OFFICE OF THE CITY MANAGER COUNCIL AGENDA

AGENDA

REGULAR CITY COUNCIL MEETING
September 27, 2010
5:30 p.m.

CITY HALL COUNCIL CHAMBER
313 COURT STREET
THE DALLES, OREGON

1. CALL TO ORDER

2. ROLL CALL OF COUNCIL

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF AGENDA

5. PRESENTATIONS/PROCLAMATIONS

6. AUDIENCE PARTICIPATION

During this portion of the meeting, anyone may speak on any subject which does not later appear on the agenda. Five minutes per person will be allowed. If a response by the City is requested, the speaker will be referred to the City Manager for further action. The issue may appear on a future meeting agenda for City Council consideration.

7. CITY MANAGER REPORT

8. CITY ATTORNEY REPORT

9. CITY COUNCIL REPORTS

10. CONSENT AGENDA

Items of a routine and non-controversial nature are placed on the Consent Agenda to allow the City Council to spend its time and energy on the important items and issues. Any Councilor may request an item be "pulled" from the Consent Agenda and be considered separately. Items pulled from the Consent Agenda will be placed on the Agenda at the end of the "Action Items" section.

No Items for This Meeting

11. CONTRACT REVIEW BOARD ACTIONS

A. Public Hearing to Consider Exemption for ROM Tec to be Sole Source Provider for Sewer Lift Station Projects **[Agenda Staff Report #10-076]**

1. Resolution No. 10-021 Granting an Exemption From the Competitive Bid Requirements of ORS 279B.050 for the Sole Source Procurement of Sanitary Sewer and Storm Water Lift Stations

12. ACTION ITEMS

A. Authorization to Sign Connect Oregon III Grant Agreement for Airport Runway Strengthening Project **[Agenda Staff Report #10-077]**

B. Approval of Memorandum of Understanding with the Warm Springs Tribe Regarding Protection of Fishing Rights Adjacent to Proposed Marine Terminal at Union Street **[Agenda Staff Report #10-078]**

C. Household Hazardous Waste Program Update and Recommendation **[Agenda Staff Report #10-079]**

13. DISCUSSION ITEMS

A. Discussion Regarding Chenowith Interchange Area Management Plan Systems Development Charges **[Agenda Staff Report #10-080]**

14. ADJOURNMENT

This meeting conducted in a handicap accessible room.

Prepared by/
Julie Krueger, MMC
City Clerk

Julie Krueger

CITY OF THE DALLES
Department of Public Works
1215 West First Street
The Dalles, Oregon 97058

AGENDA STAFF REPORT
CITY OF THE DALLES

MEETING DATE	AGENDA LOCATION	AGENDA REPORT #
September 27, 2010	Contract Review Board 11, A	10-076

TO: Honorable Mayor and City Council

FROM: Dave Anderson, Public Works Director

THRU: Nolan K. Young, City Manager

DATE: September 8, 2010

ISSUE: **RESOLUTION NO. 10-021, AUTHORIZING THE SOLE-SOURCE PROCUREMENT FOR THE PURCHASE OF SANITARY SEWER AND STORM WATER LIFT STATIONS FROM ROMTEC INDUSTRIES**

RELATED CITY COUNCIL GOALS: N.A.

BACKGROUND: In 2009 the City replaced the Eastside Lift Station, a sanitary sewer pump station located near the east end of the AmeriTie railroad tie treating plant, under a declared emergency due to structural deterioration and potential catastrophic failure of the old system. The lift station was replaced with a new system designed and manufactured by Romtec Industries, a company located in Roseburg, Oregon. The City's experience working with Romtec was excellent and resulted in the timely and cost effective construction of a new lift station with greater redundancy and operational ease than any of the City's other existing sewer pump stations.

Purchasing the lift station from Romtec provided a number of benefits to the City. First, after the City provided basic performance criteria information to Romtec, they completed the design of the new lift station at no cost to the City. For comparison, the last sewer lift station that the City constructed prior to the Eastside Lift Station was the Port Lift Station in 2005. For that project, the City paid approximately $80,000 for design and construction-related engineering.

The combined design and construction costs of the Port Lift Station totaled about $430,670; it is somewhat larger than the Eastside Lift Station. The combined costs to design and construct the Eastside Lift Station working with Romtec were $274,664.19. The cost breakdown for Eastside project is as follows:

Romtec (design, manufacture, supply, start-up & training)	$159,677.63
Crestline Construction (excavation & piping)	$ 85,397.45
ITT Flygt (pumps)	$ 11,873.00
Hire Electric (electrical)	$ 8,570.00
CH2M Hill (SCADA telemetry and controls)	$ 21,019.11
Total	**$286,537.19**

Working with Romtec, the City has been able to standardize the design, operation, brand of pumps and controllers, and the monitoring and control systems associated with its sewer lift stations. The Romtec design has also developed a robust and redundant monitoring and control system that integrates well with our existing SCADA (remote telemetry and control) system and fully complies with Oregon Department of Environmental Quality (DEQ) regulations. These systems are superior to those at our other existing, and individually designed, sewer pump stations. By establishing a standardized design and supplier for the City's lift stations, operational efficiencies are realized as operations staff to become thoroughly familiar with a consistent design. By contrast, the City's other existing lift stations have diverse and inconsistent designs and operational needs.

Romtec lift stations are manufactured and then pre-assembled at the factory to ensure proper fitting prior to shipment. Once they are delivered to the project, they are normally assembled in a day. For the Eastside Lift Station, the City hired a local contractor to dig the hole and construct the associated piping systems. Romtec now has a construction arm of their company that can perform all of the installation if desired.

An additional benefit of standardization is that it results in greater safety for City personnel operating the system. If all the lift stations are designed and constructed the same way, operators develop a consistent set of expectations and understanding related to how power is managed and integrated on site and the types of systems that exist for fall protection.

Lastly, there are warranty-related benefits to the Romtec systems. Since the entire system is designed, manufactured, constructed, and started-up by a single provider, that provider is responsible for all warranty issues that may arise. This comprehensive level of support and responsibility is difficult to achieve with the conventional design-bid-build or design-build approaches to a project.

Staff is proposing that the City Council, as the City Contract Review Authority, designate Romtec as the sole-source provider of sanitary sewer and storm water lift stations. Bids could be solicited and prices compared for the excavation and piping work associated with each project. To the best of our knowledge, Romtec is the only provider in Oregon of turn-key pre-designed, factory-manufactured, pre-fit sewer lift stations that can provide the cost savings and construction and operational efficiencies experienced with the Romtec systems. It is anticipated that up to eight (8) sanitary sewer and storm water lift stations could be purchased by the City within the next 10 years.

The City's Contract Review Board Rules (Section 02-0270) allow the City to purchase goods and services under sole-source procurements when:

- Public notice is provided at least seven days before award of a contract.
- There are findings that the product or service is available from only one seller or source.
- The reasons the City is using sole-source procurement must include at least one of the following:
  - Efficient utilization of existing supplies and service requires the acquisition of compatible supplies and services; or
  - The goods and services required for the exchange of software or data with other public or private agencies are available from only one source; or
  - The particular product is for use in a pilot or experimental project; or
  - Other findings that support the conclusion that the goods or services are available from only one source.

An Affected Person may protest the Contract Review Authority's determination that the goods or services are available from only one source in the Public Hearing associated with this item.

The products and services proposed to be purchased under this sole-source procurement include the design, supply, start-up and training for all the structural, mechanical, electrical, and communication equipment necessary for a complete and operating duplex (2 pumps) lift station with a sealed concrete wet-well and back-up electrical generators. The systems will utilize radio communications and integrate into the City's existing SCADA system.

Romtec Industries currently has supply contracts with several federal agencies and multiple-jurisdiction purchase agreements in California and Texas; these contracts are based upon the results of competitive bidding processes.

Staff believes that authorization of sole-source procurements of sanitary sewer and storm water lift stations from Romtec Industries will result in:

- lower combined design, purchase and construction costs
- better consistency in lift station design and operation
- greater operational efficiencies
- greater safety for operations personnel
- comprehensive warranty support
- better compliance with DEQ regulations due to the robustness and redundancy in monitoring and control systems.

BUDGET ALLOCATION: If the sole-source procurements from Romtec are authorized, staff will continue to work toward the replacement of the Jordan Street Lift Station over the next few months. Within Fund 57, the Sewer Plant Construction/Debt Service Fund, the current budget identifies $311,467 for this project.

ALTERNATIVES:

A. Staff Recommendation: Move to adopt Resolution No. 10-021 authorizing the sole-source procurements of sanitary sewer and storm water lift stations from Romtec Industries.

B. Deny authorization for the sole-source procurement of sanitary sewer and storm water lift stations.

RESOLUTION NO. 10-021

A RESOLUTION GRANTING AN EXEMPTION FROM THE COMPETITIVE BID REQUIREMENTS OF ORS 279B.050 FOR THE SOLE SOURCE PROCUREMENT OF SANITARY SEWER AND STORM WATER LIFT STATIONS

WHEREAS, the City Council adopted General Ordinance No. 91-1121 on January 21, 1991, designating the City Council as the local contract review board for the City of The Dalles, and providing that the Council, acting as the local contract review board, shall have all the powers granted by the Oregon Revised Statutes; and

WHEREAS, ORS 279B.050 provides that all public contracts for goods or services shall be based upon competitive bids; with certain exceptions including an exception for sole source procurements authorized under ORS 279B.075; and

WHEREAS, the City's Local Contract Review Board rules authorize the use of a sole source procurement for the purchase of goods and services as an alternative to the requirement for competitive bidding; and

WHEREAS, ORS 279B.075 and Rule 02-0270 of the City's Local Contract Review Board rules require that certain findings be adopted by the Local Contract Review Board in order to grant an exemption from the competitive bidding requirement; and

WHEREAS, pursuant to Rule 02-0270(2), the City published notice of a public hearing for the purpose of taking public comment on the City's draft findings for the exemption from the competitive bidding requirement, which hearing was held during the City Council meeting scheduled for September 27, 2010; and

WHEREAS, the City Council acting as the Local Contract Review Board, has reviewed the proposed findings, and considered public testimony presented during the public hearing, and has determined to proceed with granting the exemption from the requirement for competitive bidding pursuant to the provisions of ORS 279B.075 and the City's Local Contract Review Board Rules;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF THE DALLES RESOLVES AS FOLLOWS:

1. In 2009, the City replaced the Eastside Lift Station, a sanitary sewer pump station located near the east end of the AmeriTie railroad tie treating plant, under a declared emergency due to structural deterioration and potential catastrophic failure of the old system. The lift station was replaced with a new system designed and manufactured by Romtec Industries, a company located in Roseburg, Oregon. City staff's experience working with Romtec was considered to be excellent, and in the staff's opinion, the project resulted in a timely and cost effective construction of a new lift station with greater redundancy and operation ease than any of the City's other existing sewer pump stations. The design and construction costs for the Eastside Lift Station were $274,664.19, compared to the design and construction costs for the Port Lift Station which totaled approximately $430,760.

2. Working with Romtec, the City has been able to standardize the design, operation, brand of pumps and controllers, and the monitoring and control systems associated with its sewer lift stations. The Romtec design has also developed a robust and redundant monitoring and control system which integrates well with the existing SCADA (remote telemetry and control) system, which also fully complies with Oregon Department of Quality regulations. Establishing a standardized design and supplier for the City's lift stations will allow for operational

efficiencies to be realized, as operations staff becomes thoroughly familiar with a consistent design. The City's other existing lift stations have diverse and inconsistent designs and operational needs. An additional benefit of standardization of design is that it results in greater safety for City personnel operating the system. If all the lift stations are designed and constructed the same way, operators develop a consistent set of expectations and understanding related to how power is managed and integrated on site and the types of systems that exist for fall protection.

3. Romtec lift stations are manufactured and then pre-assembled at the factory to ensure proper fitting prior to shipment. Once they are delivered to the project, they are normally assembled in one day. The City has the option to hire a local contractor to install the units, or Romtec now has a construction division of their company that can perform all of the installation work.

4. The units designed by Romtec are designed, manufactured, constructed, and started-up by a single provider, who is responsible for all warranty issues which may arise. This comprehensive level of support and responsibility is difficult to achieve with a conventional design-bid-build solicitation process, or a design build competitive solicitation process. To the best of staff's knowledge, Romtec is the only provider in the state of Oregon of "turn-key" pre-designed, factory manufactured, pre-fit sewer lift stations which can provide the cost savings and construction and operational efficiencies experienced with the Romtec systems.

5. City staff anticipates that up to eight sanitary sewer and storm lift stations could be purchased by the City within the next ten years. The products and services proposed to be purchased under the proposed sole source procurement include the design, supply, start-up and training for all the structural, mechanical, electrical, and communication equipment necessary for

a complete and operating duplex (2 pumps) lift station with a sealed concrete wet-well and back-up electrical generators. The systems will utilize radio communications and integrate into the City's existing SCADA system.

6. Based upon the foregoing findings, the City Council, acting as the Local Contract Review Board, finds that granting the exemption for the sole source procurement for the purchase of sanitary and storm lift stations from Romtec is justified for the reason that efficient utilization of the existing supplies and services for the City's stormwater and sanitary sewer system require the acquisition of compatible supplies and services which can be provided through the sanitary and storm lift stations designed, manufactured, and constructed by Romtec

7. City staff members are authorized to proceed with the purchase of sanitary and sewer lift stations from Romtec as a sole source procurement.

8. This Resolution shall be considered effective as of September 27, 2010.

PASSED AND ADOPTED THIS 27TH DAY OF SEPTEMBER, 2010

Voting Yes, Councilors: _____
Voting No, Councilors: _____
Absent, Councilors: _____
Abstaining, Councilors: _____

AND APPROVED BY THE MAYOR THIS 27TH DAY OF SEPTEMBER, 2010.

_____
James L. Wilcox, Mayor

Attest:

_____
Julie Krueger, MMC, City Clerk

CITY of THE DALLES
313 COURT STREET
THE DALLES, OREGON 97058

(541) 296-5481
FAX (541) 296-6906

AGENDA STAFF REPORT
CITY OF THE DALLES

MEETING DATE	AGENDA LOCATION	AGENDA REPORT #
September 27, 2010	Action Items 12, A	10-077

TO: Honorable Mayor and City Council

FROM: Nolan K. Young, City Manager

DATE: September 10, 2010

ISSUE: Authorization for the City Manager to enter into and execute an agreement with the Oregon Department of Transportation for a $3,503,184 ConnectOregon III grant for the Airport Runway Rehabilitation Project

BACKGROUND: In November of 2009, the City of The Dalles submitted a $3,503,184 grant request through the Oregon Department of Transportation's ConnectOregon III program. In August, the Oregon Transportation Commission awarded the full grant request (see attached grant award letter). These funds will be matched with $2M from the FAA that will allow for the rehabilitation of Runway 30.

The grant agreement has not yet been received. Staff will provide it for the Council's review as soon as possible. The grant will reimburse us 80% for all expenses for the project up to $3,503,184.

BUDGET IMPLICATIONS: Both this grant, and the FAA funds have been budgeted for these projects.

COUNCIL ALTERNATIVES:

1. **Staff Recommendation**: Authorize City Manager, Nolan Young to sign the ConnectOregon III Grant Agreement for Airport Runway Rehabilitation with the Oregon Department of Transportation and to execute this agreement on behalf of the City.
2. Delay this issue to allow for further research.

Oregon
Theodore R. Kulongoski, Governor

Department of Transportation
Local Government Section
355 Capitol St. NE, Room 135
Salem, OR 97301

August 27, 2010

Nolan Young
City of The Dalles
313 Court St
The Dalles, OR 97058

Subject: *Connect*Oregon III – Project Approval
Agreement Number: 26909
Application Number: A40135
Project Name: Columbia Gorge Regional Airport Runway Rehabilitation

We are pleased to announce the Oregon Transportation Commission has approved your project for *Connect*Oregon III funding. The *Connect*Oregon III award for your project is $3,503,184. In the next couple of weeks you will receive an agreement in the mail for signature. Once you receive the agreement, please sign it and return as soon as possible.

Please note that only work performed on the project after the agreement is fully signed and as described in the agreement will be eligible for reimbursement. Additionally, recipients are not eligible to receive reimbursement until they provide a conformed copy of the recorded Acknowledgement of Assistance.

We will be hosting a conference call on **Wednesday, September 8th at 10:00 a.m. - PST** to discuss the following aspects of the *Connect*Oregon III Program:

- Grant Agreement/Notice to Proceed
- ODOT Local Agency Liaison
- Monthly Invoices/Monthly Progress Reports/Project Milestones
- Request for Change Order Process/Amendment Process
- Acknowledgement of Assistance
- Project Acceptance

The conference call number: 1-877-287-0283; Participant Code: 868544

If you cannot personally attend the conference call, please send a representative.

If you have any questions, contact me at 503-986-3327.

Sincerely,

Carol Olsen

Carol Olsen
ODOT *Connect*Oregon Program Manager

CITY of THE DALLES
313 COURT STREET
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AGENDA STAFF REPORT
CITY OF THE DALLES

MEETING DATE	AGENDA LOCATION	AGENDA REPORT #
9/27/10	Action Items 12, B	10-078

TO: Mayor and City Council

FROM: Nolan K. Young, City Manager

DATE: September 10, 2010

ISSUE: Authorization for City Manager to sign a Memorandum of Understanding (MOU) with the Confederated Tribes of the Warm Springs Reservation of Oregon for the proposed Marine Terminal

BACKGROUND: A Corp of Engineers (Corp) permit is required to construct the proposed Marine Terminal at the end of Union Street. The Corp of Engineers consults with a number of entities including various tribes. We have completed the Corp process with the exception of gaining the necessary approval from the Confederated Tribes of the Warm Springs Reservation of Oregon. Over the last few months, we have been working with tribal representatives to create a Memorandum of Understanding to resolve these issues. The primary commitments the City will agree to in MOU include the following:

1. Purchasing gill nets to replace those damaged by vessels docking at the terminal,
2. Provide a contact person for City and Tribe to coordinate when fishing seasons are and to provide notification those using the dock,
3. Allow Native fisherman to tie up their nets at the west end of the terminal,
4. Reduce the size of the floating dock from 200 feet to 60 feet,
5. Facilitate any discussion with the Yakama Nation and other public agencies concerning issues that arise,
6. Install private navigation aids to identify a path to the terminal to avoid contact with fishing nets.

BUDGET IMPLICATIONS:

There will be some additional costs associated with the navigational aids and the nets. The cost of those should be covered by the funds available for this project.

COUNCIL ALTERNATIVES:

1. **Staff Recommendation:** Authorize the City Manager to sign the Memorandum of Understanding with Confederated Tribes of the Warm Springs Reservation of Oregon.
2. Postpone signing to allow for negotiations for additional points in the MOU.

MEMORANDUM OF UNDERSTANDING
BETWEEN THE CITY OF THE DALLES
AND THE CONFEDERATED TRIBES
OF THE WARM SPRINGS RESERVATION OF OREGON

WHEREAS, the City of The Dalles, an Oregon municipal corporation, hereinafter referred to as "City", proposes to reestablish an active marine terminal located in the Columbia River at the north end of Union Street, in the City of The Dalles; and

WHEREAS, the Confederated Tribes and Bands of the Confederated Tribes of the Warm Springs Reservation of Oregon, hereinafter referred to as "The Confederated Tribes of The Warm Springs Reservation of Oregon," has tribal fishing rights in the Columbia River, and cultural and heritage interest in the river; and

WHEREAS, the Corps of Engineers is considering the issuance of a "joint permit" to allow construction of a marine terminal, which would allow for a portion of the dock to be constructed to serve barges and cruise ships, and a floating dock which would be designed to serve smaller boats and watercraft; and

WHEREAS, the City recognizes and supports The Confederated Tribes of The Warm Springs Reservation of Oregon's treaty fishing rights, and desires to construct a marine terminal in such a manner that those fishing rights are preserved and protected; and

WHEREAS, it is the intent of the City and The Confederated Tribes of The Warm Springs Reservation of Oregon to establish a process where there is an ongoing dialogue between the City and The Confederated Tribes of The Warm Springs Reservation of Oregon, which will facilitate the operation of the proposed marine terminal in such a manner as to preserve, protect and enhance, where possible, The Confederated Tribes of The Warm Springs Reservation of Oregon's treaty fishing rights, providing a mutual benefit to both parties; and

WHEREAS, The Confederated Tribes of The Warm Springs Reservation of Oregon does not oppose the City's efforts to obtain a permit from the Corps of Engineers for the construction of the proposed marine terminal, provided the terminal does not interfere with tribal treaty fishing;

NOW, THEREFORE, it is mutually agreed as follows:

1. City's Obligations. The City agrees to perform the following tasks and responsibilities:

    A. Prior to opening the new marine terminal facility, the City will purchase at least two gill nets which have the same specifications as the nets currently used by members of The Confederated Tribes of The Warm Springs Reservation of Oregon near the site of the marine terminal. In the event

the specifications for the gill nets used by members of The Confederated Tribes of The Warm Springs Reservation of Oregon change in the future, the City agrees that any nets purchased under the provisions of this Memorandum of Understanding will comply with the future changes in the specifications. In the event that a net belonging to a member of The Confederated Tribes of The Warm Springs Reservation of Oregon in the vicinity of the proposed dock is damaged by a vessel either docking at or leaving the marine facility, the City will immediately provide a replacement net to the tribal member. The City will use its best efforts to identify the person, business, or other entity responsible for causing the damage to the tribal member's net, and will seek restitution from the responsible party for the cost of purchasing a net to replace the net, which the City provided to the tribal member. The City agrees that it will keep a minimum of two nets available at all times during the time this Memorandum of Understanding is in effect, to be prepared to replace any net which is damaged by vessels using the City's marine terminal facility.

B. To reduce the likelihood that vessel traffic into and out of the proposed dock would interfere with or destroy tribal gillnets set lawfully in the vicinity of the dock, the City will place Private Aids to Navigation in the Columbia River to guide approaching and departing vessels away from nearby gillnets.

C. The City will provide the name and telephone number for a contact person who The Confederated Tribes of The Warm Springs Reservation of Oregon can contact to notify the City of the dates and hours of tribal gill net fishing seasons, and any concern associated with operation of the marine terminal facility. During any gill net season, the City will install a large sign with red flags on the dock alerting vessels as to the use of gill nets nearby, and advising the operators of the vessels of their responsibility to avoid the nets and to report any mishaps so that corrective action can be implemented. In addition, the City will provide this information on its website, and notify any cruise lines using the dock. The City will work with barge companies to coordinate the mooring, loading, and unloading of any barges so that these activities can occur during times when the gill nets are not present in the water near the marine terminal.

D. The City will redesign the size of the permitted floating dock to reduce the size from approximately 200 plus feet to 60 feet in size.

E. The City has agreed, at the request of The Confederated Tribes of The Warm Springs Reservation of Oregon, to use its resources, authorities, and good will to facilitate discussions between The Confederated Tribes of The Warm Springs Reservation of Oregon and other public or private entities within the City's influence as necessary to resolve actual and

potential conflicts arising from issues regarding access to, or interference with, treaty fishing in the Columbia River in The Dalles/Dallesport area.

F. The City agrees to request the Corps of Engineers to include the completion and execution of this Memorandum of Understanding as a condition of approval for obtaining the permit for construction of the marine terminal from the Corps of Engineers.

