100 | | | | | 100% |
| Land Disposal | 100 | | | | | 100% |
| Administration | 100 | | | | | 100% |
| Other | 100 | | | | | 100% |

**Table 4.2.3 Funding Mechanism by Percentage**

**Year Six (2014)**

| Component | Tip Fee % | Grant % | Bond % | Collection Tax Rates % | Other % | Total |
|---|---|---|---|---|---|---|
| Waste Reduction | 50 | 50 | | | | 100% |
| Recycling | 50 | 50 | | | | 100% |
| Collection | NA | | | | | 100% |
| ER&I | NA | | | | | 100% |

| | | | | | | |
|---|---|---|---|---|---|---|
| Transfer | 100 | | | | | 100% |
| Land Disposal | 100 | | | | | 100% |
| Administration | 100 | | | | | 100% |
| Other | 100 | | | | | 100% |

### 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 Table 9-4, Solid Waste Fund Financial Forecast of SWMP.*

### 4.4 Surplus Funds

Please provide information about any surplus or saved funds that may support your operations.

*See Table 9-4, Solid Waste Fund Financial Forecast of SWMP for beginning cash balances.*

ASOTIN COUNTY LANDFILL
2901 6th Avenue
Clarkston, WA 99403
Phone: (509) 758-1965
Fax: (509) 758-1977

June 22, 2010

Karst Riggers
Building Official/County Planner
Asotin County Planning Department
P.O. Box 610
Asotin, WA 99402

Subject: SEPA Checklist for Asotin County's 2010 Solid Waste Management Plan Update

Dear Mr. Riggers:

Enclosed is a State Environmental Policy Act (SEPA) Checklist for the *2010 Asotin County Solid Waste Management Plan Update* (SWMP), which is also enclosed for your reference.

We hope that you will agree that after your review of this non-project SEPA Checklist, a determination of nonsignificance can be made by Asotin County's Planning Department.

If you have any questions or need additional information about the SWMP or the associated SEPA Checklist, please feel free to contact me.

Sincerely,

Stephen L. Becker
Solid Waste Supervisor

BOI/SEPA Ltr to Cnty Planner_051910.doc

# Asotin County Solid Waste Management Plan Update - 2010
Asotin County Department of Public Works

# ENVIRONMENTAL CHECKLIST
March 2010

## A. BACKGROUND

**1. Name of proposed project, if applicable:**

*Asotin County Solid Waste Management Plan 2010 Update (SWMP Update, 2010)*

**2. Name of applicant:**

Asotin County

**3. Address and phone number of applicant and contact person:**

Steve Becker
Asotin County Regional Landfill
Solid Waste Supervisor
2901 6th Ave
Clarkston, WA 99403
(509) 758-1695

**4. Date checklist prepared:**

March 2010

**5. Agency requesting checklist:**

Asotin County

**6. Proposed timing or schedule (including phasing, if applicable):**

Proposed implementation of the *SWMP Update, 2010* is from 2011 through 2015.

**7. a. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

Yes, this plan is reviewed every 5 years and updated, if necessary.

**b. Do you own or have options on land nearby or adjacent to this proposal? If yes, explain.**

Not applicable (N/A), this is a non-project action.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

The following documents provide information on the Asotin County Solid Waste Management Program: *Asotin County Solid Waste Management Plan Update 2010; Landfill Operations Plan Update* 2007; *Closure and Post-Closure Plan Update 2007*; *Asotin County Regional Landfill – Cell D Preliminary Design Update, April 2005.*

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.**

N/A. There are no specific properties covered in the *SWMP Update, 2010.*

10. **List any government approvals or permits that will be needed for your proposal, if known.**

The *SWMP Update, 2010* must be approved by Washington State Department of Ecology (Ecology), the SWAC, and participating jurisdictions in the county. All solid waste, moderate risk waste and recycling facilities require a permit from the Asotin County Health District (ACHD).

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 *SWMP Update, 2010,* addresses the County management and disposal of municipal solid wastes and moderate risk wastes currently generated in the county, and those solid wastes generated outside of the County and disposed at the Asotin County Regional Landfill (ACRL), a County operated landfill. The plan identifies types and quantities of wastes, describes existing conditions, identifies needs and opportunities for solid waste management, proposes alternatives for management of these wastes, and provides recommendations. The recommended alternatives include emphasis on waste reduction, composting, recycling programs, land disposal of remaining wastes, transfer station services, collection services, administration of waste management programs, and providing adequate enforcement.