G. The City shall keep the Warm Springs Tribal Council, or its authorized designee, informed of the construction schedule for the marine terminal. The City agrees to take necessary steps to avoid interference with tribal fishing during the construction of the marine terminal, to take reasonable actions to not allow any debris to interfere with or impede the fishermen's access to their nets, and to replace any damaged nets.

H. Upon authorization by the City Council to execute this Memorandum of Understanding, the City will properly record an original of this document in its records, so that a copy is readily available to those persons who have responsibility for administering the affairs of the City.

2. The Confederated Tribes of The Warm Springs Reservation of Oregon Obligations. The Confederated Tribes of The Warm Springs Reservation of Oregon agrees to perform the following tasks and responsibilities:

A. The Warm Springs Tribal Council will identify and provide appropriate contact information for a person to whom the City shall provide information to keep the Tribal Council informed as to construction schedule for the marine terminal, and for notification of other activities associated with the marine terminal.

B. The Warm Springs Tribal Council shall notify the contact person designated by the City of any applicable tribal gill net fishing seasons, and of any concerns associated with the operation of the marine terminal facility, in accordance with the following time parameters:

1. For notification of any fishing season, within fourteen (14) days prior to the start of, or within three (3) days of the setting of any season, whichever date comes first.

2. For notification of any concern associated with operation of the marine terminal facility, within seventy-two (72) hours after the concern comes to the attention of the Warm Springs Tribal Council.

C. The Confederated Tribes of The Warm Springs Reservation of Oregon understands and agrees that it may request the assistance of the City to facilitate discussions with other public agencies in the City of The Dalles, with the goal of assisting in the resolution of potential conflicts which may arise from issues which The Confederated Tribes of The Warm Springs Reservation of Oregon may have with those other public agencies.

D. The Confederated Tribes of The Warm Springs Reservation of Oregon understands and agrees that by executing this Memorandum of Understanding, it will not oppose the City's efforts to obtain a permit from the Corps of Engineers for construction of the proposed marine terminal located at the end of Union Street in the City of The Dalles.

3. General Provisions

A. Term and Modification. The term of this Memorandum of Understanding is intended to be indefinite. This Memorandum of Understanding is the complete agreement of the parties can only be modified or terminated in writing by mutual consent of both parties.

B. Dispute Resolution. The City and The Confederated Tribes of The Warm Springs Reservation of Oregon agree to consult in good faith to resolve any potential conflicts or disagreements concerning interpretation and implementation of the provisions in this Memorandum of Understanding.

1. Mediation. In the event the parties reach an impasse concerning the interpretation or application of any provision of this Memorandum of Understanding, the parties agree to submit the impasse to a mediation process with a mutually agreed upon mediator. If the City and The Confederated Tribes of The Warm Springs Reservation of Oregon cannot mutually agree upon a mediator to conduct the mediation proceeding, the City will obtain a list of five (5) qualified mediators from the Oregon State Bar, and the City will strike the first name from the list, followed by The Confederated Tribes of The Warm Springs Reservation of Oregon, and so on, until only one (1) name is left on the list. The one (1) remaining person on the list shall be the mediator. The City and The Confederated Tribes of The Warm Springs Reservation of Oregon shall equally share in the costs for the mediator's services.

2. Reservation of remedies. In the event that The Confederated Tribes of The Warm Springs Reservation of Oregon and the City cannot resolve a dispute through the mediation process described above, then either party may seek appropriate judicial relief in any court of competent jurisdiction.

C. Notice. Any notification required or made with respect to this Memorandum of Understanding shall be in writing and shall be effective upon receipt.

D. Reservation of Rights. Nothing in this Memorandum of Understanding shall be deemed to waive, abrogate, diminish, define, or interpret the rights of The Confederated Tribes of The Warm Springs Reservation of Oregon under the Treaty of June 9, 1855, or under any other federal laws or statutes. The Confederated Tribes of The Warm Springs Reservation of Oregon in executing this Memorandum of Understanding does not waive its sovereign immunity from suit.

4. The undersigned representatives of each party certify that they are fully authorized by the parties they represent to agree to the terms and conditions of this Memorandum of Understanding and do hereby agree to the terms herein.

CITY OF THE DALLES

By: _____
Nolan K. Young, City Manager

Attest:

_____
Julie Krueger, City Clerk

Approved as to form:

_____
Gene E. Parker, City Attorney

THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON

By: _____

Approved as to form:

_____
Attorneys for The Confederated Tribes of The Warm Springs Reservation of Oregon

CITY OF THE DALLES
Department of Public Works
1215 West First Street
The Dalles, Oregon 97058

AGENDA STAFF REPORT
CITY OF THE DALLES

MEETING DATE	AGENDA LOCATION	AGENDA REPORT #
September 27, 2010	**Action Item** 12, C	10-079

TO: Honorable Mayor and City Council

FROM: Dave Anderson, Public Works Director

THRU: Nolan K. Young, City Manager

DATE: September 3, 2010

ISSUE: **AUTHORIZATION FOR CITY OF THE DALLES TO CONTINUE PARTICIPATION IN THE TRI-COUNTY HAZARDOUS WASTE MANAGEMENT PROGRAM AND APPROVE ASSOCIATED LEVEL OF SERVICES**

RELATED CITY COUNCIL GOALS: N.A.

BACKGROUND: In September 2002, the City Council adopted the Tri-County Household Hazardous Waste Management Plan. The original Plan focused on collection and disposal of hazardous wastes in Wasco, Sherman and Hood River Counties and was adopted by nine local jurisdictions, including both cities and counties, in the three counties. Following adoption of the Plan, the local jurisdictions entered into Intergovernmental Agreements (IGAs) to implement a Hazardous Waste Management program, Wasco County was designated as the lead agency for the program, and collection facilities were constructed in The Dalles and Hood River. The operation of the program was funded through implementation of a solid waste tipping fee surcharge collected at the landfill and passed through solid waste collection service providers to customers in Wasco and Hood River Counties. In The Dalles, the surcharge pass-through currently equates to $0.52/month for residential customers with 32-gallon garbage cans and $1.35/month for customers with 90-gallon roll carts; the fee has been adjusted annually with the solid waste collection fees since it was implemented. Because there was no franchise solid waste service provider in Sherman County, that county's financial contribution to the program was through payment of an annual flat fee from the County. The program's first hazardous waste collection events occurred in 2006.

The original level of service for the program provided free collection and disposal of household hazardous waste (residential), hazardous wastes generated by businesses in small quantities, and agricultural hazardous wastes up to specific quantity limits. It also included opportunities for re-use/recycling of materials received and public education. It was unique in its approach to multi-jurisdiction cooperation and the provision of free collection services for waste generators other than residential. In 2007 the program received an award recognizing its innovative approach to building coalitions to prevent pollution and reduce wastes.

The program is managed by a steering committee with representation from each of the nine participating jurisdictions. On April 10, 2007 the steering committee voted to approve a budget that would expand the recycling/reuse programs and to fund those efforts with the existing HHW tipping fee surcharge; copies of the minutes from that meeting and the associated Wasteshed Recovery Plan are attached. A primary objective of the program expansion was achievement of DEQ-mandated waste recovery goals.

Staff from the Tri-County Hazardous Waste Management Program will provide an update to the City Council at the meeting. They will also be seeking authorization from the Council for the City's continued participation in the program and approval of the program's proposed levels of service.

The IGAs provided that the program was to be re-evaluated after five years of operation and local jurisdictions could withdraw at that time. This is the fifth year of operation and the presentation at the meeting will allow the current City Council to indicate its desires related to participation in the program. The current IGA expires December 31, 2010.

To provide the current Council with the background information provided to prior Councils as the program was developed, copies of the previous related Agenda Staff Reports, the IGA implementing the program and the 2002 HHW Management Plan are included as attachments to this report. In addition, information that may be new to The Dalles City Council includes the 2007-2009 Wasteshed Recovery Plan Update, the 2009 Wasco County Opportunity to Recycle Report, and the 2010-11 program budget adopted by Wasco County.

BUDGET ALLOCATION: No budget implications to the City as the program is funded through the Wasco County financial systems.

ALTERNATIVES:

A. Authorize continued City participation in the Tri-County Hazardous Waste Management Program at the proposed level of service.

B. Authorize continued City participation in the Tri-County Hazardous Waste Management Program at an alternative level of service as defined by the City Council.

C. Deny authorization for the City's continued participation in the Tri-County Hazardous Waste Management Program.

AGENDA STAFF REPORT
CITY OF THE DALLES

MEETING DATE	AGENDA LOCATION	AGENDA REPORT #
July 9, 2001	Discussion Items	#01-064

TO: Honorable Mayor and City Council

FROM: Dave Anderson, Water Quality Manager

THRU: Nolan K. Young, City Manager

DATE: June 23, 2001

ISSUE: **TRI-COUNTY HOUSEHOLD HAZARDOUS WASTE PLANNING PROJECT.**

RELATED CITY COUNCIL GOAL: not applicable

PREVIOUS AGENDA REPORT NUMBERS: none

BACKGROUND: In 1999, Wasco County received a grant from the Oregon Department of Environmental Quality (DEQ) to develop a Household Hazardous Waste Management Program for the Tri-County Area including Wasco, Sherman and Hood River counties. A steering committee was formed for the project made up of representatives from the three counties and major cities in the area; Dave Anderson has been representing the City of The Dalles on that committee. A consultant has also been hired using the grant funds to assist the committee in developing a plan acceptable to DEQ. The committee plans to complete a draft plan for formal consideration by the various city councils and county courts/commissions in late 2001.

Attached to this report is a copy of a Briefing Paper written by the consultant and the steering committee to inform elected officials in the Tri-County Area about this planning effort. The Briefing Paper provides detailed information about the issues and processes of developing a plan as well as the various options being considered by the committee.

Household Hazardous Waste (HHW) includes materials such as oil-based paints, solvents, batteries, mercury and other heavy metals, fuels, motor oils, antifreeze, pesticides and herbicides, and other materials which can be harmful to human health and the environment. There are no legal or regulatory requirements mandating local jurisdictions to develop HHW management programs. However, some of the benefits of providing accessible and affordable options for disposal of these wastes include reducing the toxic loading to sewers and stormwater systems,

reducing the potential for child poisonings, reducing the hazards to residents and firefighters in event of fires, and providing better protection of drinking water source quality.

Since 1992, DEQ has funded 15 HHW collection events in the Tri-County Area, including four in The Dalles. DEQ has since shifted its focus from funding individual collection events to supporting locally-funded solutions by providing grants for local program development, public education to reduce the amount of HHW generated, and construction of permanent collection facilities. This shift in financial assistance from DEQ is the primary impetus for this planning effort.

One purpose of this report is to inform City Council about this planning effort. The second is to solicit feedback from the Council regarding the levels of service and possible funding options for HHW collection that the Council considers viable for further consideration by the steering committee. The committee, working with the consultant, has developed five conceptual options for different levels of service which are identified in the Briefing Paper as Alternatives A - E. The simplest and cheapest option (Alternative A) is to continue to hold collection events, 3 events every two years, that would be locally funded. This option is the least convenient to participants and therefore reaches the fewest people and collects the least amount of HHW. The other four options all involve the construction of one or more permanent collection facilities in combination with collection events. They are arranged in order of cost and effectiveness with Alternative E being the most expensive, reaching the largest number of participants, and collecting the most HHW. The Briefing Paper provides a more detailed discussion of these options with a summary table on the last page.

The committee has identified six potential funding options for the HHW program which are also discussed in more detail in the Briefing Paper. These options include user fees, surcharges on wastes generated in the three counties, surcharges on wastes disposed of in the three counties, advance disposal fees on the sale of hazardous materials, DEQ grants, and supplemental environmental programs (SEP) which come from fines imposed by DEQ on companies for environmental damage. To date, most of the committee's discussions have focused on the waste surcharges for operating costs and DEQ grants for capital costs with a willingness to accept SEP funds as they may become available. If the program were funded entirely from surcharges on wastes generated in the Tri-County Area and using the maximum amount of DEQ grants available for capital construction, the range of costs for Alternatives A through E are estimated to be $0.15 to $0.55 per household per month. A combination of funding sources is also possible.

At this time, the steering committee is seeking feedback from the City Council about which options (in terms of both service level and funding) have enough merit to warrant further consideration and planning effort, and any options the Council specifically prefers. The committee is also very interested in receiving an indication if City Council opposes any of the identified options so that they can be dropped from further consideration.

BUDGET IMPLICATIONS: None at this time.

ALTERNATIVES: Discussion item only.

CITY OF THE DALLES
Department of Public Works
6780 Reservoir Road
The Dalles, Oregon 97058

The **DIRECTOR'S CERTIFICATE** of recognition issued by the U.S. Environmental Protection Agency on behalf of the *Partnership for Safe Water Program* has been awarded to **City of The Dalles** (for the treatment plant listed below) for its' efforts to achieve excellence in water quality far beyond what is required by federal regulations. **Wicks Water Treatment Plant**

Memorandum

July 3, 2002

TO: **Honorable Mayor and City Council**
Nolan K. Young, City Manager

THRU: **Brian R. Stahl, Director of Public Works**

FROM: **Dave Anderson, Water Quality Manager**

RE: **Draft Household Hazardous Waste Management Plan**

Enclosed for your review is the Draft Household Waste Management Plan developed by the Tri-County HHW Planning Committee and Harding ESE, a consultant working under contract for Wasco County. The plan is being provided to you at this time to give Councilors an opportunity to review the plan prior to the Council meeting on July 29th. At that meeting, a brief overview of the plan will be presented by David Allaway of Harding ESE. The City Council will then have an opportunity to ask questions and provide comments/suggestions regarding the plan.

On June 26th, the Wasco County Court took action to accept the role of "Lead Agency" for implementation of the plan. On July 3rd, the Court received the draft plan and a briefing from Mr. Allaway. The Court was very supportive of the draft plan as presented to them. They intend to take action to adopt a final plan on August 7th, contingent on comments they receive in the next month. Between now and then, the plan will be presented to other jurisdictions in the Tri-County Area for comments. It is hoped that any comments received can be addressed so that a final plan can be adopted by the County on August 7th. This will allow an opportunity to apply for grants this year by the September 13th deadline.

The presentation that Mr. Allaway provided the County Court took nearly an hour to give. By providing copies of the draft plan to the City Council prior to its meeting, we hope to focus our efforts on questions and comments and limit the time for this agenda item to about 15 minutes. As the City is an important player in the plan, City Council will be asked to give a statement of support for the plan, along with any comments they have on the plan details, at the July 29th meeting.

If you have any questions regarding the draft plan that you would like to discuss prior to the meeting, please feel free to contact me at your convenience.

phone (541) 298-1242 Ext 300 e-mail: danderson@netcnct.net fax (541) 298-2129

AGENDA STAFF REPORT
CITY OF THE DALLES

MEETING DATE	AGENDA LOCATION	AGENDA REPORT #
July 29, 2002	Presentations/Proclamations	02-074

TO: Honorable Mayor and City Council

FROM: Dave Anderson, Water Quality Manager
Brian R. Stahl, Director of Public Works

THRU: Nolan K. Young, City Manager

DATE: July 16, 2002

ISSUE: **DISCUSSION ON TRI-COUNTY HOUSEHOLD HAZARDOUS WASTE MANAGEMENT PROGRAM.**

RELATED CITY COUNCIL GOAL: not applicable

PREVIOUS AGENDA REPORT NUMBERS: Staff Report #01-064 dated June 23, 2001; Memorandum to Council dated July 3, 2002 with draft Tri-County HHW Management Plan.

BACKGROUND: In 1999, Wasco County received a grant from the Oregon Department of Environmental Quality (DEQ) to develop a Household Hazardous Waste Management Program for the Tri-County Area including Wasco, Sherman and Hood River counties. A steering committee was formed for the project made up of representatives from the three counties and major cities in the area; Dave Anderson has been representing the City of The Dalles on that committee. A consultant has also been hired using the grant funds to assist the committee in developing a plan acceptable to DEQ. That committee has now completed a draft plan. That plan was distributed to City Councilors earlier this month for review.

The draft plan that has been developed is unique from other plans of this type in several ways. First of all, this plan provides for the management of hazardous wastes on a regional basis and involves several entities and jurisdictions throughout the Tri-County Area. The mechanism for doing this is the development of an Intergovernmental Agreement (IGA) between the various participating entities and the designation of a Lead Agency to administer the program under the direction of a permanent Steering Committee. Secondly, this program proposes to address the collection, management, and disposal of hazardous wastes generated by small businesses (Conditionally Exempt Small Quantity Generators or CESQG's) for free (with annual limits) in

addition to hazardous wastes generated by households; other programs that accept CESQG wastes charge for this service. And thirdly, the draft program proposes to accept agricultural waste pesticides for disposal free of charge, again within limits. Annual limits have been proposed on these services to manage the amounts of these types of wastes accepted, which can be very expensive to manage and dispose of, to keep from bankrupting the system.

Wasco County tentatively approved the plan on July 3rd contingent upon a 30-day public review period and comments received from the other participating entities; final adoption by the County is scheduled for August 7th, 2002. The County has also agreed to serve as the Lead Agency in the implementation of the plan. It is hoped that the other participants identified in the plan (cities and counties in the Tri-County Area), including City of The Dalles, can issue statements of support for the plan, thereby understanding and committing to the associated solid waste disposal rate adjustments to fund the program, before August 7th. If there are significant questions and/or concerns regarding the draft plan by the City Council, these could be forwarded to the County for their August 7th meeting for resolution, and follow-up with the City Council could occur on September 9th.

Following adoption of the plan, Wasco County plans to apply for grants from DEQ to fund start-up of the IGA and construction of the first permanent facility located in The Dalles; these grant applications are due by September 13th. Beyond adoption, the program currently anticipates that the County would work through 2003 to set up the IGA, the solid waste disposal surcharges and associated garbage collection rate increases would be implemented January 1, 2004, design, contracting, and construction of the first permanent facility would occur through 2004 and 2005, and collection services would begin January 1, 2006.

Following a presentation at this meeting by David Allaway of Harding ESE, the consultant working with the steering committee under contract from Wasco County, staff will be asking for comments from the City Council on the draft plan. If the Council approves of the draft plan, staff will ask for a statement of support that can be forwarded to Wasco County for their consideration in the final adoption process and grant applications.

BUDGET IMPLICATIONS: None at this time. If the plan is adopted as drafted, residential and commercial garbage collection rates would need to be increased January 1, 2004.

ALTERNATIVES:

A. Forward a statement of support for the Tri-County Household Hazardous Waste Management Plan as drafted to Wasco County.

B. Forward comments on the draft Tri-County Household Hazardous Waste Management Plan to Wasco County for their consideration and review the plan, possibly as amended, on September 9th for re-consideration of support.

AGENDA STAFF REPORT
CITY OF THE DALLES

MEETING DATE	AGENDA LOCATION	AGENDA REPORT #
September 9, 2002	Consent Agenda	

TO: Honorable Mayor and City Council

FROM: Dave Anderson, Water Quality Manager
Brian R. Stahl, Director of Public Works

THRU: Nolan K. Young, City Manager

DATE: August 27, 2002

ISSUE: **ADOPTION OF TRI-COUNTY HOUSEHOLD HAZARDOUS WASTE MANAGEMENT PROGRAM.**

RELATED CITY COUNCIL GOAL: not applicable

PREVIOUS AGENDA REPORT NUMBERS: Staff Report #01-064 dated June 23, 2001; Memorandum to Council dated July 3, 2002 with draft Tri-County HHW Management Plan; Staff Report #02-074 dated July 16, 2002.

BACKGROUND: At its July 29, 2002 meeting, The Dalles City Council formally endorsed the Preliminary Final Draft Tri-County Household Hazardous Management Plan and authorized that a statement of support for the plan be forwarded to the Wasco County Court. That statement was sent to the County Court on July 31st.

The County Court considered the plan and comments received from other participating jurisdictions on August 7th. At that time, the Court decided to adopt the plan with minor revisions based upon comments received. The four revisions from the Preliminary Final Draft are as follows:

1. Section 6.1.1, fourth bullet point from the end (on page 49), change to read as follows:

> "Term of agreement, termination, and withdrawal of IGA Participants. The IGA will be re-evaluated during the fifth year of collection service. In the event that a participating local government chooses to withdraw from the IGA prior to the termination of the IGA, the IGA will provide for a method for equitably returning to that local government un-spent reserve funds collected from that local government or local government's ratepayers. In the event that the IGA is terminated or not extended, and reserve funds remain after all expenses are paid for, the IGA will also provide a method for re-distributing these reserve funds to the participating local governments. The individual local governments may choose to refund these to their ratepayers."

Hopefully nobody will pull out of the Inter-Governmental Agreement (IGA), but if they do, the IGA should address how any unspent financial contributions (reserve funds) will be reimbursed. And after five years of service, if the local governments choose not to extend the IGA and money remains in the reserve fund ($222,000 as projected if contingency costs aren't needed), then a mechanism is needed to refund the balance after all expenses are paid.

2. End of Section 5.5 (page 47), add the following paragraph:

"This Plan proposes that the rate increase go into effect prior to the actual provision of collection services. This is proposed for two reasons: first, to generate revenue required to help pay for program start-up costs; and second, to build a reserve fund in order to provide for contingencies when program services begin, such as higher than projected participation. As part of the development of the intergovernmental agreement (see Section 6.1), the participating local governments will reconsider this approach and evaluate the possibility of delaying or adjusting the proposed rate increase so that ratepayers are not paying for services before they actually become available."

This language addresses a concern that was expressed about raising rates before services actually become available. The bottom line is, money is needed from somewhere to pay for start-up costs and to build a small operating reserve. The only other options that have been identified involve using general fund money or borrowing money. This borrowed money would presumably be paid back through solid waste fees. Rather than $0.50/per month for 7 years [2 years of start-up and 5 years of service], it might require $0.70/per month for the 5 years of service, plus extra expenses to service the start-up debt. In discussing this concern, the County Court noted that raising of revenues prior to start-up of services in not unusual in these circumstances, citing revenues collected prior to initiation of services for both the regional jail facility and the new middle school. However, the addition of this language allows the issue to be considered during the development of the IGA.

3. The end of Section 1.5 was to be modified to bring the narrative current to August 7, 2002.

4. The Plan was renamed from "Preliminary Final Draft" to "Adopted Plan".

As of the writing of this Staff Report, the Wasco County Court was scheduled to formally adopt the Plan by resolution at its September 4th meeting. Following that adoption, all of the participating entities will have the opportunity to also adopt the Plan effective for their jurisdictions. If the Plan is adopted by the larger entities in time, especially Wasco County and City of The Dalles, Wasco County plans to apply for grants from DEQ to fund start-up of the IGA and construction of the first permanent facility located in The Dalles; these grant applications are due by September 13th. Beyond adoption, the program currently anticipates that the County would work through 2003 to set up the IGA, the solid waste disposal surcharges and associated garbage collection rate increases would be implemented January 1, 2004, design, contracting, and construction of the first permanent facility would occur through 2004 and 2005, and collection services would begin January 1, 2006.

BUDGET IMPLICATIONS: None at this time. With plan adoption, residential and commercial garbage collection rates would need to be increased January 1, 2004.

ALTERNATIVES:

A. Adopt the Tri-County Household Hazardous Waste Management Plan - Adopted Plan for the City of The Dalles.

B. Decline to adopt the Tri-County Household Hazardous Waste Management Plan - Adopted Plan and forward comments to the Wasco County Court outlining the City's concerns about the Plan.