The selected management strategies are intended to comply with Washington State solid waste management priorities: 1) waste reduction, 2) recycling, 3) energy recovery, incineration, or landfilling of separated wastes, and 4) energy recovery, incineration, or landfilling of mixed wastes.

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 plans required by the agency. You are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The SWMP is intended to include Asotin County and the communities of City of Asotin, the City of Clarkston, City of Pomeroy and Garfield County in Washington, and the Port of Wilma in Whitman County, WA, and the City of Lewiston and Nez Perce County in Idaho. Asotin County is responsible for providing solid waste disposal for both the Washington and Idaho waste partners and presently operates the Asotin County Regional Landfill (ACRL), which is a municipal solid waste (MSW) landfill located within Asotin County. Asotin County is the lead entity for preparation of the SWMP update and all participants are included in its application.

The ACRL is located on the south portion of the County-owned Section 36 of Township 11 North Range 35 East. Site plan and vicinity maps can be found in Figures 2-1 and 2-2 of the *SWMP Update, 2010.*

## B. ENVIRONMENTAL ELEMENTS

### 1. Earth

**a. General description of the site (check one):**

Asotin County is located in the southeastern corner of Eastern Washington, borders the State of Idaho on the east with the Snake River, bounded by Garfield County to the west and northwest, Whitman County to the north, and by Oregon to the south. It occupies 633 square miles of various topographical features (See Chapter 2 of the 2010 SWMP update)

**b. What is the steepest slope on the site (approximate percent slope)?**

N/A

**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 prime farmland.**

N/A

**d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

N/A

**e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.**

N/A

**f. Could erosion occur as a result of clearing, construction or use? If so, generally describe.**

N/A

**g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

N/A

**h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

N/A

**2. Air**

**a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

N/A (Note that some emissions will occur from the existing landfill operations, the transfer station (Lewiston/Nez Perce County), and recycling drop box sites, and from motor vehicles transporting solid waste. These source emissions are expected to make up only a small percentage of total air emissions generated in the county.)

**b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

N/A

**c. Proposed measures to reduce or control emissions or other impacts to air, if any:**

General - Asotin County maintains equipment to reduce emissions and controls dust at the ACRL.

**3. Water**

**a. Surface:**

**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.**

A number of perennial streams exist within Asotin County, generally trending in a northeasterly direction and discharging to the Snake River, which forms the eastern and northern borders of the County. Two streams of importance within the County are Asotin Creek and the Grande Ronde River. Surface water features in the immediate vicinity of the landfill are shown on Figure 2-2 of the *SWMP Update, 2010.*

Asotin Creek has its headwaters in the Blue Mountains and flows northeasterly through the northern half of the County, discharging to the Snake River near the City of Asotin. Asotin Creek drains an area of 322 square miles, with peak flows of 1,000 to 1,500 cubic feet per second (cfs).

The Grande Ronde River flows through the southern portion of the County in the Blue Mountains, approximately three miles north of and parallel to the Oregon border. The Grande Ronde has incised a relatively large canyon several thousand feet deep along its lower reaches. Peak discharges up to 35,000 cfs have been recorded in the Grande Ronde system.

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.**

All existing solid waste facilities are located 200 feet or more from described surface waters.

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.**

N/A

4) **Will the proposal require surface water withdrawals or diversions? Give general descriptions, purpose, and approximate quantities if known.**

N/A

5) **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

All existing solid waste facilities are located outside of 100-year floodplains.

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.**

N/A

**b. Ground:**

1) **Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

N/A

2) **Describe waste material that will be discharged into the ground from septic tanks or others 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.**

N/A

3) **Describe any systems, other than those designated for the disposal of sanitary waste, installed for the purpose of discharging fluids below the ground surface (includes systems such as those for the disposal of storm water or drainage from floor drains). Describe the type of system, the amount of material to be disposed of through the system and the types of materials likely to be disposed of (including materials, which may enter the system inadvertently through spills or as a result of firefighting activities.**

N/A

4) **Will any chemicals (especially organic solvents or petroleum fuels) be stored in above ground or underground storage tanks? If so, what types and quantities of materials will be stored?**

N/A (except for Moderate Risk Waste facility operations)

5) **What protective measures will be taken to insure the leaks or spills of any chemical stored or used on site will not be allowed to percolate to groundwater (this includes measures to keep chemicals out of disposal systems described in 3b(2) and 3b(3)?**

N/A (General – Asotin County and participants utilize spill prevention and control programs. The ACRL is lined and meets design specifications required by regulation.)

c. **Water Runoff (including storm water):**

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.**

The SWMP refers to the Operations Plan for runoff control and stormwater management systems at the ACRL. For example, stormwater is diverted from active landfilling areas.

2) **Will any chemicals be stored, handled or used on the site in a location where a spill or leak will drain to surface or groundwater or to a storm water disposal system discharging to surface or groundwater?**

N/A

**3) Could waste materials enter ground or surface waters? If so, generally describe.**

No. Wastes are contained within a liner to protect the groundwater at the landfill. Wastes are carefully managed at the MRW facility and stored in proper containers for disposal and recycling by contract services. The Lewiston/Nez Perce County Transfer Station also implements protective measures for handling and managing solid waste.

**d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any (be especially clear on explanations relating to facilities concerning Sections 3b(4), 3b(6), and 3c(2) of this checklist:**

The ACRL has runoff and stormwater management controls to protect surface waters and a leachate collection system to protect groundwater.

**4. Plants**

**a. Types of vegetation found on the site:**

N/A

**b. What kind and amount of vegetation will be removed or altered?**

N/A

**c. List threatened or endangered species known to be on or near the site.**

N/A

**d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:**

N/A

**5. Animals**

**a. Check any birds and animals which have been observed on or near the site or are known to be on or near the site:**

N/A

**b. List any threatened or endangered species known to be on or near the site.**

N/A

**c. Is the site part of a migration route? If so, explain.**

N/A

**d. Proposed measures to preserve or enhance wildlife, if any:**

N/A

**6. Energy and Natural Resources**

**a. What kinds of energy (electrical, 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.**

N/A

**b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

No.

**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:**

N/A

**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.**

This SWMP 2010 Update includes information on moderate risk waste Management Plan (Section 8), which supplements and updates some of the information provided in the original MRW Management Plan (1991). The MRW program covers household and business education related to the disposal of toxic chemicals, and describes MRW collection, management and disposal compliance. The gas control system at the ACRL and landfill operating procedures minimizes the potential for fire and explosions.

**1) Describe special emergency services that might be required.**

Personnel operating collection programs and solid waste handling facilities are trained in emergency procedures, and emergency alarm systems are present at the MRW facility. In the unlikely event of an emergency, County fire and emergency services will be available.

2) **Proposed measures to reduce or control environmental health hazards, if any:**

The ACRL has spill prevention control plans/emergency response plans and health and safety programs.

b. **Noise**

1) **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

N/A

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.**

N/A (Existing facilities comply with noise regulations.)

3) **Proposed measures to reduce or control noise impacts, if any:**

N/A

8. **Land and Shoreline Use**

a. **What is the current use of the site and adjacent properties?**

N/A

b. **Has the site been used for agriculture? If so, describe.**

N/A

c. **Describe any structures on the site.**

N/A

d. **Will any structures be demolished? If so, what?**

N/A

e. **What is the current zoning classification of the site?**

N/A

f. **What is the current comprehensive plan designation of the site?**

N/A

**g. If applicable, what is the current shoreline master program designation of the site?**

N/A

**h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.**

N/A

**i. Approximately how many people would reside or work in the completed project?**

N/A

**j. Approximately how many people would the completed project displace?**

N/A

**k. Proposed measures to avoid or reduce displacement impacts, if any:**

N/A

**l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**

N/A

**9. Housing**

**a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

N/A

**b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low income housing.**

N/A

**c. Proposed measures to reduce or control housing impacts, if any:**

N/A

**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?**

N/A

b. **What views in the immediate vicinity would be altered or obstructed?**

N/A

c. **Proposed measures to reduce or control aesthetic impacts, if any:**

N/A

**11. Light and Glare**

a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

N/A

b. **Could light or glare from the finished project be a safety hazard or interfere with views?**

N/A

c. **What existing off-site sources of light or glare may affect your proposal?**

N/A

d. **Proposed measures to reduce or control light and glare impacts, if any:**

N/A

**12. Recreation**

a. **What designated and informal recreational opportunities are in the immediate vicinity?**

N/A

b. **Would the proposed project displace any existing recreational uses? If so, describe.**

N/A

c. **Proposed measures to reduce or control impacts to recreation, including recreation opportunities to be provided by the project or applicant, if any:**