Date: August 16, 2002

To: Hood River County Commissioners, Sherman County Commissioners, City Council of Hood River, City Council of The Dalles, City Council of Cascade Locks, City Council of Mosier, City Council of Dufur, and City Council of Maupin

From: Glenn Pierce, Chair, Tri-County HHW Planning Committee
Wasco-Sherman Public Health Department

RE: Request for Household Hazardous Waste Management Plan Adoption (Note: The Plan Covers Sherman, Wasco and Hood River Counties and Incorporated Cities in those Counties)

On August 7, 2002, the Wasco County Court formally adopted the Household Hazardous Waste Management Plan for Hood River, Wasco and Sherman Counties. Wasco County has also agreed to be the Lead Agency for the development and implementation of this plan.

As the Chair of the Tri-County HHW Planning Committee, I am meeting with each of the other County Commissions and City Councils in the Tri-County area over the next several weeks to give a short presentation about the plan, to answer any questions that you might have, and to request that you also formally adopt this plan. Attached to this memorandum is a copy of the *Plan Development* history and an *Executive Summary* of the plan for your review. Your County Chair/Judge or Mayor has a complete copy of the final plan for additional review.

Adoption of the plan is the highest level of support that your County or City can provide at this time in the multi-County/City effort to develop and implement a comprehensive hazardous waste management program in Sherman, Wasco and Hood River Counties. This program, if fully implemented, would provide hazardous waste management and disposal services to all residential, farm/ranch, and small business/public generators of hazardous wastes in this area.

According to the plan's *Executive Summary*: "The services described in this Plan will be paid for by a combination of funding sources. The most significant funding source will be a surcharge on waste originating in Wasco and Hood River Counties and disposed of in the Wasco County Landfill. This disposal surcharge will be passed back to households and businesses by a corresponding increase in transfer station and garbage collection service rates. The average household in these counties (with one 32-gallon container of garbage collected once a week, the most common class of service) will see their monthly garbage bill increase by approximately $0.50, a 4.0% increase over existing rates. Since almost all waste from Wasco and Hood River Counties goes to the Wasco County Landfill, this surcharge is viewed as an equitable method of funding this community service."

In closing, the proper management of hazardous waste from households and conditionally exempt small quantity generators will have many advantages, which include:

- Minimize environmental and health impacts associated with HHW.
- Reduce the amount of hazardous waste disposed of in landfills, sewerage systems, ground water, waterways (streams, rivers), the air, illegally dumped, and incinerated. Accomplish this through education, collection and focusing effort on waste types that pose a higher risk to the environment and health.
- Reduce the risks of accidental poisonings and fires in homes. Reduce the fuel load in homes caused by storage of flammable materials, and reduce the risk to fire safety workers associated with storage of hazardous materials.

In order to achieve these benefits, we would greatly appreciate your formal adoption of this plan.

Glenn Pierce

Household Hazardous Waste Management Plan
Hood River County, Wasco County, and Sherman County, Oregon

Adopted Plan

Prepared for

Tri-County Household Hazardous Waste Planning Committee
c/o Wasco-Sherman Health Department
419 E. Seventh Street, Room 100
The Dalles, OR 97058-2676

Harding ESE Project No. 50671

August 7, 2002

Prepared by:

Harding ESE, a MACTEC Company
and The Center for Environmental Communications

Table of Contents

Please note: Appendices are included with only some Plan copies.

Acknowledgments

Hood River, Wasco, and Sherman County would like to gratefully recognize the Oregon Department of Environmental Quality for assisting in funding the preparation of this Household Hazardous Waste (HHW) Management Plan.

The following list identifies those individuals who attended at least one HHW planning meeting or otherwise directly provided input into this Plan.

Hood River County
John Arens, County Commissioner
Bob Hastings, County Commissioner
David Meriwether, County Administrator
Lesley Apple-Haskell, County Attorney
David Skakel, County Solid Waste Coordinator
Anne Saxby, Hood River County Soil and Water Conservation District

City of Cascade Locks
Sandra Kelly, City Councilor
Bob Willoughby, City Manager

City of Hood River
Lynn Guenther, City Manager
Steven J. Everroad, City Finance Manager

Wasco County
John Mabrey, County Court
Scott McKay, County Court
Eric Nisley, District Attorney
Glenn Pierce, Wasco-Sherman Health Department
Kathy Schwartz, Wasco-Sherman Health Department Administrator
Rob VanCleaves, Personnel Manager
Randy Haugen, Litter Patrol

City of The Dalles
Nolan K. Young, City Manager
David Anderson, Water Quality Manager
Gene Parker, City Attorney

Sherman County
Mike McArthur, County Judge
Gary Thompson, County Court
Sandy Macnab, OSU Extension (Sherman County)

Mid-Columbia Council of Governments
John Arens
Geri Chatton

Waste Connections
Jacque Betts, Office Manager
Linda Jones
Eric Merrill, Regional Vice President
Nancy Mitchell, Landfill Manager
Rob Nielsen, Divisional Vice President
Dan Schooler, District Controller
Joe Schultz, Operations
Erwin Swetnam, District Manager

Oregon Department of Environmental Quality
Abby Boudouris, Household Hazardous Waste Program (Portland)
Maggie Conley, Household Hazardous Waste Program (Portland)
Lissa Druback, Eastern Region Solid Waste Manager (The Dalles)
Mary Sue Gilliland, Solid Waste Program (Portland)
Jeff Ingalls, Hazardous Waste Program (Bend)
Bonnie Lamb, Water Quality Program (Bend)
Ken Lucas, Solid Waste Program (The Dalles)
Bruce Lumper, Solid Waste Program (The Dalles)
Carl Nadler, Water Quality Program (The Dalles)
Rick Volpel, Hazardous Waste Program (Portland)

Washington Department of Ecology
David Nightingale

Harding ESE
David Allaway, Project Manager
Delyn Kies
Christine LaRosa
Angie Tomlinson

The Center for Environmental Communication
Carolyn Dann

Others
Stu Nagle, Mid-Columbia Fire and Rescue
Jim Mansfield, Clark County (Washington)
Mark Nedrow, Yakima County (Washington)
Mel Gard, Mt. Hood National Forest, Barlow Ranger District
Steve Privel, Oregon Department of Fish and Wildlife
Dave Anderson, Oregon State Police
Mike Courtney, Courtney Insurance

The authors apologize for any accidental omission of individuals or organizations, not listed above, who contributed to this planning effort.

Acronyms and Abbreviations

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	Conditionally Exempt Small Quantity Generator(s)
CPI	Consumer Price Index
DEQ	Oregon Department of Environmental Quality
DIY	Do-it-Yourself (motor oil changer)
DOT	Department of Transportation
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FTE	Full-time Equivalent
HELICO	Handicapped, Elderly, and Low Income
HHW	Household Hazardous Waste
IGA	Inter-Governmental Agreement
MCCOG	Mid-Columbia Council of Governments
MSW	Municipal Solid Waste
NiCd, Ni-Cd	Nickel-Cadmium (batteries)
ORS	Oregon Revised Statutes
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
PEL	Permissible Exposure Limit
Plan	Hood River County, Wasco County, and Sherman County Household Hazardous Waste Management Plan
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
SEP	Supplemental Environmental Project
Superfund	See CERCLA
TMDL	Total Maximum Daily Load
TSD	Treatment, Storage, and Disposal
TSDF	Treatment, Storage, and Disposal Facility
UL	Underwriter's Laboratories
VOC	Volatile Organic Compound

Executive Summary

This Household Hazardous Waste Management Plan (hereafter, "Plan") has been prepared to address the health and environmental impacts of hazardous waste from households, farmers, and small businesses in Hood River, Wasco, and Sherman Counties.

Household hazardous waste (HHW) is waste from households that has the potential to cause significant harm to human health or the environment. HHW includes common household products that are poisonous, toxic, flammable, reactive, or corrosive. Examples include pesticides, herbicides, mercury-containing products, some types of batteries, gasoline, kerosene, motor oil, antifreeze, oil-based paint, paint thinner, turpentine, pool chemicals, drain cleaners, and a variety of other products commonly used in household cleaning, around the yard, or in hobbies, crafts, and auto maintenance.

Although inappropriate disposal of these wastes may harm the environment, households are exempt from most federal and state separation requirements governing hazardous wastes.

The same is true for most businesses in the three-county area. All but about ten businesses, schools or government facilities in the three-county area are classified as conditionally exempt small quantity generators (CESQGs) of hazardous waste. CESQGs, like households, may dispose of their hazardous waste mixed with regular solid waste (garbage).

A third group of hazardous waste generators in the area includes orchardists and farmers with stockpiles of waste pesticides. Pesticides may be stockpiled because they have been banned, the farmer has changed crops, or the product is damaged or expired. Some farmers may be choosing to stockpile or improperly dispose of these toxic materials rather than pay high disposal fees. Both Oregon and federal law provide regulatory relief if waste pesticides are managed as a "universal waste" (described later in this Plan). This Plan takes advantage of this policy to help farmers and orchardists improve management of these wastes.

This Plan identifies new services which the counties and cities, working in partnership with the waste haulers and other interested parties, will offer to better manage hazardous waste from households, farmers, and other CESQGs. Implementation of this Plan should reduce the negative impacts associated with hazardous waste storage and disposal, which include fires, poisonings, and contamination of surface water, ground water, and soil.

The core service will consist of a series of sixteen (or more) collection events each year, held at locations throughout the three county area. Small, permanent facilities for the collection and temporary storage of HHW and CESQG waste will be constructed at the solid waste transfer stations in The Dalles and Hood River. The facilities will provide a secure, protected location for waste identification, packing, and temporary storage. The majority of collection events will be held at these facilities. Satellite events will be held in other areas, including Cascade Locks, south Wasco County, and Sherman County. Waste collected at these satellite events will be brought back to the permanent facilities for consolidation and temporary storage. In between events, the permanent facilities will also serve as a location where residents unable to wait for the next event (primarily those selling and cleaning out their homes) can drop-off HHW, on an appointment-only basis. Consolidated wastes will be removed from the facilities on a regular basis and sent to permitted Treatment, Storage, and Disposal (TSD) facilities outside of the counties for authorized recycling, incineration, or disposal. The program partners will also work to educate residents about safe handling and storage, as well as waste prevention alternatives.

Once the facilities are constructed, collection of HHW will begin. After the first year of HHW collection, collection services for farmers with agricultural pesticides and other CESQGs will be added.

New services, as described in this Plan, are projected to require approximately $514,000 in start-up costs ($451,000 + contingency). Average

annual operating costs for the second through fifth years of operation (once CESQG and agricultural pesticide collection is added) are estimated at $256,000 per year ($223,000 + 15% contingency). Approximately one-half of these costs are for the collection of hazardous waste from households. The other one-half of costs is for the addition of agricultural pesticide and CESQG collections. The high costs of the proposed collection system, relative to normal solid waste (garbage), reflects the dangerous characteristics and special handling, storage, and disposal methods that are required for safe and proper management of hazardous waste.

Actual costs are highly dependent on program participation and volumes of wastes collected, and thus may be higher or lower than estimated. However, cost estimates contained in this Plan include a 15% contingency factor, so the Plan's cost estimates may be higher than what will actually be realized.

The services described in this Plan will be paid for by a combination of funding sources. The most significant funding source will be a surcharge on waste originating in Wasco and Hood River Counties and disposed of in the Wasco County Landfill. This disposal surcharge will be passed back to households and businesses by a corresponding increase in transfer station and garbage collection service rates. The average household in these counties (with one 32-gallon container of garbage collected once a week, the most common class of service) will see their monthly garbage bill increase by approximately $0.50, a 4.0% increase over existing rates. Since almost all waste from Wasco and Hood River Counties goes to the Wasco County Landfill, this surcharge is viewed as an equitable method of funding this community service.

Additional funding sources include:

- An annual fee to be paid by Sherman County in order to provide for access by Sherman County households, farmers, and other businesses to this program.
- DEQ HHW grants. Grant funds of approximately $127,000 are available for operation of the two HHW facilities as described in this Plan. An additional $10,000 may be available to help prepare the intergovernmental agreement (IGA) between the cities and counties. Additional funds are available for alternative collection systems (such as rural depots for collection of used motor oil) and waste prevention education.
- User fees. Households that want to use the collection facilities in-between regularly scheduled events will be required to pay a fee. CESQGs and farmers could also be charged a fee if the volume of wastes they deliver is excessive.
- Possible surcharge on waste disposed at the Wasco County Landfill from out-of-region sources (see Section 5.2).

Significant cost and administrative benefits are realized by implementing this Plan as a regional program, as opposed to separate County- or City-specific programs. This Plan calls for the establishment of an intergovernmental agreement (IGA) between the counties and cities and the creation of a Steering Committee that will make decisions regarding certain operational details on an ongoing basis. The Steering Committee will consist of representatives of the three counties and the larger cities. The IGA will also designate Wasco County as the Lead Agency of this regional service.

The Plan proposes the selection of a single contractor to operate the collection services on a regional basis. This contractor will work under contract to the designated Lead Agency, and will be compensated with funds collected through funding sources described above.

The IGA will provide for the Lead Agency to be compensated for administrative expenses, and will require the Lead Agency to consult with the Steering Committee, and follow the Steering Committee's recommendations on significant decisions involving program implementation, such as annual program budgeting. This management structure (Steering Committee, Lead Agency, and single, regional contractor) provides for enhanced coordination between cities and counties, simplified contract management and accounting, and an opportunity for all three counties and the major cities to provide input into the implementation of this regional service.

1. Introduction

This Household Hazardous Waste (HHW) Management Plan for the three counties of Hood River, Wasco, and Sherman has been prepared by Harding ESE, working under contract to Wasco County and in coordination with the Tri-County HHW Planning Committee.

1.1 What is Household Hazardous Waste?

Household hazardous waste (HHW) is waste from households that, due to its hazardous nature, has the potential to cause significant harm to human health or the environment. HHW includes common household products that are poisonous, toxic, flammable, reactive, or corrosive. Examples include pesticides, herbicides, mercury and mercury-containing devices (thermometers, thermostats, fluorescent lamps, etc.), some types of batteries, gasoline, kerosene, motor oil, antifreeze, oil-based paint, paint thinner, turpentine, pool chemicals, drain cleaners, and a variety of other products. HHW can be found throughout most peoples' homes, as hazardous products are commonly used in household cleaning, around the yard, and in hobbies, crafts, and auto maintenance.

Although inappropriate disposal of some of these wastes may harm the environment, households are exempt from most federal, state, and local separation requirements governing hazardous wastes. One exception is a prohibition of disposal of "bulk liquids", such as large quantities of paint, in solid waste. Households are also exempt from liability under CERCLA ("Superfund"). As a result, most HHW is disposed of mixed with regular garbage.

1.2 What is CESQG Waste?

Conditionally exempt small quantity generators (CESQGs) are organizations other than households (such as businesses and government facilities) that generate less than 100 kilograms per month (about 220 pounds) of hazardous waste (or 1 kilogram/month of "acutely hazardous waste"), and accumulate less than 1,000 kilograms (about 2,200 pounds) of hazardous waste at any one time. Unlike larger generators of hazardous wastes, CESQGs are not required to follow all of the same regulatory requirements as larger generators, including obtaining an EPA identification number, using a manifest when shipping hazardous waste, and reporting to DEQ. CESQGs are responsible for the treatment or disposal of their hazardous wastes; however, permitted municipal solid waste facilities are legally acceptable disposal sites for CESQGs.

Common types of CESQGs (and common types of wastes they generate) include:

- Small printers (press cleaners and other solvents)
- Photography businesses (developers, bleaches, fixers)
- Small dry cleaners (perchloroethylene)
- Automobile services (spent solvents, antifreeze)
- Construction contractors (paint thinner, flammable paints, varnishes, stains)
- Farms, landscapers and horticultural businesses (pesticides, herbicides, fungicides, motor oil)
- Small manufacturers (waste types varies, but can include acids, bases, solvents, oils)
- City, county and other government public works departments (spent solvents, antifreeze, oils, paints, herbicides)

Because many CESQGs choose to dispose of their hazardous waste at permitted solid waste transfer stations and landfills (just like households), HHW collection programs often also include CESQGs. This Plan, while focused primarily on HHW, also provides for collection of hazardous waste from CESQGs as well as waste agricultural pesticides generated by farmers.

1.3 Scope of HHW Management Plan

This Plan addresses hazardous wastes generated by households located within Hood River County, Wasco County, and Sherman County Oregon. It also addresses hazardous waste from CESQGs (see Section 4.15) and farmers with waste pesticides (see Section 4.16) in these three counties.

In the future, the infrastructure and services developed as part of this Plan may be expanded to serve residents and CESQGs in surrounding areas, such as Gilliam, Wheeler, or Jefferson counties. At this time, however, this Plan is limited in scope to the counties of Hood River, Wasco, and Sherman only.

The planning horizon of this Plan begins with adoption of this Plan. Following Plan adoption, the three counties and key cities located within them will enter into an intergovernmental agreement for the provision and funding of hazardous waste collection services in the tri-County area. The planning horizon proceeds through the negotiation of a contract for provision of HHW collection services, and detailed design and preparation for these services, including the permitting and construction of two HHW collection facilities (in Hood River and Wasco counties).

The planning period continues for five years from the start of collection services at these facilities. The reason for this is that if any of the local governments accept a grant for facility funding from the DEQ, one of the grant conditions will be operation of the HHW collection service for a period of five years. After five years of operation, the program partners may choose to continue providing hazardous waste collection services, even though their obligation to the DEQ under the facility grant(s) will have been completed. Alternatively, the collection services could be discontinued or scaled back. It is also important to note that the DEQ grant is for HHW only (not for CESQG and agricultural pesticide collections), so non-HHW services can be adjusted more easily.

Specifically, the Plan is divided into two periods: short-term and medium-term.

The short-term period includes completion of the intergovernmental agreement, negotiation of a contract for service provisions, and extends through design, permitting, and construction of the permanent facilities, and other work necessary to prepare for the services described later in this Plan. The short-term period is expected to last approximately three years.

The medium-term planning period begins once the permanent facilities open for service, and continues throughout the first five years of services there. After five years, the cities and counties will have met their grant obligations to the DEQ for facility operation.

1.4 HHW Management Goals

The following are the three counties' goals for managing hazardous waste from households and conditionally exempt small quantity generators (CESQGs):

- Minimize environmental and health impacts associated with HHW.
- Educate residents and promote the use of least hazardous products and approaches.
- Educate residents in the reduction, proper use, and proper storage of household hazardous waste.
- Reduce the amount of hazardous waste disposed of in landfills, sewerage systems, ground water, waterways (streams, rivers), the air, illegally dumped, and incinerated. Accomplish this through education, collection, and focusing effort on waste types that pose a higher risk to the environment and health.
- Reduce the risks of accidental poisonings and fires in homes. Reduce the fuel load in homes caused by storage of flammable materials,

and reduce the risk to fire safety workers associated with storage of hazardous materials.

- Continue to build cooperative relationships among the counties, cities, waste collection and disposal companies, the agricultural and natural resource communities, school districts, fire districts, poison control professionals, retailers, real estate agents, business groups, community organizations, the Oregon Department of Environmental Quality and other State and Federal agencies.
- Provide regular, convenient, efficient and cost-effective service, considering both short-term and long-term costs.
- Focus efforts and resources on services which will achieve the greatest environmental and health benefit.
- Emphasize proper end-of-life management of any hazardous wastes collected.
- Reduce regulatory liabilities for local governments.
- Include agricultural, natural resource, and other Conditionally Exempt Small Quantity Generators (CESQGs) in these efforts by identifying CESQGs within the Counties, providing educational outreach, and encouraging/accommodating participation in proper handling, record keeping, storage and disposal.

1.5 Plan History

Preparation of this Plan has been a project of the Tri-County HHW Planning Committee. The Planning Committee membership includes:

- Sandy Macnab, OSU Extension Agent for Sherman County;
- Glenn Pierce, Wasco-Sherman Public Health Department;
- Dave Anderson, City of The Dalles;
- David Skakel, Hood River County; and
- Lynn Guenther, City of Hood River.

Committee members have been assisted by other interested parties in the planning area, many of whom are listed in the Acknowledgments section of this Plan.

Using HHW planning grants from the Oregon Department of Environmental Quality (DEQ), the Committee has also been assisted in the planning effort by the firm of Harding ESE (formerly Harding Lawson Associates), and its subcontractor, The Center for Environmental Communications ("the consultant team").

In preparing this Plan, the Committee and consultant team met on six separate occasions. The first meeting was held in The Dalles on October 20, 2000. In advance of this first meeting, the consultant team prepared a detailed briefing paper. That briefing paper (dated October 9, 2000) included an overview of the proposed planning process, key decision issues, an overview of HHW and CESQG wastes, types and volumes of waste, history of HHW management in the study area, possible planning goals, a description and evaluation of four collection options, and funding options.

A second meeting between the Committee and consultant team was held in The Dalles on November 21, 2000. In advance of this second meeting, the consultant team revised and expanded the evaluation of collection options from four to five; and provided additional information regarding local environmental hazards, funding options, and intergovernmental cost-sharing options.

At both the first and second meetings, the Committee struggled with key decisions regarding collection and funding options. It decided that before recommending specific collection and funding options for inclusion in a Draft HHW Plan, it wanted to involve elected decision-makers. A third meeting, held in The Dalles on February 20, 2001, was used to plan for a work session involving representatives of County and City elected officials, and other interested parties. Discussions of risk, liabilities, collection and funding options also continued at this third meeting.

Following the third meeting, the Committee and consultant team worked with the Mid-Columbia Council of Governments (MCCOG) to plan for the joint work session of elected officials. Invitations were sent to all three counties and the cities within them, as well as other interested parties. A short briefing paper was sent to those individuals who RSVP'd. (This briefing paper is included as Appendix B to this Plan.) The work session was held in The Dalles on June 19, 2001 with twenty people in attendance. Collection and funding options were discussed and participants expressed their preliminary (and personal) preferences for different options. Participants were also provided a formal response form and were encouraged to complete this form and return it to MCCOG. Individuals representing elected boards (County Courts and Commissions and City Councils) were asked to take the information they had learned at the work session, share it with their full elected bodies, and return the preliminary preferences of the elected bodies. Representatives of the Planning Committee were also involved in this process. A total of eleven responses were received; responses are summarized in Appendix D to this Plan.

Responses to the June 19 work session generally preferred a "hybrid" collection system consisting of both permanent facilities and mobile events as opposed to a collection system that relied exclusively on either fixed facilities or mobile collection events. Responses also favored having facilities located in both major population centers (Hood River and The Dalles), despite the higher cost. On the funding side, responses favored some kind of surcharge on the solid waste disposal system, supplemented with DEQ grants, funds from Supplemental Environmental Projects (see Section 5.2) and possibly other funding sources.

The Committee and consultant team met a fifth time on September 10, 2001 in Hood River. At this meeting the Committee reviewed responses from the work session and formally expressed its preference for collection and funding options. These collection and funding options form the basis of this Plan. At its September 10 meeting the Committee also discussed intergovernmental cooperation and cost sharing, and some other details of project implementation.