N/A

**13. Historic and Cultural Preservation**

**a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

N/A

**b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

N/A

**c. Proposed measures to reduce or control impacts, if any:**

N/A

**14. Transportation**

**a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

N/A

**b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

N/A

**c. How many parking spaces would the completed project have?**
**How many would the project eliminate?**

N/A

**d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

N/A

**e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

N/A

**f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

N/A

**g. Proposed measures to reduce or control transportation impacts, if any:**

N/A

**15. Public Services**

**a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.**

N/A

**b. Proposed measures to reduce or control direct impacts on public services, if any.**

N/A

**16. Utilities**

**a. Check utilities currently available at the site:**

N/A

**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.**

N/A

**C. SUPPLEMENTAL SHEET FOR NON-PROJECT ACTION**

**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?**

Implementation of the proposed plan will result in decreased discharges to the environment as a result of management strategies developed to prevent disposal problems caused by solid waste.

**Proposed measures to avoid or reduce such increases are:**

The *SWMP Update, 2010* includes the following solid waste management strategies, which may avoid or reduce such an increase:

- Education Initiatives – waste reduction education programs to motivate use of waste reduction techniques

- Waste Reduction – waste reduction programs (seek Ecology grants and support from cities in the County for waste reduction programs); variable-can-rate recycling programs; yard waste collection

- Waste Recycling – recyclers encouraged to recycle additional items, backyard composting encouraged; continuation of educational outreach programs, provision of recycling drop-box collection services

- Landfilling – recycling opportunities encouraged at all solid waste disposal stations; gas, leachate, and stormwater control and management at the landfill site measured to protect the environment; green waste and metals/appliances collection areas provided at the landfill

- Special wastes – recovery of CFCs from refrigeration units, recycle refrigerators, evaluate the potential for recycling other special wastes

- Household hazardous waste program – a moderate risk waste collection facility at the landfill provided

**2. How would the proposal be likely to affect plants, animals, fish, or marine life?**

Implementation of the updated SWMP should result in general improved quality of habitat for plant and animal species in the county by reducing the potential for contamination of surface water and groundwater through proper solid waste management, source reduction and recycling, and disposal methods for solid waste.

**Proposed measures to protect or conserve plants, animals, fish, or marine life?**

Implementation of the updated SWMP.

**3. How would the proposal be likely to deplete energy or natural resources?**

N/A

**Proposed measures to protect or conserve energy and natural resources?**

N/A

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?**

The updated SWMP will enhance the previously mentioned areas by continuing to protect water quality while educating the public (who use these areas) to properly manage and dispose of solid waste.

**Proposed measures to protect such resources or to avoid or reduce impacts are:**

Public education on proper waste management, source reduction, and recycling is expected to result in reduced impacts to sensitive areas.

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.**

The updated SWMP will not result in land and shoreline use that will be incompatible with existing plans.

**Proposed measures to avoid or reduce shoreline and land use impacts are:**

No impacts anticipated.

6. **How would the proposal be likely to increase demands on transportation or public services and utilities.**

No impacts anticipated.

**Proposed measures to reduce or respond to such demand(s) are:**

N/A

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

The *Asotin County Solid Waste Management Plan 2010 Update* has been prepared in compliance with local, state, and federal laws and regulations governing solid waste management.

## D. 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.**

**Proposed measures to reduce or respond to such demand(s) are:**

N/A

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

The *Asotin County Solid Waste Management Plan 2010 Update* has been prepared in compliance with local, state, and federal laws and regulations governing solid waste management.

## D. 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:** _____

**Stephen L. Becker**
**Asotin County Regional Landfill, Solid Waste Supervisor**

**Date Submitted:** 6/22/10

**INTERLOCAL AGREEMENT**
**BETWEEN**
**THE CITY OF ASOTIN**
**AND**
**ASOTIN COUNTY**
**FOR**
**THE SOLID WASTE MANAGEMENT PLAN (2010 UPDATE)**

THIS AGREEMENT is made and entered into this 21st day of June, 2010, by and between the City of Asotin ("City"), and Asotin County ("County"), (herein jointly referred to as "the parties"); and

WHERAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010 update to the Asotin County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provisions of *RCW 70.95.080*, each county within the state, with various cities located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the city's solid waste management for inclusion in the comprehensive County Plan.

WHEREAS, the City recognizes the County as the agency responsible for completing the plan, and the parties agree to have the County prepare the plan pursuant to *RCW 70.95.080 (2)*.