During and following this meeting, Committee members also discussed how to include CESQGs in any new collection services. Until this point, the Planning Committee had approached the topic of CESQGs in a manner consistent with almost all other HHW programs throughout the U.S.: as a possible add-on service. Put differently, the planning process had been for the development of a HHW service, which might include a supplemental CESQG service. (This is also consistent with the terms of DEQ's planning grant, as DEQ has an active program to support local HHW planning, but no formal program for CESQG waste planning.) Further, almost all programs that offer both HHW and CESQG collection do not charge households but do charge CESQGs.

However, at the September 10 meeting, Committee members expressed an interest in adding CESQGs to the collection service, and not charging them a user fee. Offering a free collection service for CESQGs could significantly increase waste volumes and costs.

Following the September 10 meeting, the consultant team prepared a First Draft of the HHW Management Plan. This First Draft assumed that collection services would be provided to households, CESQGs, and farmers (for agricultural pesticides) without user fees (with a few exceptions). This represented a significant expansion in the scope of the Plan.

The First Draft Plan was forwarded to Committee members and other interested parties in advance of the Committee's sixth meeting, held May 9, 2002 in Hood River. At this meeting, the Plan was thoroughly reviewed and discussed. Comments and questions were provided.

One of the outstanding questions from the May 9 meeting was who would assume responsibility for

being the Lead Agency. After studying the advantages and disadvantages and consulting with other local governments in the area, the Wasco County Court decided on June 26 that Wasco County would assume the role of the Lead Agency, conditioned on the eventual successful negotiation of an Intergovernmental Agreement for implementation of this Plan.

Comments received at the May 9 meeting were incorporated into a Preliminary Final Draft Plan. The Preliminary Final Draft was presented to the Wasco County Court on July 3. At this meeting, the Wasco County Court expressed its intention to adopt the Plan on August 7. Subsequently, the Preliminary Final Draft was presented to the Sherman County Court on July 3, the Hood River County Board of Commissioners on July 15, the Hood River City Council on July 22, the Cascade Locks City Council on July 22, and The Dalles City Council on July 29. During and after these meetings, the elected officials of Wasco County, Hood River County, City of Hood River, and City of The Dalles expressed support for adopting the plan. Sherman County and Cascade Locks did not decide prior to August 7 whether or not to support the Plan.

Hood River County was the only organization to propose specific changes to the Preliminary Final Draft Plan. On August 7, the Wasco County Court formally adopted the Plan, with Hood River County's proposed changes. This document ("Adopted Plan") is the Plan as adopted by Wasco County, as the lead agency.

Wasco County intends to forward this Plan, as adopted by Wasco County, to the other local governments for formal consideration and adoption. All records of formal Plan adoption can be added to Appendix F of this Adopted Plan.

2. Local Conditions

2.1 Planning Area

The geographical boundaries of the planning area are the political boundaries of Hood River, Wasco, and Sherman counties. Taken together, these three counties stretch from the crest of the Cascade Mountains in the west to the John Day River in the east. The Columbia River forms the northern border of all three counties.

Hood River County is the farthest west of the three counties. Hood River (the County seat) and Cascade Locks are the only incorporated cities in Hood River County. The County is one of Oregon's smallest, at 533 square miles in size. Much of the County is included in the Mt. Hood National Forest. Principal industries include agriculture, timber and recreation. The county is a world leader in production of Anjou pears. The County's recreation industry is based on its natural environment, including the Columbia River Gorge, Mt. Hood, and the Hood River Valley.

Wasco County is the largest of the three counties, at 2,396 square miles in size. (At the time of its founding, Wasco County was much larger, including all of Oregon east of the Cascade Mountains, most of Idaho, and parts of Montana and Wyoming.) The Dalles is the County seat. Other incorporated cities include Mosier, Maupin, Dufur, Antelope, and Shaniko. Unincorporated communities include Rowena, Tygh Valley and Wamic. The western edge of Wasco County is located in the Mt. Hood National Forest and roughly half of the Warm Springs Indian Reservation lies in south Wasco County. Leading industries are agriculture (cereal grains, cherries, apples, livestock), lumber, manufacturing, electric power and aluminum. However, the aluminum industry (with its high-paying jobs) is currently contracting due in part to increases in electricity prices. The decline in the aluminum industry, coupled with overseas competition for agricultural products, has hurt Wasco County's economy.

Sherman County is located to the east of Wasco County, and is 831 square miles in size. Moro is the County seat. Other incorporated cities include Wasco, Rufus, and Grass Valley. The community of Biggs is located at the junction of Interstate 84 and U.S. highway 97, in the

Columbia Gorge. Principal industries are wheat, barley, cattle, and tourism. Sherman County has a total absence of timber and much of the land consists of rolling hills and deep canyons. Depressed grain markets have hurt the economy of Sherman County.

Precipitation decreases sharply from west to east, with average annual precipitation exceeding 70 inches per year in Cascade Locks, decreasing to 31 inches in Hood River, 15 inches in The Dalles, and 11 inches in Moro.

Prevailing winds near the Columbia River Gorge are from the west and can be very strong. Snow and severe ice storms can disrupt traffic during the winter.

In addition to the Columbia River, major waterways include the Hood River (in Hood River County), and the Deschutes and John Day Rivers (both in Wasco and Sherman counties). Additional geographic considerations are discussed in Section 3.1, below.

According to the Portland State University Population Research Center, estimated July 1, 2000 populations for the three counties are as follows:

Hood River County	20,500
City of Hood River	5,920
City of Cascade Locks	1,120
Other (unincorporated)	13,460
Wasco County	23,850
City of The Dalles	12,185
City of Dufur	590
City of Mosier	415
City of Maupin	410
City of Antelope	60
City of Shaniko	25
Other (unincorporated)	10,165
Sherman County	1,950
City of Wasco	380
City of Moro	340
City of Rufus	270
City of Grass Valley	170
Other (unincorporated)	790

Total population of the three County area is estimated at 46,300 people. Fewer than 5% of the population is located in Sherman County. Just over half of the total population of the three counties lives in unincorporated areas. This percentage is highest in Hood River County, where 65% of residents live outside of cities, primarily in the Hood River Valley.

Population growth between 1990 and 2000 is estimated at 20.8% for Hood River County, 9.7% for Wasco County, and 0.8% for Sherman County.

According to the U.S. 2000 Census, Hood River County's population is 25% Hispanic, compared to 9% for Wasco County and 5% for Sherman County. A portion of this population is not fluent in English, which is an important consideration for education and outreach activities.

The number of Wasco County residents living on the Warm Springs Indian Reservation is probably less than 1,000. The Tribal Government estimates total on-reservation population of about 3,600, of which the majority live in and around the community of Warm Springs, in Jefferson County. According to the U.S. Census, the Native American population of Wasco County was just over 900 people, or less than 4% of the County's population.

2.2 Solid Waste Management in the Tri-County Area

Collection and management of solid waste ("garbage") in much of the three-County area is provided by Waste Connections, a company that provides vertically integrated collection, transfer, and disposal services. Waste Connections is a publicly traded company with operations in 17

states. Two smaller companies, Sunrise Sanitation and Mel's Sanitation provide collection services in sparsely populated Sherman County and areas of east and south Wasco County.

2.2.1 Hood River County

According to the Oregon DEQ, Hood River County disposed of 15,741 tons of municipal solid waste (MSW) in calendar year 2000. Disposal for each of the last five years (1996 – 2000) has been fairly steady, ranging from a low of 14,931 tons (in 1998) to a high of 16,021 (in 1999).

City and County governments in the Tri-County area franchise for the collection of solid waste from households and commercial accounts. Households and businesses are free to self-haul wastes to a transfer station or disposal site of their choosing. However, fee-for-service subscription garbage collection services are franchised (in the case of the City of Cascade Locks, the franchise is referred to as a "contract"). The City of Cascade Locks is unique among all cities in the planning area for having mandatory garbage collection service for all households.

In Hood River County, there are a total of three collection franchises: City of Hood River, City of Cascade Locks, and Hood River County. Waste Connections is the sole franchise holder for all three of these franchises. All waste collected by Waste Connections vehicles in Hood River County is taken to the Hood River County Transfer Station.

The Transfer Station is located at 3440 Guignard Drive, and is owned and operated by Waste Connections. Waste coming into the transfer station is from three sources: households who self-haul; businesses that self-haul; and Waste Connections vehicles. All incoming waste from self-haulers is charged a per-yard fee (there are currently no vehicle scales at the transfer station). Waste destined for disposal is loaded into trailers and typically hauled to the Wasco County Landfill, south of The Dalles. The Wasco County Landfill is also owned by Waste Connections.

According to Waste Connections, a few businesses in Hood River County self-haul their waste directly to the Wasco County Landfill.

Rates charged for all services provided under these franchises are set by the County and cities. The County sets rates for the Transfer Station and for garbage collection in unincorporated areas of the County, including the Urban Growth Area. The cities set rates for garbage collection within their municipal limits.

Franchise agreements between Waste Connections and the City and County of Hood River were revised in 2001, as were rates charged for collection service in both communities and at the Transfer Station. The City of Cascade Locks updated their rates in February, 2002. The new rates provide for bi-weekly curbside recycling.

Franchise agreements with the City and County of Hood River provide for an opportunity for annual rate reviews, if requested and justified by the franchisee. The County franchise agreement provides the opportunity for additional "as needed" rate review in the event of a rate change at the disposal site, so that rate changes at the Wasco County Landfill can be readily passed through at the transfer station and collection rates (in the unincorporated area). The City of Hood River's and City of Cascade Locks' agreements do not appear to include this provision.

Both City and County of Hood River ordinances prohibit rate preferences for classes or groups of subscribers. The County ordinance allows the County Board of Commissioners to authorize rate preferences for certain groups or individuals (preferences are provided for HELICO [Handicapped, Elderly, and Low Income], pre-paid discount, and veterans discount). The City of Hood River ordinance notes that uniform rates can be set based on length of haul, type or quantity of solid waste handled and location of customers so long as such rates are reasonably based upon costs of the particular service.

The new County franchise agreement includes the payment of an annual franchise fee in the amount of $42,000 from Waste Connections to the County. The City of Hood River franchise agreement provides for the franchisee to pay an annual franchise fee equal to 3% of gross revenue from the collection service. The City of Cascade Locks' franchise fee is $1,000 per year.

2.2.2 Wasco County

According to the Oregon DEQ, Wasco County disposed of 18,118 tons of municipal solid waste (MSW) in calendar year 2000. Disposal for each of the last five years (1996 – 2000) has been fairly steady, ranging from a low of 17,480 tons (in 1996) to a high of 18,855 (in 1997).

Waste Connections provides garbage collection services in Wasco County under separate exclusive franchise agreements with the City of The Dalles, City of Mosier, and Wasco County (for unincorporated areas of north Wasco County). Waste collected by Waste Connection vehicles is driven directly to the Wasco County Landfill for disposal.

Waste Connection's franchise agreement with the City of the Dalles provides for a franchise fee calculated as 3% of the franchisee's gross revenue from the collection of solid waste. Rates are set by the City Council. This franchise agreement does not appear to provide for automatic annual rate changes.

Waste collection in the populated unincorporated northern part of Wasco County is provided by Waste Connections under a franchise with the County. Rates for service provided under this collection franchise are set by the County Court.

Waste Connections also operates a transfer station in The Dalles, located at 1317 W. 1st Street. Waste Connections leases the transfer station and land from the previous franchisee. The transfer station primarily accepts self-haul waste from households and businesses, including landscapers and construction/remodeling contractors. Waste delivered to the transfer station is hauled by Waste Connections to the Wasco County Landfill for disposal. This transfer station is operated under Waste Connection's franchise with the City of The Dalles, although the franchise ordinance does not explicitly identify the transfer station.

Mel's Sanitary Service provides collection services in the areas of Dufur, Tygh Valley, Maupin, and Wamic, both within the municipal limits and also unincorporated areas of south Wasco County (under franchise to the County). Waste collected by Mel's is disposed of at the Wasco County Landfill. The County Court sets collection rates in unincorporated areas, and by the cities inside the incorporated areas. This company has recently built and begun operation of a small transfer station north of Maupin.

The County's Solid Waste and Disposal Ordinance requires that the County increase collection rates if tipping fees at the landfill used by a collection franchise are increased at the order of the County Court. (Such an increase in collection rates is referred to as a "pass through" cost increase. Examples of increases in disposal charges include annual "cost of living" adjustments in the tipping fee; see below.) It also provides for an annual franchise fee of $100 per waste collection vehicle. Since both Waste Connection and Mel's Sanitary Service use the Wasco County Landfill, any County-approved disposal fee increase there should result in a near-automatic increase in these two company's collection rates for unincorporated areas of the County.

The communities of Shaniko and Antelope have both closed their local landfills. Both Shaniko and Antelope have recently constructed small transfer stations, from which waste is hauled by Madras Sanitary for disposal in Crook County. The tonnage of waste passing through these two transfer stations is very small relative to the rest of Wasco County.

Sunrise Sanitation, based in Sherman County, provides waste collection in the sparsely

populated area of Celilo, in the northeast corner of Wasco County. This waste is sent to the Columbia Ridge Landfill in Arlington (Gilliam County).

Waste generated on lands of the Warm Springs Indian Reservation is managed by the Tribe's solid waste program. Waste collected by the Tribe is disposed of in a Tribally owned landfill located in Jefferson County.

The Wasco County Landfill is located approximately three miles south of The Dalles and is owned and operated by Waste Connections. All waste collected at Waste Connections' transfer stations and collection vehicles in Hood River and Wasco counties is disposed of at this landfill. The landfill also accepts a limited amount of self-haul waste from large area businesses, as well as large quantities of waste from outside the tri-County area. According to DEQ records, both MSW and special waste inflows to the Wasco County Landfill increased significantly between 1999 and 2001, as the following figures show:

Waste type	Tons, 1999	Tons, 2000	Tons, 2001
Municipal solid waste (MSW)*	76,113	101,848	119,907
Industrial waste**	4,135	4,739	15,679
Other waste***	6,722	31,087	9,642
Total	86,970	137,674	145,228

*Includes most waste from households and commercial businesses, as well as industrial waste from out of state.
**Oregon only
***Asbestos, contaminated cleanup, petroleum-contaminated soils, etc.

For the sake of comparison, it is worth noting that of the 101,848 tons of municipal solid waste disposed in the Wasco County Landfill in 2000, less than one-third originated in Hood River and Wasco counties. The remainder came from outside of the planning area, primarily the Portland area and Washington state.

The Wasco County Landfill is operated under a Solid Waste Disposal License Agreement with Wasco County. (Although referred to as the "Wasco County Landfill", the landfill is owned by Waste Connections, not Wasco County.) Some of the key terms of this License Agreement include the following:

- The per-ton rate charged for municipal solid waste from "County customers" is determined by the License Agreement.
- The licensee may charge tipping fees to other classes of customers (including out-of-County customers) at its sole discretion. This provides Waste Connections with some flexibility in competing with other landfills for disposal contracts.
- The licensee pays Wasco County an annual license fee plus a per-ton host fee levied against all waste disposed by non-County customers. Practically speaking, "non-County" customers include all waste generated outside of Wasco County, as well as potentially some self-haulers from inside Wasco County.
- The annual license fee is a fixed fee that is adjusted annually (every January 1) by a percentage amount equal to 85% of the consumer price index.
- The host fee for 2001 was $1.14/ton, and this is also adjusted annually (every January 1) by a percentage amount equal to 85% of the consumer price index (CPI).
- The tipping fee charged to "County customers" is automatically adjusted each January 1, again by a percentage amount equal to 85% of the consumer price index.
- The licensee is required to maintain liability insurance for bodily injury and property damages (exclusive of environmental impairment). The licensee also agrees to obtain legal pollution liability insurance, but only "to the extent it is practicably available at a commercially reasonable cost."
- The liability insurance is required to name the County as an additional insured.

2.2.3 Sherman County

According to the Oregon DEQ, Sherman County disposed of 1,031 tons of municipal solid waste (MSW) in calendar year 2000. Annual disposal for each of the last five years (1996 – 2000) has ranged from a low of 987 tons (in 1996) to a high of 1,295 tons (in 1997).

Sherman County's solid waste system includes a transfer station outside of Biggs, and a single collection franchise with Sunrise Sanitation for all areas of the County (all four incorporated cities, and the unincorporated county). All services are provided by Sunrise Sanitation. Sherman County administers the franchise and sets rates in all areas (both incorporated and unincorporated), through a series of intergovernmental agreements with the four cities (Grass Valley, Moro, Wasco, and Rufus).

Sunrise Sanitation provides for all waste collection as well as operation of the transfer station. The transfer station is open the 2nd and 4th Saturdays of each month. All waste collected by Sunrise Sanitation is offloaded at the transfer station where it is added to waste from self-haulers in large roll-off containers. These roll-off containers are then hauled to the Columbia Ridge Landfill in Arlington (Gilliam County), which is owned by Waste Management, Inc.

Sunrise Sanitation charges rates for collection service and use of the transfer station. The Sherman County Court sets these rates. The franchise agreement provides for the option of an automatic rate adjustment using the CPI, as well as other rate reviews if requested by the franchisee. In contrast to Wasco and Hood River Counties, where revenue from rates is adequate to pay for all service expenses, rates charged by Sunrise Sanitation do not fully pay for all costs of disposal. Waste Management is paid directly by the County for hauling and disposal of the roll-off containers from the transfer station to the landfill. This is paid out of the County's general fund.

2.3 HHW Collection Events

DEQ has funded 16 one-day HHW collection events in Wasco, Hood River, and Sherman Counties, starting in 1991. Each event has involved local partners (such as waste haulers, cities, and/or the county) who provide a location for the event, provide staff (including volunteers) for traffic control, and provide local promotion of the event. DEQ pays a hazardous waste contractor to set-up, staff the site, accept wastes, remove them, and ultimately pay for safe recycling or disposal of the wastes.

The number of vehicles coming to the event (typically a vehicle represents one or more households), the pounds of waste collected, and the cost (to DEQ) of each event are summarized in Table 1. (Data for the most recent event, held April 20, 2002 in Hood River, is not included.)

Quantities of wastes collected at these events are portrayed in Table 2. Table 2 also shows the average composition of all HHW collected in all DEQ-sponsored events throughout Oregon in 1998. The relative amounts of different types of HHW brought to events in the Tri-County area generally mirror Statewide trends.

2.4 CESQGs and CESQG Collections

- In Oregon, all non-household generators of waste are classified into three categories: conditionally exempt small quantity generators (CESQGs), small quantity generators (SQGs), and large quantity generators (LQGs), depending on the quantities of hazardous wastes generated and accumulated. By definition, all businesses and other non-residential facilities (schools, government facilities) fit into one of these three categories, since CESQGs include all sites generating less than 100 kilograms of hazardous waste in a month (and accumulating less than 1,000 kilograms on site at any one time). Some businesses may not generate any hazardous wastes at all in

Table 1.
Summary of Previous HHW and CEG Collection Events for Wasco, Hood River, and Sherman Counties

	1991 The Dalles	1992 Cascade Lock	1992 Moro	1992 Maupin	1992 Hood River	1992 The Dalles	1996 Moro	1996 The Dalles	1997 Maupin	1997 Moro	1997 The Dalles
Lbs. Collected	25,000	4,460	9,037	3,100	27,318	32,705	1,700	29,360	2,850	4,361	30,077
Number of Participants	266	40	34	20	215	290	50	468	50	45	338
Total Cost $	47,590	10,288	10,722	7,642	36,105	40,910	3,924	35,395	4,724	4,445	30,309
Labor & Equipment Costs	N/A	3,740	4,471	4,010	11,532	12,889	2,229	9,813	2,309	2,140	12,233
Disposal Costs	N/A	6,548	6,251	3,632	24,572	28,041	1,695	25,582	2,415	2,305	18,076
Lbs. Per Participant	94	112	266	155	127	113	34	63	57	97	89
Total Cost Per Participant	$ 179	$ 257	$ 315	$ 382	$ 168	$ 141	$ 78	$ 76	$ 94	$ 99	$ 90
Total Cost Per Pound	$ 1.90	$ 2.31	$ 1.19	$ 2.47	$ 1.32	$ 1.25	$ 2.31	$ 1.21	$ 1.66	$ 1.02	$ 1.01
Disposal Cost Per Pound	n/a	$ 1.47	$ 0.69	$ 1.17	$ 0.90	$ 0.86	$ 1.00	$ 0.87	$ 0.85	$ 0.53	$ 0.60

	1998 Hood River	2000 Rufus	2000 Moro	2000 Maupin	2000 The Dalles	Average (HHW)	1996 The Dalles (CEG)	1997 The Dalles (CEG)	1998Hood River (CEG)	Average (CEG)
Lbs. Collected	14,291	2,615	1,626	4,348	27,295	13,759	1,300	5,600	3,800	3,450
Number of Participants	163	N/A	12	33	335	157	9	8	6	9
Total Cost $	15,582	N/A	3,023	5,123	27,569	18,990	N/A	N/A	N/A	N/A
Labor & Equipment Costs	7,497	N/A	1,941	1,954	10,991	8,268	N/A	N/A	N/A	N/A
Disposal Costs	8,085	N/A	1,083	3,169	16,578	10,574	N/A	N/A	N/A	N/A
Lbs. Per Participant	88	N/A	136	132	81	87	144	700	633	406
Total Cost Per Participant	$ 96	N/A	$ 252	$ 155	$ 82	$ 120	N/A	N/A	N/A	N/A
Total Cost Per Pound	$ 1.09	N/A	$ 1.86	$ 1.18	$ 1.01	$ 1.37	N/A	N/A	N/A	N/A
Disposal Cost Per Pound	$ 0.57	N/A	$ 0.67	$ 0.73	$ 0.61	$ 0.77	N/A	N/A	N/A	N/A

Note: All costs, except "cost(s) per pound" are rounded to the nearest dollar.

Source: DEQ

Table 2.
Quantities of HHW Collected (pounds) by Waste Type for Wasco, Hood River, and Sherman Counties, Oregon

year:	1992	1992	1992	1992	1992	1996	1996	1997	1997	1997
location:	Cascade Locks	Moro	Maupin	Hood River	The Dalles	Moro	The Dalles	Maupin	Moro	The Dalles
Acids/bases	24	325	150	858	1350	0	350	0	20	1450
Aerosols (except pesticides)	40	150	60	480	485	50	700	200	150	1000
Antifreeze	40	0	35	550	425		400	0	250	600
Automotive oil	85	500	40	2750	1750	400	1600	0	400	2000
Batteries - alkaline	5	2	10	110	250		100	0	0	60
Batteries - NiCd								0	1	5
Batteries - automotive	550	2450	725	2200	2100	200	5000	0	1000	3000
Flammable liquids				12		400	2400	400	400	1300
Flammable solids				40	20		10	0	0	0
Latex paint	2520	850	260	6160	6125	200	7600	600	900	9500
Oil-based paint	375	3000	420	7400	13725	200	8800	1000	1000	7800
Oxidizers, reactives	45	30	0	62	225		30	0	10	200
Pesticides/poisons	166	530	310	3966	3150	250	2450	400	200	3000
Aerosols - pesticides	10	50	15	180	485		100	0	30	100
PPE/crushed containers								250	0	0
Other	600	1150	1075	2550	2635		20	0	0	62
Total	4480	9037	3100	27318	32705	1700	29360	2850	4361	30077

year:	1998	2000	2000	2000	2000	all events		Comparison: All DEQ-sponsored HHW events in Oregon, 2000
location:	Hood River	Rufus	Moro	Maupin	The Dalles	pounds	%	
Acids/bases	750		60	400	500	6237	3%	2%
Aerosols (except pesticides)	200	10	75	150	800	4560	2%	2%
Antifreeze	300		0	50	200	2850	1%	2%
Automotive oil	1700	250	600	0	400	12475	6%	6%
Batteries - alkaline	200		6	0	92	835	0%	0%
Batteries - NiCd	10		0	0	29	45	0%	0%
Batteries - automotive	500	800	60	627	500	19712	10%	11%
Flammable liquids	800	250	200	600	2400	9162	5%	9%
Flammable solids			0	0	7	77	0%	0%
Latex paint	3500	250	100	1040	8750	48365	25%	24%
Oil-based paint	3700	850	250	600	9500	58420	30%	31%
Oxidizers, reactives	200		15	90	250	1157	1%	0%
Pesticides/poisons	2100	200	250	600	3500	21072	11%	9%
Aerosols - pesticides	150	5	10	1	150	1268	1%	0%
PPE/crushed containers	150		0	0	100	500	0%	0%
Other	31			190	117	8430	4%	3%
Total	14291	2815	1626	4348	27295	195143	100%	

Totals may not sum exactly due to rounding.

some months, however, since "no generation" is "less than 100 kilograms", these sites are still considered to be CESQGs.

SQGs and LQGs are required to submit annual reports to the Oregon DEQ. According to DEQ staff, there are nine known SQGs and LQGs in the three-County area (note that this list was current as of late 2001 and is subject to change):

- Don's Cleaner's and Laundry (The Dalles)
- Hogg & Davis (Odell)
- Luhr Jensen & Sons (Hood River)
- The Dalles Dam
- John Day Dam
- Kerr McGee Chemical (The Dalles)
- Union Pacific Railroad (The Dalles)
- Lockheed Martin and Northwest Aluminum Company (same address in The Dalles).

According to the U.S. Census Bureau, there were a total of 1,516 "private non-farm" establishments in the three-County area in 1999, employing more than 15,400 people. An additional 2,035 people were employed in 1997 in "local government", which includes schools. The number of "private farm" establishments is not known. Regardless, all but nine of these (private establishments and public sector establishments) are considered to be CESQGs.

Some CESQGs may choose to have their hazardous waste collected by a private collection contractor. The extent of such collection in the tri-County area is unknown. However, DEQ allowed for CESQG collection concurrent with HHW collection events in The Dalles in 1996 and 1997, and Hood River in 1998. At these events, CESQGs who chose to bring in waste (participation was purely voluntary) were required to pay DEQ's contractor, Philip Services Corporation, a collection/disposal fee based on the quantity and types of hazardous wastes delivered. Participation and cost data from these events is included in Table 1; data on waste collected from these CESQG events is profiled in Table 3. Because of the relatively high cost of participation, and the voluntary nature of the program, CESQGs represented only 2.3% of the number of deliveries at these three events. In contrast, because the average CESQG delivered a greater amount of waste than the average household did, CESQG wastes were 12.7% of the total quantity of wastes delivered from all sources at these events.

2.5 Agricultural Pesticides

The Oregon DEQ recognizes waste agricultural pesticides as a "Universal Waste". From a practical perspective, this means that agricultural pesticides can be collected at a collection event (registered with DEQ) from all sources, without application of the CESQG/SQG/LQG limits. Put differently, farmers with large quantities of agricultural pesticides in storage can bring these to a collection event even if they are no longer CESQGs because they have exceeded the CESQG accumulation limit of 1,000 kilograms.

Unlike some states, Oregon has neither a state-funded nor an industry-sponsored agricultural pesticide collection program. Realistic options for farmers with "waste" pesticides are to find someone else who wants them, try to get their distributor to take them back, or dispose of the pesticides as an option of last resort. However, bulk liquids cannot be disposed of with solid waste. Anecdotal evidence and discussions with representatives of local agricultural and water quality organizations suggests that some agricultural pesticides may be inappropriately disposed of, for lack of an affordable, safe and legal disposal option.

Beginning in 1997, the DEQ began collecting waste pesticides in conjunction with HHW and CESQG collection events. Funding comes from a waste disposal fee charged to participants. The fee has ranged from $2.40 to $2.65 per pound, which creates a significant financial disincentive to participate. In 1999, the Oregon Department of Agriculture received a one-time grant from the EPA that subsidized disposal costs and allowed participants to dispose of most waste pesticides at collection events for the reduced rate of $1.00 per pound. Participation in DEQ's collection

Table 3.
Quantities of CESQG Hazardous Waste Collected (pounds) by Waste Type for Wasco, Hood River, and Sherman Counties, Oregon

year:	1996	1997	1998	all events		Comparison: All DEQ-sponsored CESQG events in Oregon, 1998
location:	The Dalles	The Dalles	Hood River	pounds	%	
Acids/bases	200	500		700	7%	9%
Aerosols (except pesticides)				0	0%	3%
Antifreeze				0	0%	0%
Automotive oil				0	0%	3%
Batteries - alkaline				0	0%	0%
Batteries - NiCd				0	0%	0%
Batteries - automotive				0	0%	0%
Flammable liquids	400	2800	2950	6150	57%	28%
Flammable solids			150	150	1%	0%
Latex paint				0	0%	2%
Oil-based paint	600	1850	250	2700	25%	30%
Oxidizers, reactives	100			100	1%	0%
Pesticides/poisons		300	450	750	7%	13%
Aerosols - pesticides				0	0%	0%
PPE/crushed containers				0	0%	0%
Other*		150		150	1%	13%
Total	1300	5600	3800	10700	100%	

Totals may not sum exactly due to rounding.

*In 1998, "other" wastes collected throughout Oregon at CEG events included lithium batteries, PCB light ballasts, fluorescent lamps, and petroleum-contaminated soil.

program requires submission of a registration form and approval by DEQ's event contractor. The approved registration form serves as a bill of lading for transportation to the waste collection site.

Previous experience with agricultural pesticide collections pre-dates the Universal Waste designation. Again, using one-time funds from EPA, DEQ was able to offer collection events in The Dalles in 1991 and 1993. The 1991 event brought in approximately 20,000 pounds of pesticides from about 40 farmers. Data from The Dalles is not available for the 1993 event. The 1993 event was part of a series of eight events around the state that brought in a total of 318 growers with an average of 278 pounds of pesticides per grower. The most common pesticides collected (statewide) through these eight events were DDT (18% of total), Dinoseb (9%), 2,4-D (5%), Lindane-BHC (3%), Arsenate compounds (3%), Malathion (1%), and Parathion (1%).

2.6 Used Motor Oil and Lead Acid Battery Programs

As part of their solid waste permit requirements, all transfer stations and landfills in Oregon are required to provide drop-off recycling for used motor oil and lead acid batteries (among other items). Within the Tri-County area, the only operating landfill is the Wasco County Landfill, which is owned and operated by Waste Connections, Inc. Transfer stations are located in or near Biggs Junction (operated by Sunrise Sanitation, and servicing Sherman County as well as the Celilo area), The Dalles (operated by Waste Connections), Hood River (operated by Waste Connections), the Maupin area (operated by Mel's Sanitary Service), Shaniko, and Antelope. Presumably, all of these transfer stations provide collection of used motor oil and lead acid batteries.

In addition, Waste Connections provides curbside collection of used motor oil to residential customers in those areas with curbside recycling. It is assumed that most of the motor oil collected at the transfer stations and through curbside routes is a result of "do-it-yourself" (DIY) oil changes. Research in Washington, Oregon, California, and elsewhere indicates that a significant amount of DIY waste oil may be released inappropriately to the environment, causing significant pollution of soils, and ground and surface water. In fact, reducing groundwater contamination from motor oil has been identified by DEQ drinking water staff as a top priority, particularly in areas with shallow drinking water aquifers below residential neighborhoods. Providing convenient collection opportunities for DIY'ers to safely manage motor oil, such as curbside recycling, is a critical public service from an environmental perspective. What is not well understood at this time is what percentage of the waste motor oil is being collected through these systems, and how much is still being disposed of inappropriately.

3. Overview of HHW Management Needs

There are no regular, convenient options for households and CESQGs in the three counties to dispose of their hazardous wastes except mixed with regular garbage, with the exception of used motor oil and lead acid batteries. Permitted municipal solid waste facilities are legally acceptable disposal sites for most hazardous wastes from CESQGs and households.

3.1 Overview of Risks

The following list provides examples of how HHW and CESQG waste may harm peoples' health and the environment.

Product Use. When used improperly (for example, at high application rates), some pesticides may enter groundwater, or runoff from lawns and gardens into storm drains, and from there into rivers, killing aquatic life and contaminating drinking water.

For example, DEQ has been conducting stream monitoring in the Hood River Valley for orchard pesticides. Lorsban/Dursban and Guthion have recently been found in concentrations exceeding state standards in the main stem of the Hood River, as well as Neal Creek and Indian Creek. Pollution in Neal Creek is assumed to be from orchards. The pollution in Indian Creek could be from orchards or may be from a golf course or urban runoff. Other streams have not been monitored and monitoring has not been conducted for other hazardous substances.

Product Storage: Poisonings. Improperly stored products can result in accidental poisonings, especially among children. According to the *American Journal of Emergency Medicine* (September, 1999), there were almost one million exposures to non-pharmaceutical HHW reported to poison control centers in 1998, including 241 deaths and 3,027 "major impacts", which include comas, brain damage, and major burns, lung damage, and disfigurement. Assuming that these impacts are equally distributed across the nation, pro-rating these impacts to the tri-County area equates to twelve "major impacts" and one death over a 25-year period.

Product Storage: Fire Hazard. Storage of flammable products (solvents, fuels, oil-based paint) in homes may start fires, add to the fuel load of buildings, and endanger firefighter safety.

Waste Collection. There have been several reported incidents in Oregon of workers at solid waste disposal facilities being injured or endangered as a result of hazardous waste disposal from households. For example, some pool chemicals are highly reactive and can release a poisonous chlorine gas that can severely disable or even kill. Flammable products may ignite inside the collection vehicle or disposal site. While no hazardous waste-related deaths have been reported among solid waste workers in the tri-County area, there have been several incidents where workers have been sprayed with unknown liquids in solid waste, and one case where a garbage truck driver inhaled fumes from pool chemicals disposed in the garbage. At least two local cases resulted in workers compensation claims.

Product Disposal: Illegal Dumping/Storm Drains. Area environmental specialists can recall several instances of complaints about residents dumping hazardous wastes down storm drains or into rivers or on land. These include a home-based engine repair business that was dumping antifreeze down a storm drain in The Dalles, as well as several households where neighbors have complained of motor oil being dumped down storm drains. DEQ has responded to several such complaints in The Dalles. Several years ago, the City of Hood River's Engineer reported that the City was responding to approximately one report of HHW disposal (using storm drains) a month. It is a fair assumption that many more events per month were going unreported. Paint and motor oil were the most common reported wastes being dumped. The city storm drains lead directly to several creeks. Some drain into the Hood River system, which is home to ESA-listed steelhead and bull trout.

According to Anne Saxby, Director of the Hood River Soil and Water Conservation District, several years ago a County Public Works crew dumped a solvent into what they mistakenly believed was a holding tank. It was a storm drain, and the solvent was reported by neighbors downstream on Paradise Creek.

Conversations with orchardists and anecdotal evidence suggests that some orchards and other agricultural sites may be disposing of unwanted pesticides or other hazardous products in ravines or other areas on their property. According to Anne Saxby, old drums and barrels are visible from the Mt. Hood Railway in several ravines.

Oregon State Police report having found batteries and cleaning materials buried in The Dalles, and "construction materials" left next to Fifteenmile Creek. A DEQ representative who has conducted limited surveys of streams has found empty pesticide containers next to a stream on one

occasion. Anne Saxby reported finding a renter washing his paintbrushes in a creek. An earlier watershed coordinator found seven barrels in Indian Creek (and the barrels are still there). A high school advanced biology class surveys and monitors Indian Creek each year and they have found some historic dumping sites as well as a spot where, according to Anne Saxby, "an orange goo is leaking into the creek".

According to a local representative of the Oregon Department of Fish and Wildlife, there are frequent smaller spills of unknown substances in the urban areas that cause contamination of wetlands and kill aquatic life. These incidents are referred to as "ghost kills" because the sources are unknown, but they are assumed to be the type of chemical that would be considered HHW.

Hazardous wastes are also dumped on National Forest Service lands in the three-county area. Staff from the Barlow Ranger District report finding hazardous waste dumped on forest lands an average of twice each year. Quantities are usually small (about 20 – 30 gallons) but require cleanup by an environmental contractor. This represents only the hazardous waste which is found or reported to Forest Service staff; given the large size of forest lands, actual amounts of materials dumped is probably higher.

Oiling of Roads. According to Jeff Ingalls, a DEQ hazardous waste inspector, complaints from the public about used motor oil being applied to roads for dust suppression are common all summer throughout the three counties (and other areas). It is illegal for a business to apply used motor oil to any type of road, even their own (on private property). Households may apply motor oil to their own private driveways, but not on public roads, although even this is strongly discouraged by DEQ. While the practice of applying used oil for dust suppression has decreased some in recent years, some have commented that this practice can still be observed in all three Counties.

Product Disposal: Landfills and Incinerators. Even disposal of some types of HHW in lined, RCRA Subtitle-D compliant landfills (such as the Wasco County Landfill) can result in environmental damage. For example, mercury disposed of with regular garbage can evaporate (volatilize) or leach out of the landfill. Volatized mercury eventually re-enters aquatic environments in the form of methyl mercury, where it accumulates at increasing concentrations in the fatty tissues of fish, wildlife, and humans, causing neurologic and other damage. The addition of solvents and acids into landfills can cause heavy metals and other contaminants to become more mobile. The addition of ignitable wastes can contribute to landfill fires.

Product Disposal: Wastewater Treatment Systems. Some households (and CESQGs) may opt to flush certain hazardous wastes into the sewer. A survey of small businesses in Montgomery County, Maryland, found that 13% of hazardous waste from CESQGs there is disposed of down the sewer. Research in King County, Washington, has found that approximately 20% of hazardous waste from households and CESQGs enters the stormwater and wastewater systems. Some types of HHW can damage drain lines, leak into surrounding soil, or damage wastewater treatment systems (including on-site septic systems). HHW disposed of in on-site drain fields can contaminate groundwater down gradient. Other types of HHW can pass through wastewater systems and be released to the environment in the form of wastewater or metals accumulation in waste solids (sludge).

In February of 2002, the Mosier Wastewater Treatment Plant experienced an upset that caused the plant's discharge to exceed permitted effluent limits. The plant operator had to transfer waste from Mosier to the treatment plant in Hood River for processing there, and twice had to haul sludge from Hood River back to Mosier in order to restart biological activity in the treatment plant. Although the exact cause of this upset has not been determined, it is hypothesized that a resident or business may have dumped a hazardous waste

into the sewer. Because of the plant's small size, it is susceptible to being overwhelmed by a disposal of hazardous waste into the sewer.

Groundwater Contamination. The improper dumping of HHW on the ground or disposal in on-site septic tanks or drain fields easily contaminates drinking water in shallow aquifers. In addition to motor oil, which is pervasive in its use throughout the planning area, of particular concern are commercially-available drainfield degreasing agents such as tetra- or perchloroethylene, methylene chloride, 1,1,1-trichloroethane, trichloroethylene, and other cleaners containing chlorinated hydrocarbons. All of these compounds are known or suspected carcinogens, and some continue to be sold in Oregon as "septic field/drain cleaners". Several studies in other communities have found high concentrations of these and other carcinogens in domestic septic tank effluent and in down-gradient wells.

Endangered Species Act Liability. In addition to these health and environmental risks, the counties and cities may be liable under the Endangered Species Act for the release of hazardous waste into streams that negatively impact listed species. Under the Endangered Species Act, populations of Steelhead, Chinook Salmon and Chum Salmon in all (Steelhead) or part (Chinook, Chum) of the planning area have been recently listed as threatened. The Endangered Species Act (ESA) has been triggered because actions required to protect these species of fish and avoid extinction are not in place. Under Section 4(d) of the ESA, blanket rules protect the listed fish until tailor-made measures are approved and ready to take their place. These blanket restrictions are intended to reduce the "take" of listed species. The definition of "take" includes modifying or degrading habitat where it kills or injures a species by impairing its ability to breed, spawn, rear, migrate, feed or find shelter. For example, the National Marine Fisheries Service, in its list of activities that "could have a high risk of resulting in take", includes "discharging pollutants, such as oil, toxic chemicals, radioactivity, carcinogens, mutagens, teratogens or organic nutrient-laden water including sewage water into a listed species' habitat." Such discharge could be direct (spraying herbicides on a stream bank) or indirect (run-off of oil from streets into a stream through municipally owned stormwater conveyance systems).

For these reasons, there is a need to reduce the negative impacts of HHW on human health and the environment. This need is expected to continue into the foreseeable future. Better management of HHW can help address all of these problems.

3.2 Waste Specific Considerations

Not all HHW is equally hazardous to human health and the environment. Recent changes to DEQ's HHW program reflect this fact. DEQ's HHW program now focuses on waste types that have been identified as "high hazard" wastes. These include the following:

- Poisons: pesticides, herbicides, fungicides, PCBs, and other poisons. Many types of pesticides, for example, can have significant negative impacts on the environment and human health when applied in excessive amounts or in inappropriate ways. Poisons are also hazardous to human health if not handled, stored, or applied with the appropriate precautions.
- Heavy metals: mercury and products containing elemental mercury (thermostats, thermometers, fluorescent lamps, and some automotive switches), Nickel-Cadmium (Ni-Cd) batteries, lead acid batteries. Many heavy metals are persistent in the environment and difficult to effectively transform into environmentally benign materials. Some heavy metals, such as mercury, are likely to bioaccumulate if they enter the food chain. Exposure to heavy metals can cause various long-term human health problems and also have been associated with birth defects.

- Flammables: solvents, gasoline, kerosene, other fuels and oil-based paint. Flammables can contribute to dangerous fires in trash collection vehicles and transfer stations. They can also be the cause of fires in homes, or contribute to the fuel load of fires in homes.
- Reactives and corrosives: acids, bases, oxidizers and reactives (such as pool chemicals). These can also present dangers to trash collection workers and vehicles and can be dangerous for young children if they are exposed to them at home. Reactive materials can cause spontaneous combustion or lead to explosions. Corrosives can also cause dangerous chemical reactions if they are co-mingled in the waste stream inadvertently.

Motor oil is also identified by DEQ as a moderate priority waste. Used oil can contain such contaminants as lead, magnesium, copper, zinc, chromium, arsenic, chlorides, cadmium, and chlorinated compounds. Oil poured down drains or onto the ground can work its way into our ground and surface waters and cause serious pollution, particularly in areas with shallow aquifers used for drinking water. One gallon of used oil can foul a million gallons of drinking water. Federal reports indicate that used motor oil accounts for more than 40 percent of the total oil pollution of our nation's harbors and waterways. In some rural areas, there is no convenient method for residents to safely dispose of used motor oil.

One of the largest constituents of waste traditionally collected at HHW events is latex paint. Latex paint manufactured more than 20 – 30 years ago tends to contain significant amounts of hazardous materials such as mercury, lead and fungicides. Many hazardous constituents ceased to be added in latex paint formulations in the mid- to late 1970s, or continue to be used but in lower concentrations. As a result, the amount of old, hazardous paint in the "average" blend of latex paint that is collected at events in Oregon is typically diluted enough that the blend of all latex paint aggregated together no longer meets the legal definition of being a "hazardous waste".

Future collections of waste latex paint should show a continued decrease in hazardous constituents. Because of this, a growing number of HHW programs are encouraging residents to dry latex paint at home (through evaporation or mixing it with an absorbant such as kitty litter) and dispose of the solids as solid waste.

4. Recommended Approach

4.1 HHW Management Options

Generally speaking, there are three types of HHW services that the counties could reasonably implement:

- Public education, including education about safer alternatives, poison control, the dangers of improper storage and disposal, storm drain stenciling, and education to support collection programs.
- Comprehensive HHW collection programs, such as one-day events or permanent facilities that accept all types of wastes.
- Specialized collection systems for motor oil, such as drop-off depots in rural areas, or enhanced curbside collection opportunities. Motor oil in particular is targeted because it is a ubiquitous waste type and relatively small amounts can significantly contaminate soil and water.

The cities and counties will explore appropriate opportunities to educate the public about safer alternatives, poison control, the dangers of improper waste storage and disposal, and environmental and health impacts of inappropriate disposal. The cities and counties will also continue to explore opportunities to improve the collection of motor oil from households.

Planning Committee members and elected officials have reviewed several different options for comprehensive HHW collection. Five alternatives were studied in detail. These alternatives are summarized below and qualitatively evaluated in Table 4; rough pro-forma cost estimates are included in Appendix C. These cost estimates are

for provision of HHW collection only and do not include collection of CESQG waste or agricultural pesticides.

Alternative A: Collection Events
The cities, counties, waste companies, or other organizations would sponsor a series of HHW collection events around the area. There may be one to four events per year. Presumably, events could be held in different locations, with higher-population areas receiving more frequent service. The events would function similar to the events that DEQ has sponsored in the past, except that these events would be locally funded. The events could use a combination of County, City, solid waste company, and/or contractor staff. This approach has been taken by Tillamook, Benton, and Jackson Counties, among others.

Alternative B: Small Permanent Facility; No Other Services
The cities, counties, waste companies, or other organizations would sponsor the siting and operation of a small permanent facility to accept HHW from the public. A variety of facility designs and sizes exist, ranging from small and simple to large, complex, and expensive. The facility might consist of a pre-fabricated storage building, with ventilation, spill containment, and fire suppression features. There would be controlled, covered areas for accepting waste from the public, and consolidating/repacking wastes for storage and shipment.

Access to the facility would be controlled. It could be located at or adjacent to a transfer station, fire station, public works yard, wastewater treatment plant, or other similarly zoned land. The facility would require a permit from DEQ.

The facility would be open to the public anywhere from four to twenty (or more) days per year. Vehicles would queue up to use the facility. Users could be required to pre-register in order to control costs and reduce waits. Wastes would be removed from vehicles in order (just like at a collection event) and set-aside for identification and packing. Some wastes may be "lab packed" into larger drums in their original containers, while others might be drained and mixed together. Waste drums would be segregated in different bays or compartments of the storage unit. When several drums are full, or at least every 90 or 180 days, the facility operator would arrange for removal by a licensed contractor.

In Oregon, Lane County has implemented this approach.

Alternative C: Small Permanent Facility with Satellite Collection Services in Other Cities
This alternative includes the same type of facility as described in Alternative B. However, it would expand collection service in other parts of the service area through the use of smaller satellite events (such as those described in Alternative A). Staff from the permanent facility, using a special collection vehicle would service the events. The vehicle may be trailer or truck, specially designed for collection and transport of HHW. Waste collected at the satellite events could be loaded into the truck for transport to the facility, where the wastes would be further sorted and packed for eventual removal.

In Oregon, this type of service is provided by Metro, the regional government of the Portland area. Metro operates two large HHW facilities (in Oregon City and Northwest Portland), and provides collection events in neighborhoods distant from those facilities.