**CITY OF ASOTIN:**

James Miller
Jim Miller, Mayor

Date: June 14, 2010

APPROVED TO AS FORM:

City Attorney

**ASOTIN COUNTY BOARD OF COMMISSIONERS:**

Doug Mattoon, Chairman

Date: June 21, 2010

APPROVED AS TO FORM:

Jane Bremner Risley
Chief Deputy Prosecuting Attorney
WSBA #20791

**INTERLOCAL AGREEMENT**
**BETWEEN**
**THE CITY OF CLARKSTON**
**AND**
**ASOTIN COUNTY**
**FOR**
**THE SOLID WASTE MANAGEMENT PLAN (2010 UPDATE)**

THIS AGREEMENT is made and entered into this 7th day of June, 2010, by and between the City of Clarkston ("City"), and Asotin County ("County"), (herein jointly referred to as "the parties"); and

WHERAS, the purpose of this Agreement is to establish an integrated and coordinated effort for preparing, adopting, and implementing the 2010 update to the Asotin County Solid Waste Management Plan, herein referred to as the "County Plan," and

WHEREAS, pursuant to the provisions of *RCW 70.95.080*, each county within the state, with various cities located within such county, shall prepare a coordinated, comprehensive solid waste management plan, and each city shall choose one of the three planning options: (1) Prepare and deliver to the county auditor of the county in which it is location its plan for its own solid waste management for integration into the comprehensive County Plan; (2) Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or (3) Authorize the county to prepare the plan for the city's solid waste management for inclusion in the comprehensive County Plan.

WHEREAS, the City recognizes the County as the agency responsible for completing the plan, and the parties agree to have the County prepare the plan pursuant to *RCW 70.95.080 (2)*.

**CITY OF CLARKSTON:**

Donna M. Engle
Donna Engle, Mayor

Date: May 24-2010

APPROVED TO AS FORM:
Deputy City Attorney

**ASOTIN COUNTY BOARD OF COMMISSIONERS:**

Doug Mattoon, Chairman

Date: 6/7/10

APPROVED AS TO FORM:
Jane Bremner Risley
Chief Deputy Prosecuting Attorney
WSBA #20791

BEFORE THE BOARD OF ASOTIN COUNTY COMMISSIONERS

| | | |
|---|---|---|
| IN THE MATTER OF ADOPTING THE 2010 ASOTIN COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE | ) | RESOLUTION NO. _____ |
| | ) | ADOPTING 2010 SOLID WASTE MANAGEMENT PLAN UPDATE |

WHEREAS, pursuant to the Washington State Solid Waste Management RCW 70.95, Asotin County has agreed to participate in preparing a County Solid Waste Management Plan, and required updates; and

WHEREAS, the Asotin County Solid Waste Advisory Committee has reviewed and recommended adoption of the final draft of the 2010 Solid Waste Management Plan Update; and

WHEREAS, the Washington State Department of Ecology has completed technical review of the 2010 Solid Waste Management Plan Update; and

WHEREAS, Washington State Department of Ecology review comments in their letter of _____ have been incorporated into the final 2010 Solid Waste Management Plan Update; and

WHEREAS, a State Environmental Policy Act Determination of Non-Significance was issued on _____;

NOW, THEREFORE BE IT RESOLVED that Asotin County hereby adopts the 2010 Solid Waste Management Plan Update.

BOARD OF COUNTY COMMISSIONERS
OF ASOTIN COUNTY, WASHINGTON

_____
Chairman

_____
Commissioner

_____
Commissioner

ATTEST:

_____
Clerk of the Board

RESOLUTION NO. _____

A RESOLUTION ADOPTING THE 2010 ASOTIN COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

WHEREAS, pursuant to the Washington State Solid Waste Management RCW 70.95, Asotin County has agreed to participate in preparing a County Solid Waste Management Plan, and required updates; and

WHEREAS, the Asotin County Solid Waste Advisory Committee has reviewed and recommended adoption of the final draft of the 2010 Solid Waste Management Plan Update; and

WHEREAS, the Washington State Department of Ecology has completed technical review of the 2010 Solid Waste Management Plan Update; and

WHEREAS, Washington State Department of Ecology review comments in their letter of _____have been incorporated into the final 2010 Solid Waste Management Plan Update; and

WHEREAS, a State Environmental Policy Act Determination of Non-Significance was issued on _____;

NOW, THEREFORE BE IT RESOLVED that the City of _____ hereby adopts the 2010 Solid Waste Management Plan Update.

Passed and adopted by the City Council of the City of _____, on the _____ day of _____, 20_____.

_____ Attest: _____

Mayor City Clerk