Alternative D: Small Permanent "Hub" Facility with Smaller Satellite Facilities/Cabinets
In addition to the permanent facility of Alternative B, this alternative would add one or more "hazardous waste cabinets" or other smaller, satellite facilities in population centers that aren't well serviced by the main permanent facility. For example, if a permanent facility (as in Alternative B) were constructed in The Dalles, hazardous waste cabinets or hybrid facilities (more than a cabinet but less than a full facility) might be installed at the transfer stations or fire stations in Hood River, Biggs Junction, and central or

Table 4.
Qualitative Evaluation of Alternatives

	Major Advantages	Major Disadvantages
Alternative A: Collection Events	• No facility siting or construction. • Flexible – can serve different areas. • Probably the least expensive of the options (unless there are a large number of events). • Relatively easy to discontinue service if ongoing funding is not available.	• Not very convenient; residents must wait for the next event. • No funding available from DEQ. • Does not serve home sellers, a significant source of HHW.
Alternative B: Small Permanent Facility, No Other Services	• Provides more frequent opportunities for residents to safely dispose of HHW than events. • Allows for "use by appointment", both for home sellers (a major targeted population) and as a method to control access and cost. • Partial funding available from DEQ. • Provides opportunity for HHW re-use, which can lower costs. • Provides opportunity to serve CESQGs that can also lower per-pound HHW costs.	• Requires permit from DEQ. • Accepting DEQ grant funds requires a commitment to continue operation and meet minimum performance standards for at least 5 years. • More days available than events but less convenient than events in areas distant from the facility.
Alternative C: Small Permanent Facility with Satellite Collection Services in Other Cities	• All of the advantages of Alternative B. • Provides broader, more convenient service in more areas.	• Permanent facility requires permit from DEQ. • Accepting DEQ grant funds requires a commitment to continue operation and meet minimum performance standards for at least 5 years. • More expensive that Alternatives A or B.
Alternative D: Small Permanent "Hub" Facility with Smaller Satellite Facilities/Cabinets	• All of the advantages of Alternative B. • Provides broader, more convenient service in more areas. • HHW cabinets may be the most convenient to residents, if co-located at transfer stations or other regularly staffed sites.	• Permanent facilities require permits from DEQ. • Accepting DEQ grant requires a commitment to continue service for five years. • Probably most expensive option. • Highest demand on local staff.
Alternative E: Multiple Facilities and Satellite Events	• All of the advantages of Alternative B. • Provides broader, more convenient service in more areas.	• Permanent facilities require permits from DEQ. • Accepting DEQ grant requires a commitment to continue service for five years. • Relatively high cost.

southern Wasco County (Maupin, Antelope). The cabinets or storage buildings would be located in areas with controlled access. Larger satellite facilities might require more extensive environmental protections, akin to what might be required of the hub facility. The public could bring hazardous waste to the satellite sites on a regular basis. Staff at the host sites (transfer stations, fire stations, etc.) would need to be trained in basic hazardous waste identification and segregation, to avoid accepting and storing incompatible wastes together. Wastes would be placed in the cabinets by the facility staff, for regular removal by the waste collection vehicle. Waste would be driven from the satellites back to the hub facility for further sorting and packing and eventual transport out of the area.

While this approach has been used in communities in other states, it is a new approach in Oregon.

Alternative E: Multiple Facilities and Satellite Events

This alternative is a hybrid approach of Alternatives C and D. At least two permanent facilities would be built and operated (probably in Hood River and The Dalles, which are the two major population centers). Residents in all areas of the three counties would be free to use these facilities. Small satellite collection events would be offered in areas distant from the permanent facilities.

4.2 Overview of Selected Hazardous Waste Collection Option

This Plan identifies new services which the cities and counties adopting this Plan, working in partnership with the waste haulers and other interested parties, will implement to address the problem of hazardous waste from households and CESQGs, as well as agricultural pesticides.

The proposed new hazardous waste program consists of the following:

- The counties, cities, and area waste collectors will continue to provide both the collection and recycling of motor oil and lead acid batteries (as described in Section 2.6, above).

- A permanent "hub" facility will be constructed and operated in The Dalles. This facility could be co-located with the Waste Connections Transfer Station, and operated by Waste Connections under contract to the local governments (program management and contracting is discussed in Section 6).

- A second, smaller facility will be constructed and operated in Hood River County. This facility could be co-located with the Waste Connections Transfer Station on Guignard Drive, and will be operated by Waste Connections under contract to the local governments (program management and contracting is discussed in Section 6).

- Both of these facilities will provide a secure, protected location for waste acceptance, identification, packing, and temporary storage.

- A series of collection events for residents, held on a regular basis and sponsored by the local governments. Initially, at least eight small events will be held per year in Hood River County, and at least eight small events will be held per year in Wasco and Sherman Counties (together).

- It is anticipated that the majority of these events will be held at the two permanent facilities. It is expected that each event will accept waste from the public for a period of approximately four hours. This allows sufficient time for waste packing and site clean-up after waste acceptance ends.

- However, at least one event per year will be held in Cascade Locks, and at least one event per year (or every other year; to be discussed with Sherman County and the Planning Committee at the next meeting; see Section

5.3.3) will be held in Sherman County. Additional satellite events may be held in south Wasco County. Waste at these events will be packed in secure containers and loaded into a specially designed truck or trailer for hauling to the permanent hub facility. There, wastes will be further packed and consolidated. This same trailer will also be used to transfer wastes from the Hood River facility to the facility in The Dalles, as needed.

- Both facilities, and all events, will be open to all residents of the three counties (Hood River, Wasco, and Sherman), although it is expected that most event participants will not travel more than 15 or 20 minutes from home to participate.

- In-between events, the permanent facilities will also serve as a location where residents who can't wait for the next event (primarily those selling and cleaning out their homes) can drop-off HHW, on an appointment-only basis.

- All of the services described above will also be available for CESQGs as well as deliveries of waste pesticides.

- Consolidated wastes will be periodically removed from the permanent facilities by a fully permitted and trained contractor, and sent to permitted Treatment, Storage, and Disposal (TSD) facilities for safe recycling, incineration, or disposal.

- The counties and cities will educate residents in the reduction, proper use, storage, and disposal of household hazardous waste. This will be done in conjunction with the partners listed above, as well as the DEQ, schools, poison control professionals, fire departments, and other organizations. The exact details of these education efforts will be determined as part of program implementation.

- The counties and cities will identify needs and opportunities to improve collection of waste motor oil, and support the implementation of enhanced collection services as appropriate.

Elements of these new services are explained in greater detail below.

4.3 Targeted and Accepted Wastes

4.3.1 Targeted Wastes

The Tri-County hazardous waste collection program will place emphasis on collecting the most highly hazardous wastes, as identified by DEQ. There will be a special focus on collection of the following waste types:

- **Poisons:** pesticides, herbicides, fungicides and other poisons.
- **Heavy Metals:** mercury and products containing elemental mercury (thermostats and thermometers, fluorescent light tubes, mercury batteries), Nickel-Cadmium (Ni-Cd) batteries, lead-acid batteries.
- **Flammables:** solvents, gasoline, kerosene, other fuels, oil-based paint, and flammable solids.
- **Corrosives:** acids, bases, and reactives (such as pool chemicals).

4.3.2 Accepted Wastes

Wastes that will be accepted through the collection system includes the following:

Paints, Stains, and Solvents
- Oil-based paint and stains
- Latex paint, water-based stains (but see Section 4.3.5)
- Aerosol paints
- Other paints (pool, marine, auto)
- Solvent-based cleaning fluids
- Water-based cleaners

Pesticides and Poisons
- Solid, non-flammable pesticides
- Aerosol pesticides
- Liquid pesticides
- Solid, flammable pesticides

Corrosives
- Acids
- Bases (drain cleaners, oven cleaners)
- Reactives
- Oxidizers

Other Automotive Products
- Motor oil (new and used; but see Section 4.3.4)
- Contaminated, used motor oil
- Antifreeze (new and used)
- Vehicle Batteries (but see Section 4.3.4)
- Other automotive fluids

Other Household Products
- Household batteries, NiCds, buttons
- Polishes, waxes, soaps
- Thermometers, thermostats
- Fluorescent light bulbs, ballasts

4.3.3 Non-Accepted Wastes

Wastes that won't be accepted by the new HHW collection system include the following:

- Explosives. Few HHW programs accept any explosives but in some areas near coasts and water bodies, there are few options to manage spent emergency flares (required in all boats over 16') and so some programs team up with the Coast Guard or fire departments to accept these and then let the fire departments manage them. Adding these wastes as an option will be explored at a later time.

- Radioactive materials (with one possible exception being if the selected Treatment, Storage and Disposal facility has a reasonably priced option to manage smoke detectors).

- Asbestos.

- Sharps (needles). An existing alternative for safely disposing of sharps is already provided through the solid waste transfer stations.

4.3.4 Motor Oil and Lead Acid Batteries

Motor oil and lead-acid batteries from households are best managed through the solid waste transfer stations or curbside collection (for motor oil). Residents bringing these materials to HHW collection services will be informed of the year-round availability of these services. In the case of events held at HHW facilities co-located with transfer stations, the location of oil and lead-acid battery drop-off points will be identified and customers will be asked to deposit the materials there, themselves. In this way, more people will learn about these year-round recycling opportunities for these special wastes.

Promotional materials for the events will not list motor oil and lead acid batteries as wastes to be accepted at the events (although they will be); promotional materials may list other locations that accept these waste types. If motor oil collection opportunities are enhanced, special promotional activities will be conducted (separate from the comprehensive HHW collection) to increase participation in motor oil recycling.

Most used motor oil can be managed at relatively little cost. However, used motor oil contaminated with chlorinated compounds or other contaminants can be much more expensive to manage. Used oils from businesses are more likely to be contaminated than used oils from residents. Used oils from businesses will be managed under the CESQG program and will be tested for contamination as part of waste determination and packing. "Clean" oils will be managed together, and will not be consolidated with contaminated oils.

4.3.5 Latex Paint

Latex paint poses a special challenge to HHW collection programs. Latex paint has always been collected along side other, more hazardous

materials at HHW collection events in Oregon. The volume of latex paint is significant, accounting for 33% (by weight) of all waste collected at HHW events in the Tri-County area from 1992 – 2000.

However, the majority of latex paint collected at these events does not meet the definition of a "hazardous waste". Latex paint is neither a RCRA-listed waste, nor is it ignitable, corrosive, or reactive. Older latex paint that contains mercury and/or lead is a hazardous waste because of its toxicity. Other latex paints may still contain toxic materials such as certain fungicides, however, typically not at levels high enough to cause them to be classified as "hazardous" under federal or state law.

Thus, a majority of latex paint collected at HHW programs does not need to be managed as a hazardous waste. Old latex paint may contain hazardous constituents, however, in lower quantities than other waste types. As such, it can either be reblended into a "recycled" paint, or it can be solidified using bentonite or a similar substance, and disposed of as regular solid waste. Recycling is typically fairly expensive unless there is demand for a low-quality gray/brown finished product, as higher quality product requires color sorting, blending, and screening to remove solids. In addition, recycling of latex paint may spread heavy metals (although at legally accepted concentrations) in the environment.

As a result, communities that collect HHW have several options for latex paint. First, they can discourage or even prohibit people from bringing latex paint to collection events, encouraging them instead to donate or solidify the paint at home. At-home solidification and drying can have several drawbacks, however, including increased local air pollution, disposal of hazardous solids (for older paints), and if done improperly, exposure of children or animals to the still-liquid paint.

If latex paints are accepted, management options include removal by a contractor for recycling, on-site recycling, or solidification. Solidification is typically the least expensive approach and is initially the preferred option for the Tri-County collection program, at least during start-up. Paint recycling can be explored as a possible service enhancement once the basic collection program is established.

The DEQ has developed draft sorting guidelines for latex paint. A copy of these guidelines is included in Appendix A. These guidelines involve reading labels and looking for dates, key words, and certain colors. (Containers of paint without labels must be managed as a RCRA hazardous waste.) These guidelines are intended to help separate paints that have a high likelihood of being RCRA hazardous wastes (because of toxicity) from those that can be solidified and disposed of with solid waste. The Tri-County hazardous waste collection programs will use these guidelines in order to reduce the recycling or solid waste disposal of latex paints that are more hazardous. These more hazardous latex paints will be managed as hazardous waste.

4.4 HHW Collection: Functions and Activities

4.4.1 Permanent Facilities: Acceptance, Identification, Packing, and Storage

The permanent HHW facilities serve four primary purposes: waste acceptance, waste identification, waste packing, and waste storage.

Waste acceptance includes collection events held at the facilities, as well as special use of the facilities on an appointment-only basis by individuals and CESQGs. Appointment-based use of the facilities by residents will be limited to circumstances where the resident clearly cannot wait for the next regularly-scheduled event, such as a family that is selling their home, or are cleaning out the garage of a recently deceased parent.

Waste identification involves the classification of wastes into pre-determined categories so that

compatible wastes are stored together and incompatible wastes are kept separate. Definitions of compatible and incompatible are a function of reactivity, safety, end-user (TSDF) requirements, economics, and available storage space.

Waste packing generally consists of three approaches:

- loose packing (wastes are kept in their original containers, and packed together into totes, drums, or containment pallets);
- lab-packing (the same as loose packing, but with the addition of absorbent material around the containers, in order to protect containers during shipment and absorb any spilled liquids); and
- bulking (wastes are drained or emptied from their original containers into a bulk liquid "soup" of compatible wastes).

Packing methods and materials are determined for each type of waste in accordance with U.S. Department of Transportation regulations.

Finally, **waste storage** provides for the temporary storage of full- or partially full containers prior to eventual removal of wastes from the facilities.

For wastes brought by the public directly to the HHW facilities, the facilities provide a location for all four of these primary functions. However, activities at the two facilities will vary slightly.

The Wasco County facility will be designed as the regional "hub" for all HHW collected in the three counties. The Hood River County facility will be designed with the ability to operate as a stand-alone HHW facility independent of the Wasco County facility. However the proposed site of the Hood River County facility provides for less space than the proposed site in The Dalles. There are also potential cost efficiencies to be gained by consolidating some wastes at a single location prior to moving them out of the Tri-County area. Therefore, a portion of the wastes collected at the Hood River County facility will be transferred to the Wasco County facility.

As such, the activities of waste acceptance, identification, packing, and storage will vary slightly between the two facilities. The Wasco County facility will conduct all of the activities described above, in addition to waste acceptance from the Hood River County facility (and satellite collection events, described in detail below).

Wastes collected at the Hood River facility may be loose-packed or lab-packed, either for transfer to The Dalles, or storage on-site and eventual waste removal. Most waste removal contracts charge a fixed fee per shipping container (drum, pallet box, etc.) regardless of whether the container is full or empty. If the Hood River facility can accumulate enough wastes to fill transport containers (without violating accumulation time limits; see Section 4.11 below), these containers will be stored on site for eventual waste removal. However, if there are cost advantages to consolidating all of the wastes in one location, wastes will be transferred to The Dalles for consolidation. (It is also possible that in special circumstances, wastes from The Dalles could be consolidated at Hood River.)

Bulking of liquid wastes may occur at both facilities. However, because of the heavy weights and potential for spills, wastes will not be consolidated if they have already been bulked (for example, pouring a half-full 55-gallon drum into another half-full drum). Because of inhalation-related health concerns involved in bulking solvents and pesticides, the program operator will be careful to comply with all OSHA and other safety regulations.

Decisions involving when, how much, and in what manner (lab packing, loose packing, full drums, etc.) to transfer of wastes from Hood River to The Dalles is a function of costs, storage capacity, staff locations, hazardous waste contractor/removal fees, timing (accumulation limits) and other factors. Over time, the facility operator will learn the most cost-effective way to decide which wastes are transferred, and when.

It is assumed that the collection trailer will be used at most collection events at the Hood River facility. This provides the maximum flexibility to collection program staff. Wastes collected during events in Hood River may be bulked on-site, with drums stored at Hood River or transferred that day to The Dalles. Other wastes may be loose packed or lab packed, and again stored on site or transferred that day to The Dalles. Depending on the volumes of wastes collected, the time of day, staff availability, and weather (working conditions), more or less wastes may be stored inside the Hood River facility for bulking, packing, and/or removal to The Dalles at a later date.

Thus, storage of wastes at the facilities is essentially of two types. The first type is wastes that have been identified and packed into their final shipping containers (either at the facility, or at satellite events). The majority of waste stored on-site at any one time will be in this form. In most cases, the final shipping containers will be 55-gallon drums. In all cases, only Department of Transportation approved shipping containers will be used.

The second type of storage will consist of relatively small amounts of wastes, in their original containers, stored on shelves, or in containment pallets or totes. Incompatible wastes will be stored in separate containment totes. These wastes will be re-identified and packed into their final shipping containers at one of the next facility-based collection events (or in the case of the Hood River facility, transferred to The Dalles for final packing). This second type of storage is a temporary measure to allow for waste acceptance in-between collection events, without requiring final waste identification, bulking, and/or lab-packing each time waste is brought to the facility. Also, in the event of inclement weather or higher than anticipated collection volumes at individual events, this temporary storage measure allows for final packing of wastes at a more measured and reasonable pace, following the day when the wastes are initially accepted.

4.4.2 Satellite Collection Events

Wastes collected at satellite events in Cascade Locks, Sherman County, and south Wasco County will be handled slightly differently than wastes collected at the permanent facilities.

Waste acceptance and preliminary identification will occur at the events. Wastes received at the satellite events may be packed into their final shipping containers, so that when the trailer delivers these wastes to the facility, the containers are simply transferred to the facility for temporary storage. This avoids the extra costs of double handling. Wastes that are difficult to classify in the field will be placed (in their original containers) into containment totes for transport to the permanent facility in The Dalles and final identification there. Similarly, in case of inclement weather or other logistical difficulties at the satellite events, some wastes collected at these events may be transported back to the permanent facility in The Dalles in containment totes, for eventual re-packing and storage.

4.4.3 Special Collections

Wastes delivered to the facilities by individuals and CESQGs on days other than regularly scheduled collection events will undergo preliminary identification at the time of delivery so that incompatible wastes are kept separate. Depending on the types of waste, the certainty of identification, and staff availability, these wastes may be packed in their final shipping containers at that time, or stored on shelves or in containment totes inside the facility for final identification and packing at a later date.

4.5 Facility Descriptions

While the Hood River facility will be smaller than the facility in The Dalles, basic features of both facilities are the same.

Each facility will consist of a small storage building, a metal canopy, and sealed concrete flooring. If required by DEQ, each facility will

also be surrounded by security fencing (this may not be necessary if the facilities are co-located at transfer stations that already have security fencing). The main entrance(s) to each storage building will be located underneath the canopy. The building may extend slightly beyond the protection of the canopy, although the building should be shaded from the sun during most hours of the summer months. The main purpose of the canopy is to maintain a dry work area for waste acceptance, identification, and packing, which will occur underneath the canopy but not inside the building. The building is for waste storage only; packing will not occur inside the building. The canopy also keeps the storage building and work areas in shadow during most times, which will help to reduce temperatures inside the storage compartments.

In most cases, partially full drums will be transferred from the building to the covered area for waste packing underneath the canopy. Some types of collected wastes may also be stored underneath the canopy, in appropriate containers (55-gallon drums, etc.), if allowed by DEQ and the local land use permit. Examples of wastes that might be stored outside, under the canopy include motor oil, antifreeze, lead acid batteries, fluorescent light tubes, and materials set aside for the reuse program (see Section 4.18). Storage space inside the building will be at a premium, so the counties will work with DEQ and the local permitting authority to identify those wastes that can be safely stored outside of the building.

The storage building envisioned at each facility is a 3-compartment, pre-fabricated building with 2-hour fire-rated steel construction. Separate compartments will be provided for oxidizers/reactives, flammables, and poisons. Each compartment will have its own door, passive ventilation, and containment sump. The building will have the assurance of Factory Mutual Systems approval UL classification and state certification. It will be designed to comply with EPA, OSHA, Uniform Building & Fire Codes, BOCA National Building and Fire Codes and the National Electric Code for use in Group H (hazard-containing) occupancies.

The compartments will be used to keep labeled and dated drums or containers of incompatible materials separated. Drums will not be stacked, and compartments will be configured to provide for storage of drums in rows so that all drums can be accessed by aisles at least 3-feet in width. Each storage building will be equipped with explosion proof lights and exhaust fans, a chemical resistant sump liner, floor grating, emergency eye wash and shower, and a dry chemical fire suppression system. Compartments will be sized based on the anticipated need for storage capacity. The compartment for storing oxidizers and other reactives may be quite small, with capacity for 4 to 7 drums, while the compartment for storing flammables and poisons/pesticides may be significantly larger. Shelves above the drums can be used to store bins and individual items to be packed or consolidated into drums (or, at the Hood River facility, transferred to The Dalles for consolidation).

The canopy pad, where waste unloading, shipping, identification, and packing occurs, will be constructed of structurally reinforced concrete, and sealed with an epoxy coating or other solvent barrier. The working area will slope to a locking drain or sump for containment of spills. The entire canopy, pad and surrounding areas will be designed to minimize surface water run-on and runoff. Because the bottom of the doors of the storage building may be 9 to 12 inches above the base of the building (in order to provide space below the building floor for containment sumps), a curb will be built across the pad. The working area will be elevated relative to the other half of the pad, which is where the storage building will be placed, adjacent to the curb. When the front of the building is placed flush against the curb, the bottom of the doors will be level with the working surface of the canopy pad where waste packing occurs. The working surface of the canopy pad will slope slightly away from the curb (to a sump), so that any accidental spills don't go underneath the storage building. This design will

allow easy transfer of drums between the working area and the storage building, without the need for ramps into the building.

Ideally, the pad, canopy, building, and fencing will be designed in such a manner as to allow flexibility and growth in the program. For example, it may be desirable in the future to add a second storage facility. Providing and reserving a small area for potential expansion adjacent to the first facility will provide for future flexibility. Consideration of prevailing winds (and rain) should impact the placement of these structures relative to the canopy, so that the working area under the canopy is sheltered on the windward side, if possible. On another side of the canopy, space should be reserved for cars to pull in next to the canopy so that wastes can be unloaded and directly placed on carts or tables underneath the canopy. Adequate space for egress by vehicles should be provided so that vehicles don't have to back-up in order to leave. The canopy should also be positioned relative to the storage building to keep the building in shadow during hot summer months.

Additional details regarding facility design and operations will be resolved in the subsequent Engineering Plan and Operations Plan, which will be prepared prior to submitting a permit application to DEQ.

4.6 Facility Permit Requirements

4.6.1 DEQ Permit Requirements

According to the DEQ, the facility will require a solid waste permit. If the facility is co-located at a transfer station, permitting may be accomplished through an amendment to the transfer station's permit.

Permitting of HHW collection facilities in Oregon is currently in a state of transition. At this time, DEQ has not promulgated permit requirements specific to household hazardous waste facilities. Until that happens, the facility will most likely be permitted in the Transfer Station/Material Recovery Facility category.

However, DEQ does have a "General Guidance" for the design and operations of HHW collection and storage facilities. Until the DEQ prepares specific permit requirements for HHW facilities, applicants will need to refer to both permit requirements for the Transfer Station/Material Recovery Facility category, as well as the HHW General Guidance. Some of the permit requirements in the Transfer Station/Material Recovery Facility category will most likely be waived in this case, since no putrescible wastes will be accepted at the facility.

A full copy of this Guidance is contained in Appendix A. The Guidance contains 72 specific requirements related to all aspects of HHW facilities, including siting, security, emergency equipment, structural requirements, exterior secondary containment, drum storage, waste identification, waste sorting and storage, waste packaging, waste shipments, worker safety, facility inspections, spill prevention and emergency response, equipment, personnel training, and facility closure.

As part of the permit application, applicants will need to prepare a facility Engineering Plan and a separate Operations Plan. Again, requirements of these two plans are clearly outlined in Appendix A.

DEQ has minimal requirements for the satellite collection events held at locations other than permanent facilities. A special permit is not required, although including an operations plan with health and safety standards for satellite collection events in the facility permit might eliminate the need for obtaining DEQ approval for each event.

4.6.2 Local Permit Requirements

To expedite the opening of the facility, consideration of an appropriate location, including zoning, access, visibility, and the like will need to

be made. Once preferred locations are determined, local permits may be needed and all local requirements will need to be complied with.

4.7 Facility Location and Siting

At this time, it is assumed that the facilities may be operated by Waste Connections and located at the transfer stations in The Dalles and Hood River County. Both of these locations are relatively convenient for the public, have utility connections, and provide space for queuing vehicles waiting to use the facility. Both sites also have telephone and restroom access (for workers), and lead acid battery and used motor oil recycling. It appears that the site in The Dalles may have adequate space that can be attained by simply moving stored equipment. The site in Hood River County appears to be more constrained for space, although Waste Connections is currently re-designing the site. Location of a HHW facility will need to be a consideration in Waste Connection's master plan for the site. The Hood River transfer station is owned by Waste Connections, while the transfer station in The Dalles is leased. Waste Connections will need to obtain the property owner's written permission for this new use of the property.

DEQ's General Guidance for HHW facilities (Appendix A) discusses siting requirements. These requirements include:

- Consult and comply with local zoning requirements.
- Consider the proximity to sensitive resources such as wetlands, streams, etc. and develop mitigating measures necessary for preventing their degradation.
- Comply with local setback requirements.
- Consult and comply with the fire code and building code for separation between property line and buildings and separation between buildings and construction requirements for flammable and/or reactive materials.
- Construct facility on a stable foundation.
- Provide adequate ingress and egress to major streets and/or highways.

4.8 Collection Events at the Permanent Facilities

The collection events held at the permanent facility will use the following basic series of steps:

1. **Set-Up:** Traffic cones will be distributed. Spill containment equipment will be set-up and safety equipment (portable safety shower, eye wash kit, and fire extinguishers) will be checked. Tables and carts will be readied for waste acceptance and sorting; drums and totes will be prepared for waste bulking and packing. Waste identification, sorting, and packing areas will be set-up under the canopy.

2. **Safety Training:** All staff (and volunteers, if used for traffic control) will review work procedures, traffic flow, and safety considerations. Personal protective equipment will be put on.

3. **Greeting:** Cars will line up in a designated area waiting their turn. At the collection point, a staff person will greet them, request the driver open the trunk and stay in the car, and possibly fill out a short survey or questionnaire to determine the address of the resident and ask if the resident has used the service before. If pre-registration is required (see Section 4.12), the name/address may be checked against the registration list. Additional questions to be asked may include the how they heard about the event, the distance they traveled, and whether they represent one or more households.

4. **Unacceptable Waste Screening:** At the unloading area, adjacent to the canopy, a staff person unloads the materials onto a cart. Any unacceptable materials or unknowns are discussed with the driver. Unknowns will generally be accepted but unacceptable materials will not be, unless the materials cannot be safely returned to the driver. For any rejected materials, the driver will be provided with a written set of suggestions as to alternative places to take the wastes. If any unknowns or unacceptable wastes are accepted, staff will take the name and address of the

resident (or business) that brought them and set them aside.

5. **Sorting of Acceptable Wastes:** Accepted wastes are generally sorted on a table into basic classifications according to DOT regulations and for safe handling. Incompatible materials will not be set next to each other. Separate areas will be designated for Flammables, Non-Regulated Liquids, Paint/Paint-related materials, Poisons, Non-regulated Solids, Acids, Bases, Oxidizers, and waste needing special handling.

6. **Reusable Products:** The segregated materials are reviewed for possible diversion to the reuse program (see Section 4.18, below). Reusable items must have intact containers, readable labels, no obvious contamination, and must be mostly full.

7. **Transfer of locally managed wastes:** Latex paint, motor oil, and lead acid batteries will be transferred to a second identification and packing area, described below.

8. **Oil and Lead Acid Battery Management:** Used oil from commercial sources may be tested for the presence of contaminants such as chlorinated solvents. Materials from households and "clean" used motor oil will be removed to the transfer station and consolidated at the existing collection points. Contaminated motor oil and leaking lead acid batteries must be managed as hazardous wastes.

9. **Latex Paint:** All cans of latex paint will be reviewed against criteria provided by DEQ in order to determine if the paint is likely to be a hazardous waste. (Draft criteria are provided in Appendix A.) This determination is done by comparing information on the label against a list provided by DEQ. Unlabeled latex paint, or paint that meets DEQ's criteria for being a likely hazardous waste, will then be transferred back to the other hazardous wastes. The remaining non-hazardous latex paint will be managed as described in Section 4.3.5, above.

10. **Packing or consolidation:** Materials are sorted for either packaging or consolidation. Flammable liquids will be consolidated into 55-gallon drums and the containers will be discarded as solid waste. Other materials will be bulk packaged or labpacked into appropriate shipping containers. Some wastes may be segregated and set aside for packing at a later date. At the end of the event, all containers will be completely closed and labeled.

11. **Solid Waste:** Any solid waste (packing material such as corrugated cardboard boxes in which the materials were delivered or non-hazardous waste products) will be removed to roll carts and/or dumpsters for recycling or disposal.

12. **Storage/Removal:** Containers will be returned to the appropriate section of the storage building. Incompatible wastes will be stored in separate areas and each area will be marked with a placard to show the hazard class of items stored inside the area. At Hood River, some containers may be loaded into the vehicle for transfer to the hub facility in The Dalles for storage (and possible consolidation) there.

4.9 Collection Events at Other Locations (Satellite Events)

The satellite collection events will be served by a vehicle that will bring supplies to the collection site and allow for transport of the collected wastes back to the permanent facility for storage. The basic procedure for these events is similar to events held at the permanent facilities (above), with a few additional steps. Each satellite collection event will follow the same basic series of steps, as follows:

1. **Set-Up:** The entire area where waste identification, sorting, and packing occurs will be a paved site covered with tarps; tarps will be sealed together with duct tape. Spill containment equipment and safety equipment (portable safety shower, eye wash kit, and fire extinguishers) will be set-up. Tables and carts will be readied for waste acceptance and sorting; drums and totes will be prepared for waste bulking and packing. Waste identification, sorting, and packing areas

will be set-up under the trailer-side canopy (as much as possible).

2. **Safety Training:** All staff (and volunteers, if used for traffic control) will review work procedures, traffic flow, and safety considerations. Personal protective equipment will be put on.

3. **Greeting:** Same as events at the permanent facility (see Section 4.8 above).

4. **Unacceptable Waste Screening:** Same as events at the permanent facility (see Section 4.8 above).

5. **Sorting of Acceptable Wastes:** Same as events at the permanent facility (see Section 4.8 above).

6. **Reusable Products:** Same as events at the permanent facility (see Section 4.8 above).

7. **Transfer of locally-managed wastes:** Latex paint, used motor oil, and lead acid batteries will be packed in containment pallets or totes for transportation to the permanent facility and sorting and management as described in Section 4.8.

8. **Packing or consolidation:** Same as events at the permanent facilities (see Section 4.8 above). However, some wastes may be packed (in their original containers) into temporary containment pallets or totes for transport back to the permanent facility in The Dalles for further consolidation. This might occur if the volumes of waste brought to the satellite events significantly exceed expectations and staff/time availability, or if inclement weather makes waste packing and consolidation at the satellite event difficult. At the end of the event, all containers will be completely closed, labeled, and loaded securely into the collection vehicle for transport back to the permanent facility in The Dalles.

9. **Solid Waste:** Same as events at the permanent facility (see Section 4.8 above).

10. **Storage:** At the permanent facility in The Dalles, the containers will be removed from the vehicle and stored in the appropriate section of the storage building. Incompatible wastes will be stored in separate areas and each area will be marked with a placard to show the hazard class of items stored inside the area.

4.10 Truck/Trailer

A vehicle will be used to transport waste from the satellite collection events to the permanent facility in The Dalles. The same vehicle will also be used to transport waste from the Hood River facility to The Dalles (or vice versa) for the purposes of consolidating wastes and reducing the number of partially full drums that are shipped to the TSDF.

The vehicle will most likely be a panel truck, equipped with a hydraulic lift gate for easy transfer of drums and other heavy containers. The truck will be retrofitted to include wall braces and vents, as needed. A side-mounting canopy will be added to provide for easy set-up of a covered area (next to the truck) for small satellite collection events. The truck may need to be placarded and the operator will need to check with and comply with all DOT regulations.

Because this truck will be used infrequently, it could be shared with some other program as a cost-saving measure.

4.11 Number, Frequency, and Duration of Services (Events)

It is assumed that the limiting factor on the size of events is the number of locally available staff who can be trained and are willing and available to work at these collection events. Assuming a core staff of three to four (one chemist, one or two hazardous waste specialists, and one waste technician), supplemented by a few trained volunteers or other staff (for traffic control and surveys), the largest number of vehicles that events may reasonably accommodate is approximately 100. This would constitute approximately four hours of waste acceptance, followed by up to four additional hours of waste sorting, packing, and demobilization (and waste transport to the permanent facility, for satellite events).

Initially the local service provider will subcontract with a hazardous waste management firm to provide a chemist and one or more hazardous waste specialists to help staff events, with local staff (previously trained in safety and waste handling issues) working along-side this subcontractor. The primary purpose of this is for local staff to gain experience with event practices and procedures. Over time, local staff will assume greater responsibilities and will be supported by a smaller number of contractor staff. On occasion, the local service provider may supplement the local staffing with additional subcontracted hazardous waste specialists and/or waste technician positions if events have the potential to be too large, or if additional training is needed for new, local staff.

In order to maximize efficiency and provide adequate time for waste handling and clean-up, waste will not be accepted for more than four hours per event. Events in very small communities (such as Sherman County and south Wasco County) can probably satisfy all local collection needs in two hours or less. Waste acceptance will always be scheduled for the morning, or early afternoon, in order to allow adequate daylight hours (in the afternoon) to complete waste packing and site demobilization.

Initially, eight events will be held per year in Hood River County, and eight events will be held per year between Wasco and Sherman Counties. In subsequent years, the number of events may be increased, depending on event costs and staff and funding availability. The limiting factor on the size and number of events will be the funds available for local staff, contractor staff, waste management, and waste transportation costs. Annual event calendars will be prepared based on a review of program budget/funds available and projections/forecasts of anticipated costs based on event participation. Promotion for each event may include the date and location of the next event, or a phone number to call for more information.

The majority of events (including all of the satellite events) will be scheduled between April and October, when the weather is generally warmer and drier. Since hazardous wastes cannot be accumulated at the storage facility for more than 90 or 180 days, this may reduce slightly the number of trips to the TSDF, as well as increase the potential to fill drums. (Current DEQ guidance provides for a 90-day accumulation limit, but 180 days or even one year might be allowed) Shipping drums that are less than full to the TSDF costs more per pound than shipping full drums. Events should be scheduled so that the number of non-full containers removed from the local storage facilities is minimized.

4.12 Pre-Registration

During the first year of collection from households, a maximum number of allowed vehicles will be determined in advance, and pre-registration will be required. This is a change from the historical policy at DEQ-sponsored collection events of being open to anyone who wants to use them, but is used by Lane County at its HHW facility in Eugene.

One reason for setting a maximum number of participants and requiring pre-registration is to control event costs and avoid cost overruns. Another reason is to avoid needing to train or subcontract (at a higher cost) additional staff to help with the events (larger events require a larger pool of trained staff). After the first year, the counties and cities will decide whether or not to continue this approach.

Initially, participation limits for facility-based events should be set in the range of 50 to 75 vehicles per event. Although this raises the probability that not everyone who wants to participate can do so on the very first event, the regular frequency of events (7 per year per facility) should provide ample opportunities for area residents to have access to the service. Pre-registration will not be required for satellite events, as the number of vehicles in these areas is generally small, and even a doubling in

participation has a relatively small impact on overall costs and staffing requirements.

Pre-registration requires very clear promotion and communication with the media and the public, so that residents aren't frustrated or disappointed by coming to the event only to learn that they aren't allowed in. At the day of the event, incoming vehicles are screened against the pre-registration list. In addition to controlling costs, pre-registration also can be used to limit the participation in the event to tri-County area residents, and to encourage alternative (lower-cost) methods of managing wastes such as used motor oil, lead acid batteries, and latex paint (see Sections 4.3.4 and 4.3.5). Two disadvantages of this approach, however, are the administrative cost of pre-registering users, and the risk that some residents may drive to the event without having pre-registered.

From an administrative standpoint, pre-registration may be most easily managed by asking residents to call a dedicated phone line; this could be a voice mail box at the facility contractor, or a county or city office, established just for this purpose. Callers will hear a short message regarding the date, time, and location of the next several events, as well as eligibility criteria (including that the event is a service only for residents of Hood River, Wasco, and Sherman Counties). This message could also be used to educate callers regarding options for latex paint disposal and regular motor oil and vehicle battery recycling opportunities. Following this message, they would be asked to register by leaving their name, address, and phone number, and which event they are registering for (March 20 or April 17, for example). These messages would be transferred to a registration list daily; when the maximum number of allowable registrants has been met (or is close to being met), event promotion would end and the voice mail message would be changed to reflect this. In the event a non-Tri-County resident calls to register, they would be called back and informed that the event is for residents of the three counties only. They will also be provided with the toll-free telephone number of the DEQ Statewide hotline where they can hear about upcoming HHW collection events in their area (or a phone number for Skamania or Klickitat County's HHW programs, if calling from those areas in Washington State).

The second disadvantage of pre-registration is the risk that some residents may try to come to the event without having pre-registered. A solution to this challenge is to plan for a certain number of these un-registered users. For example, if the budget allows for 75 vehicles at an event, the counties and cities might consider ending pre-registration at 65 vehicles. This would allow for at least 10 non pre-registered users, and probably more since not everyone who registers will actually come to the event. After a few years of experience with pre-registration, the counties and cities would be able to project realistic registration limits more accurately.

Pre-registration requirements for CESQGs and farmers with agricultural pesticides are discussed in Sections 4.15 and 4.16.

4.13 Out-of-Area Participants

Because the hazardous waste collection program is a service of the three counties, and is funded primarily by residents and businesses in the counties, the collection events will be limited to residents and businesses of the three Counties. Proof of County residency (a driver's license) may be required at all collection services. All materials promoting the events will clearly state that they are "a service for residents and businesses of Hood River, Wasco, and Sherman County only."

However, it is inevitable that some residents from outside of the area will try to avail themselves of these services. Initially, should such wastes arrive at collection events (consistent, however, with the policy on dealing with non pre-registered users, above), they will be allowed in (although this won't be promoted). The number of out-of-area vehicles using each event will be tracked. The counties and cities will re-evaluate this approach

should out-of-area participation ever exceed 2% of the total participation.

DEQ currently maintains a facility reimbursement program with Metro (in Portland) to accept HHW at its facilities from Oregon residents who live outside of the Metro service area. These wastes are tracked separately and DEQ reimburses Metro a flat fee. Participation in some kind of waste acceptance program is a pre-condition of accepting the DEQ grant funds for the permanent facilities. This will help to share the risk and cost of accepting waste from outside of the three County area. However, given the small population surrounding the three Counties, the number of out-of-area participants is expected to be small.

4.14 Special (Appointment-Only) Collections

In addition to the regular collection events, the facility will also be available for special collections on an appointment basis. This service is intended for special, extenuating circumstances, where there is an immediate and time-sensitive need for HHW collection. Examples of this include people who are selling their home and have an immediate need to dispose of large quantities of garden, garage, and household chemicals, or a person who calls in with a large quantity of highly hazardous materials (such as elemental mercury). In these types of cases, facility staff will make an appointment to meet the resident at the permanent facility. The special wastes will be identified and either immediately packed into final shipping containers, or placed in containment pallets or totes for re-packing at a later date. These appointment-based visits to the facility will be scheduled, whenever possible, to maximize staffing efficiencies and reduce the disruption of staff opening up the facility for a single user. This may include only taking appointment-based visits on one day of the week (Tuesday afternoons, for example). As a condition of the DEQ facility grants, this type of "special" collection for households must be provided at least one day per week. Collection opportunities for CESQGs (and agricultural pesticide deliveries) can be less frequent.

In order to encourage households to use the facilities during a normally scheduled collection day, and to reflect the extra cost involved in opening the facility up for these special one-time users, these special household users will be charged a fee in the range of $10 - $20 for this service.

4.15 Services for CESQGs

CESQGs will be allowed to use the collection events and permanent facility, but pre-registration and certification of their status as CESQGs will be required. In order to protect the local governments, users will need to sign a certification that they are CESQGs, as the facilities cannot accept wastes from SQGs or LQGs. Self-certification is usually acceptable but should include the definition of a CESQG so as to avoid confusion or mis-representation.

Assuming this approach is taken, pre-registration will involve five basic steps:

1. The CESQG completes an application form certifying that they are, in fact, a CESQG. At the same time, the CESQG also identifies the types and volumes of wastes they desire to bring to the event.

2. The application is denied if the applicant is not a CESQG.

3. At this point in time, it is assumed that a fee will not be charged for CESQGs to use the facility. But if this policy changes and a fee is charged, facility staff will estimate the fee to participate in the collection event. The exact fee schedule will be determined by the counties and cities working with the facility staff. Facility staff will clearly explain that the fee is an *estimated* fee, and that the total charge is subject to change based on actual waste types and quantities delivered.

4. Facility staff will schedule an appointment time for the CESQG to bring their waste, either to a regularly scheduled event, or some other time. Processing CESQG waste requires additional time to verify the types and quantities of wastes and handle payments (if any) and receipts. Therefore, if CESQGs do use the satellite events or come to the facility on the same day as an event, they will be scheduled immediately prior to the opening of the event to the general public, or immediately following the end of waste acceptance from the general public, if possible.

5. Facility staff will keep all certification forms and maintain records of CESQGs who use the facility, including the dates of use and estimates of the amounts and types of waste delivered.

The number and amounts of wastes to be delivered under this program are difficult to project, as almost all CESQG programs elsewhere in the U.S. charge a significant fee to participants. Yakima County, Washington, is one of the few communities in the U.S. that offers a CESQG collection service at no additional fee. Yakima County began CESQG collections in 1992, and has seen the number of CESQG deliveries grow from 28 in that year to 729 in 2000. (However, these numbers are not exactly transferable to Oregon.)

This service for CESQGs will be introduced after HHW collection services have been operational for a year, so that the facilities and staff can focus on providing the basic collection service to residents first.

As with households, the CESQG program will begin with a limit on the number of CESQGs that can be served in the first year. After the first year of CESQG service, the counties and cities will decide whether or not to continue this approach.

4.16 Collection of Agricultural Pesticides

This service will largely mirror the CESQG service, described above, but with two exceptions.

First, agricultural pesticide waste is particularly expensive to dispose of (about $2.65/pound, compared to around $0.65/pound for most other CESQG waste). If the amount of agricultural pesticide waste delivered is higher than projected, the impact on the program budget could be severe. For this reason, agricultural pesticide collection is a particularly good candidate for limiting the amount of wastes delivered, both by individual farmers as well as all farmers in any given year. In any calendar year, the quantity of pesticides to be accepted (at no charge) from any individual farmer or orchardist will be limited to 600 pounds. (Collection events in 1991 and 1993 averaged 500 and 278 pounds per grower, respectively.) In addition, the total amount of agricultural pesticides to be accepted will be capped at 32,000 pounds in the first year of this service, and then drop as shown in Schedule A of Appendix E to 24,000 pounds in the fourth year of this service. In the event that this cap is reached, growers will still have the option of bringing in pesticides but will be charged the full waste management costs (currently about $2.65/pound) for any waste in excess of the limits. (For example, a grower wanting to deliver 750 pounds in one year could drop off the first 600 pounds for free, and then would be charged $2.65/pound for the last 150 pounds.) When the limits are reached, the facilities will stop accepting pre-registrants for the free service but will put deferred users on a list to be contacted at the beginning of the following year. These limits (both for individual growers and totals) may be adjusted by the Steering Committee based on a review of budgets and resources available.

The second distinction between the agricultural pesticide collection service and the CESQG service is that the agricultural pesticides will be collected under what is called the "Universal Waste Rules". These are federal and state rules

that, if followed, streamline the management requirements in order to encourage the collection of "universal wastes". Pesticides are a universal waste in Oregon.

The collection of pesticides under this program will be done as a universal waste collection, and universal waste standards will need to be met. The facilities will need to notify DEQ that they are "universal waste handlers". If more than 11,000 pounds of universal wastes are accumulated, DEQ requires that the waste shipments be tracked (although this will be done anyway). Other requirements of being a universal waste handler (regardless of amounts collected) are fairly straightforward (prevent and respond to releases, label containers, ship only to an off-site universal waste destination facility, etc.) and can be explained by DEQ staff.

4.17 Overview of Waste Management

A few wastes collected at the events (and possibly stored at the facility) will be managed locally. Non-hazardous latex paint may be reblended and recycled or solidified and disposed of as solid waste. Solidification will involve opening paint, blending it into a larger container (served with a long-handled paddle or compressed air paddle) and mixing it with bentonite or cement. All rechargeable batteries (primarily Ni-Cd batteries but a few other types) will be shipped in approved containers to a recycler as provided by the Rechargeable Battery Recycling Coalition, at no cost to the facility. Any used motor oil or lead acid batteries accepted will be managed through the local system of transfer stations (although damaged lead acid batteries and used oil from non-household sources that tests positive for certain contaminants will be managed as hazardous waste).

Reusable materials meeting the established re-use criteria may be set-aside as part of a waste reuse program. This is discussed in greater detail in Section 4.18, below.

Even after local management and waste re-use, the majority of wastes will still require transport to a permitted TSDF. There, wastes may be recycled, disposed of in a hazardous waste landfill, burnt for fuel, or incinerated in a hazardous waste incinerator. Waste management options are driven by a variety of factors, including available technology, cost, policy (the waste management hierarchy), and risk.

Both the State of Oregon (acting on behalf of the DEQ) and the State of Washington (acting on behalf of the Department of Ecology) maintain contracts for waste management that may be used by local governments in Oregon through a "purchaser program". This currently allows Oregon counties and cities (and their franchised or contracted agents acting on their behalf) to use the states' waste management contractor(s) (and the security of the states' contract) without needing to select a contractor from scratch and negotiate a contract. Oregon's contract expires this year and a new contract will be negotiated. It is unknown at this time if the new contract terms will be more or less favorable to DEQ and the local governments, and also if local governments and their franchised and contracted agents will be able to use the new contract as is currently done.

The counties and cities will evaluate these two contracts and use one or both for any collected waste that can't be managed locally. In order to benefit from the states' insurance requirements, investigation of compliance histories, and other contract provisions, all waste collected under this program (with the exception of motor oil, lead acid batteries, latex paint, and local re-use) will be managed under these contracts.

However, the contracts may provide alternative waste management options for some waste types. In selecting waste management options, the Tri-County HHW Program will place the greatest emphasis on minimizing risk and liability. Under CERCLA, the contractor, cities and counties could be responsible and found liable should hazardous waste collected under this program end up causing environmental damage. *This is true*

even if this damage occurs outside of the Tri-County area and/or is a consequence of poor management on the part of any entity who accepts waste collected under this program, even if the waste has exchanged hands multiple times and is no longer under the control of the cities and counties or their local contractor. While this risk can never be totally eliminated, it can be reduced through adequate contractual terms, and by ensuring that the TSDFs and the companies that own them have:

- good compliance histories,
- relevant experience,
- staff trained at appropriate levels,
- a U.S.-based insurance policy with a reasonable deductible and from an insurance company with good ratings (A- or better from AM Best, or A or better from Standard & Poors),
- adequate funding reserved for facility closure, and
- adequate overall financial strength.

The insurance policies should cover vehicle liability, including MCS-90 (provides cash availability to pay for immediate clean-up in the event of spills), worker's compensation, general liability, pollution liability for at least the next three years, and umbrella liability (for all liability expenses not covered by other insurance).

Cost will be the second most important criteria for selecting waste management options. For example, if the facility has two waste management options for a particular waste, one of which is at a facility with an excellent compliance history that charges more to accept the waste, and the other is at a facility with a spotty compliance history that will charge less, the waste will be sent to the former. However, if two facilities with comparable compliance histories charge different costs, the less expensive facility will be used.

The criteria receiving the least weight in evaluating options is the waste management hierarchy (with preference given to recycling first, then energy recovery and finally land disposal). This criterion will only come to bear if two options (for example, recycling vs. land disposal) have comparable risk and cost.

4.18 Re-Use Program

The facilities may operate a program for collected items that may be reused. While many wastes brought to the facility and events are not appropriate for re-use (and, from an environmental and public health perspective, should not have been used in the first place), some are. Diverting these items will reduce disposal costs for the facility, while reducing purchasing costs for whoever uses the material. Other HHW programs have reported disposal cost savings of up to 20% with a comprehensive waste reuse program.

This service will start with a limited approach and be phased in over time. Initially, the facilities will work with area government agencies and large institutions, including schools and parks, to identify the types of materials that they may be interested in. Segregated materials in their original containers will be compared against this list during waste identification but prior to packing/consolidation at the events and permanent facilities. Reusable items must have intact containers, readable labels, no obvious contamination, and must be mostly full. Certain items should not be distributed for reuse regardless of what condition the packaging is in (such as banned pesticides). Potentially reusable items will be set aside and stored at the permanent facilities. The exact storage location (inside the storage building, in shelves or a loeker under the canopy, inside a designated cargo box, or elsewhere) will be determined in coordination with DEQ. However, as long as the materials have been separated for re-use, they are not technically "waste" and so may not be covered under DEQ's permit for the facility.

Facility staff will work with the interested agencies and institutions to "market" these reusable items to them. This might consist of a quarterly inventory and product list distribution. Organizations interested in taking the item for

reuse will make an appointment with facility staff to come to the facility to collect the material. Users will be required to sign a waiver form releasing the facility and sponsoring agencies from any liability. However, the facilities will not charge for these products. If a product doesn't "sell" within a set period of time (6-12 months) it will be packed with other wastes for removal and disposal.

Depending on available resources and space, the facilities may expand the program into a full-service "drop and swap" with controlled public access. This will require a greater amount of space and retail-style shelving and organization. Many HHW programs throughout the U.S. operate these types of services, so facility staff can learn from and evaluate these other programs prior to implementing this idea at the area facilities. The counties may also set-up limited "drop and swap" tables at the satellite events.

5. Program Costs, Funding, and Cash Flow

5.1 Cost Projection

Table 5 portrays a projected eight-year budget and cash flow projection for this HHW/CESQG/agricultural pesticide collection program. All cost figures are shown in constant 2002 dollars. The budget only includes services associated with the collection facilities and events, including education required to support these services. Other HHW-related activities (expanded collection of used motor oil, targeted HHW prevention education, etc.) are not included in this budget projection. These services may be administered by individual jurisdictions, and/or using separate DEQ grant funds which are currently available for these types of projects.

Table 5 provides a summary of more detailed cost projections that, along with more detailed assumptions and notes, are contained in Appendix E. Key assumptions include the projections of participation and quantities of waste collected. These assumptions are based in part on previous events in the three counties, and the experience of other communities with HHW collection services. A 15% contingency factor is added to all projected costs except for initial start-up costs in the first year of the program (which are limited to County staff time).

Assumptions and cost projections in Appendix E are divided into five schedules, as follows:

- Schedule A: Operating Assumptions. Provides data on populations and numbers of households in the planning area, and assumptions on the number of households, CESQG, and agricultural pesticide users to use the collection service, and the amounts and types of wastes collected.
- Schedule B: Capital Costs. Projects the costs of the collection vehicle and two permanent facilities.
- Schedule C: Operating Costs. Draws on results from Schedule A (Operating Assumptions) and Schedule E (Labor Estimates: Facility/Event Staffing [HHW]) to show the number of labor hours and labor cost for collection services, waste management/disposal costs, program administration and promotion, supplies, training, contractor profit, and other operating costs.
- Schedule D: Revenue Forecast. Shows revenue from various funding sources. (Revenue sources are discussed in Section 5.3.)
- Schedule E: Labor Estimates: Facility/Event Staffing (HHW). Provides a detailed estimation of the number of hours worked, per job classification, at the facilities and satellite events.

New HHW, CESQG, and agricultural pesticide collection services, as described in this Plan, are projected to require approximately $514,000 in start-up costs ($451,000 + 15% contingency). Average annual operating costs for the second through fifth years of operation (once CESQG and agricultural pesticide collection is added) are estimated at $256,000 per year ($223,000 + 15% contingency). Approximately one-half of these

Table 5.
Wasco/Sherman/Hood River Counties
Household Hazardous Waste Management Planning Project
8-Year Projection of Costs, Revenues, and Cash Flow (constant 2002 dollars)

	Short-Term: Planning, Permitting Construction			Medium-Term: Facility Operations and Satellite Events					
	2003	2004	2005	2006	2007	2008	2009	2010	Average
Operating Assumptions (see Schedule A)									
Number of household visits to facilities				701	841	915	973	1,032	892
Number of household visits to satellite events				76	92	100	106	113	97
Number of CESQG visits				0	30	61	91	121	61
Number of agricultural pesticide visits				0	80	80	80	80	64
Pounds of waste collected, from households				58,370	65,378	68,233	67,164	67,835	64,986
Pounds of waste collected, from CESQGs				0	11,218	22,437	33,655	44,874	22,437
Pounds of waste collected, ag. Pesticide users				0	32,000	29,280	26,640	24,000	22,384
Total pounds of waste collected				58,370	108,595	117,950	127,459	136,709	109,817
Capital Costs (see Schedule B)									
Collection Vehicle		$0	$30,000	$0	$0	$0	$0	$0	$0
Facilities		$26,000	$251,220	$10,000	$0	$0	$0	$0	$2,000
Subtotal, capital costs	$0	$26,000	$281,220	$10,000	$0	$0	$0	$0	$2,000
Operating Costs (see Schedule C)									
Oversight, management, promotion	$32,000	$55,500	$45,500	$32,700	$25,050	$25,050	$25,050	$25,050	$26,560
Facility/event staff (HHW)				$20,153	$20,428	$20,110	$20,548	$21,374	$20,522
Waste management (HHW)				$39,108	$45,703	$48,428	$50,273	$52,015	$47,105
Facility/event staff (CESQG/ag. Pesticide)				$0	$4,199	$4,578	$4,957	$5,336	$3,814
Waste management (CESQG)				$0	$7,236	$14,472	$21,708	$28,943	$14,472
Waste management (ag. Pesticide)				$0	$84,800	$77,592	$70,596	$63,800	$59,318
Other operating costs (supplies, training, etc.)	$0	$2,500	$5,900	$22,446	$16,160	$16,180	$16,200	$16,200	$17,433
Subtotal, operating costs	$32,000	$58,000	$51,400	$114,407	$203,575	$206,389	$209,331	$212,519	$189,244
Cost Summary									
Subtotal, capital + operating costs	$32,000	$84,000	$332,620	$124,407	$203,575	$206,389	$209,331	$212,519	$191,244
Contractor profit	$0	$1,280	$1,552	$7,159	$14,725	$14,950	$15,185	$15,440	$13,492
Contingency, years 2004 - 2010 (15%)	$0	$12,792	$50,126	$19,735	$32,745	$33,201	$33,677	$34,194	$30,710
Total	$32,000	$98,072	$384,298	$151,301	$251,045	$254,540	$258,194	$262,153	$235,446
Revenue/Cash Flow (see Schedule D)									
DEQ grants	$13,500	$40,000	$83,491	$0	$0	$0	$0	$0	$0
User fees	$0	$0	$0	$447	$536	$584	$621	$658	$569
Other local revenue (tipping fee surcharges, etc.)	$0	$210,589	$221,876	$218,563	$223,935	$225,764	$227,639	$229,505	$225,085
Subtotal, revenue	$13,500	$250,589	$305,367	$219,010	$224,471	$226,387	$228,259	$230,163	$225,654
End-of-year reserves (assuming full contingency cost)	-$18,500	$134,017	$55,086	$122,795	$96,220	$68,048	$38,113	$6,124	N/A
End-of-year reserves (assuming no contingency cost)	-$18,500	$146,809	$118,004	$205,447	$211,618	$216,846	$220,389	$222,594	N/A

costs are for the collection of hazardous waste from households. The other one-half of costs is for the addition of agricultural pesticide and CESQG collections. The high costs of the proposed collection system, relative to normal solid waste (garbage), reflects the dangerous characteristics and special handling, storage, and disposal methods that are required for safe and proper management of hazardous waste.

Actual costs are highly dependent on program participation and volumes of wastes collected, and thus may be higher or lower than estimated projections shown in Table 5 and Appendix E.

5.2 Program Funding Options

The planning committee identified several funding options for the hazardous waste collection service.

1. User fees for residents/CESQGs. Those who use the event or facility would pay at the time of drop-off. However, charging anywhere near the full cost of service would discourage all but the most devoted residents. Most jurisdictions in the United States do not impose user fees for residents, but do charge CESQGs at least the cost of waste disposal (and sometimes an additional handling charge). Alternatively, user fees could be charged for those household users who require special service (in-between regularly scheduled collection events).

2. Solid waste system surcharge on waste generated in the three counties. A surcharge could be levied against all solid waste in the service area. This may be done using the cities' and counties' franchising authority of transfer stations and landfills. All residents and businesses in the service area would pay relative to the amount of solid waste disposed. In 1999, the three counties disposed of approximately 35,800 tons of solid waste. At this rate, a uniform tipping fee surcharge of $2.50 per ton (hypothetical) would generate almost $90,000 in revenues per year.

3. Solid waste system surcharge on waste disposed of in the three counties. Conversely, a surcharge could be levied on all wastes disposed of in the three counties. This would include out-of-region waste disposed of at the Wasco County Landfill. In 2001, solid waste disposed of at the landfill was just over 145,000 tons. A surcharge of $1.00 would generate over $145,000 in revenues (assuming waste flows remain and have remained unchanged). However, a sufficiently large surcharge could make the Wasco County Landfill less competitive relative to other regional landfills, and this would cause tonnage to fall.

4. Wastewater system surcharges. Some communities, such as King County, Washington, choose to partially fund their HHW and CESQG programs through surcharges on the wastewater bills. The rationale behind this approach is that reducing the improper disposal of HHW benefits wastewater treatment systems, and so users of these systems should help pay for proper treatment. Committee members did not like this alternative coupled with solid waste fees as it could be viewed as "double taxation".

5. Real estate transaction fee. Some observers of HHW programs believe that one of the greatest benefits of permanent collection opportunities is for people who are buying or selling a home, or cleaning out the home of a recently deceased family member. At that time, all of the hazardous materials accumulated over years or even decades of home ownership typically need to be disposed of. Thus, some have proposed a real estate transaction fee (on the sale of residential properties) as a partial funding source for HHW programs. The consultant team knows of no programs in North America that are actually funded this way, at this time.

6. Advance disposal fee on the sale of hazardous materials. Washington State partially funds its HHW programs by a surcharge on the sale of certain hazardous materials. Such an

approach may be difficult to replicate on the level of an individual county, or even a group of counties.

7. DEQ grants. Approximately $126,600 in grant funds is available from DEQ for two permanent facilities that provide HHW collection services to all residents of the Tri-County area. Conditions of these grant funds are described in Section 5.3.4. Additional grant funds may also be available for programs to improve motor oil management and waste prevention education.

8. General fund. Participating cities and counties may choose to fund their portion of the regional program's cost using general funds.

9. Supplemental Environmental Projects. Facilities or companies fined by DEQ sometimes have the option to propose a supplemental environmental project. Under such a project, money that would have been spent on fines is instead directed to local environmental initiatives. DEQ does not suggest SEPs; it is up to the fined entity to initiate a request for a SEP. Usually, the SEP must directly address the impact of the discharge on which the fine was based. For example, Prime Trucking was fined a civil penalty of $77,000 for its release of pesticides into Fifteenmile Creek. Prime Trucking could propose to DEQ that instead of paying the fine (all or part of it), that it help fund a local HHW program instead, particularly if it could be shown that the program would help keep pesticides out of surface waters in Wasco County in the future.

10. Financial Support from Waste Connections. At the Committee's November 2000 meeting, there was some discussion of support that Waste Connections may be able to provide to the communities it serves.

11. Revenue from resale of collected oil. If used motor oil collected through this program can replace existing purchases of new oil, some revenue might be generated. Waste oil is used locally to heat the Hood River County shop, for example. However, the market is fairly limited.

12. Bond levy for operating funds. The Committee discussed this briefly and decided not to pursue it further.

13. DEQ reimbursement program for out-of-area wastes. See Section 4.13 for more details.

5.3 Program Revenue Sources and Revenues

The HHW collection service will be funded using a combination of funding sources, as follows:

- DEQ grants.
- SEPs (as they become available).
- User fees for households who require special service (in-between regularly scheduled collection events). Fees will be determined at a later date, but will most likely be in the range of $10 - $20 per vehicle, to pay for the marginal cost of staffing the HHW facility and accepting the waste.
- Solid waste system surcharge on disposed waste from Hood River and Wasco Counties, implemented at the Wasco County Landfill.
- Fees from Sherman County (funding mechanism to be determined by the Sherman County Court); see below.
- Possible surcharge on "imported waste" (from outside the Tri-County area) disposed of in the Wasco County Landfill.
- DEQ reimbursement program for out-of-area wastes. It is assumed that only a very small number of users from outside of the three counties will use the collection system. These fees are estimated on Schedule D of Appendix E.

In addition, Wasco County is planning to advance a small amount of its own general fund money (less than $20,000), prior to receipt of additional DEQ grant funds or receipt of new solid waste system surcharge funds, in order to start the

process of preparing and negotiating the intergovernmental agreement. This advance will be paid back as part of its reimbursable administrative costs as the Lead Agency.

5.3.1 Wasco County Landfill Surcharge

Of these funding sources, the solid waste system surcharge(s) will be the most significant source of revenue. The large majority of hazardous waste collected under this system is expected to come from households, farms, and other businesses in Hood River and Wasco Counties (as opposed to Sherman County); and the Wasco County Landfill is where virtually all solid waste from these households and businesses is sent for disposal. Imposing a HHW surcharge at the Wasco County Landfill, on wastes originating in these two counties, is the simplest form of solid waste surcharge.

However, local rate-setting authorities will need to allow Waste Connections to pass this disposal rate increase back to residents and businesses in the form of rate increases at the two transfer stations and multiple collection franchises.

Table 6 illustrates what this surcharge would need to be under a variety of funding and cost options. Specifically, 6 scenarios are considered based on different combinations of two variables:

- Whether CESQGs and agricultural pesticide generators are allowed to use the collection service for free or at full cost (to be discussed at the next planning committee meeting).
- Whether or not revenues are supplemented by a surcharge on waste disposed of at the Wasco County Landfill that comes from outside of the Tri-County area (and if so, two hypothetical surcharges of $0.25/ton and $0.50/ton).

The surcharge for each of these six scenarios is estimated as follows:

- Estimated annual program costs from Schedules B (capital costs) and C (operating costs) are added together. Contingency costs are not added at this point. This provides a starting point for estimating revenue needs.
- From this annual estimate of program cost, the following revenue sources are subtracted:
  - DEQ grants,
  - user fees for special households,
  - user fees from CESQGs/agricultural pesticides, if any (note: the pro-forma cost model in this Plan assumes no payments from CESQGs or agricultural pesticide generators), and
  - DEQ reimbursement for out-of-area users.

  This results in the line on Schedule D titled "Additional Revenue Needed #1".
- A surcharge of either $0.00/ton, $0.25/ton or $0.50/ton on projected "out-of-area waste" is estimated and subtracted from "Additional Revenue Needed #1". This results in "Additional Revenue Needed #2" on Schedule D.
- A hypothetical Sherman County payment is then subtracted (see Section 5.3.3, below), resulting in the line "Additional Revenue Needed #3" on Schedule D.
- A local per-ton surcharge is derived using iterative methods. Starting at $0.00, the local surcharge is increased in ten cent increments until the "end of year reserves" on the bottom of Table 5 (assuming full 15% contingency) is positive at the end of the fifth year of operations.

Table 6.
Estimated Surcharges on Wasco and Hood River County Waste Disposal, Various Scenarios

Surcharge on waste disposed at Wasco County Landfill . . .		
. . . from "out of area" sources	. . . from Wasco and Hood River County . . .	
	. . . if CESQG and pesticide collections are free	. . . if user-fees are charged for CESQG and pesticide collections
$0.00/ton	$6.30/ton	$4.10/ton
$0.25/ton	$5.30/ton	$3.10/ton
$0.50/ton	$4.30/ton	$2.10/ton

5.3.2 Wasco and Hood River Rate Impacts

Rates at the transfer stations and for waste collection service in Hood River and Wasco County are calculated based on several components, one of which is the fee to ultimately dispose of collected waste at the Wasco County Landfill. Because the tipping fee at the Wasco County Landfill will be increased, rates charged at the transfer stations as well as for collection service in all areas that send waste to the Wasco County Landfill will also need to increase. Put differently, the increase in disposal fees will be "passed through" the solid waste system to the users of the system. Regardless of whether a household or a business has its garbage collected, or takes it to a transfer station, they will still be paying into the new hazardous waste collection service.

How much collection rates increase depends on the amount of the surcharge on disposal of waste from Wasco and Hood River Counties. Table 6 showed six different possible surcharge amounts, depending on two variables: a) a $0, $0.25/ton, or $0.50/ton surcharge on waste disposal from outside the region, and b) whether the hazardous waste collection service provides "no fee" collection opportunities for businesses and farmers, or whether they are required to pay a fee to bring in waste. For these six combinations of scenarios, Table 7 shows an estimate of the monthly increase that two different classes of users could expect:

- A household that disposes of all of its garbage through subscription garbage service. The household uses one 32-gallon container that is collected weekly.
- A business that disposes of all of its garbage through subscription garbage service. This business uses one 1-1/2 cubic yard dumpster that is collected weekly.

According to Waste Connections, these two scenarios represent the most common classes of service for single-family households and businesses, respectively.

Table 7.
Hood River and Wasco County Collection Monthly Rate Impacts, Resulting from Estimated Surcharges on Wasco and Hood River County Waste Disposal, Various Scenarios

If surcharge on waste disposed at Wasco County Landfill from "out of area" sources is:	. . . and if CESQG and pesticide collections are free	. . . and if user-fees are charged for CESQG and pesticide collections
Household with 32-gallon container, picked up weekly		
$0.00/ton	$0.50/month	$0.34/month
$0.25/ton	$0.43/month	$0.27/month
$0.50/ton	$0.35/month	$0.19/month
Business with 1-1/2 cubic yard dumpster, picked up weekly		
$0.00/ton	$3.70/month	$2.49/month
$0.25/ton	$3.15/month	$1.96/month
$0.50/ton	$2.60/month	$1.41/month

5.3.3 Sherman County Payments

Because Sherman County sends little, if any, waste to the Wasco County Landfill, it will contribute funds to the hazardous waste collection

program in an annual amount to be negotiated as part of the program's coordinating intergovernmental agreement (see Section 6.1.1 below).

The amount of Sherman County's contribution shown in Schedule D of Appendix E is for illustration purposes only. It is based on Sherman County's share of the region's population (4.21%), applied against estimated capital and operating costs, plus contractor profit (but not contingency), less DEQ grants and user fees. Alternative methods of determining Sherman County's "share" of funding include:

- Same method as above, but use 3.125% instead of 4.21%. 3.125% represents 1/32, if one in every 32 collection events is scheduled to take place in Sherman County (one event every other year).
- Same method as above but use 7.25%. This represents 1/16, if one in every 16 collection events is scheduled to take place in Sherman County (one event per year).
- Set a limit for number of Sherman County households, CESQGs, and/or agricultural pesticide generators, and require pre-registration. Allow registration until the limit is met. Sherman County pays an up-front annual fee based on the cost to service the maximum number of households, CESQGs, and agricultural pesticide generators allowed. If participation is lower than projected, a portion of costs are refunded.
- Keep tabs of the number of Sherman County households, CESQGs, and agricultural pesticide generators who use the collection service, and/or the quantities of wastes they deliver. Charge Sherman County a monthly, quarterly, or annual fee based on actual participation.

In the event that Sherman County chooses not to participate in this collection service (in any given year), revenues will be lower than shown in Table 5 but costs will be reduced as well.

5.3.4 DEQ Grants

Grants funds of $40,000 per facility plus $1 per person in the population of the service area are available for capital costs (or waste management costs, if the State of Oregon's contract is used). A grant application must be submitted as part of DEQ's annual HHW grants. As part of the grant application, DEQ will require letters of support from all local government units (cities and counties) whose population is being included in the funding formula.

Conditions of the grants include:

- That the facilities be open to the public (households) for at least 8, 4-hour days per year, for five years.
- The eight (or more) collection days per year must be spread out over at least four different months.
- The facility must be available by appointment (at least once per week) for special/unusual circumstances, including people who are moving and cannot wait for the next regularly scheduled opening.
- The facility must participate in the DEQ facility reimbursement program (see Section 4.13) within a year of opening, accepting wastes from outside of the service area at no charge to the user, and using DEQ's reimbursement schedule.
- The facility must be permitted by DEQ.

In addition, the three counties are eligible for up to an additional $10,000 in HHW planning grant funds that could be used to help complete the IGA, as this is an extension of the larger planning effort. Table 5 assumes that the Counties apply for and receive grants in both categories (planning and facilities).

5.3.5 Revenue Forecasts

Revenue forecasts for all of these revenue sources are shown in Schedule D of Appendix E.

5.3.6 Revenue for Other Services

Other HHW activities such as waste prevention education and enhanced used motor oil collection opportunities will be paid for with a combination of grants, SEPs, and local funds. If the HHW collection program builds sufficient contingency reserves, then some of these funds may also be used.

5.4 Sensitivity of Cost and Funding Projections

There are many factors that could cause actual costs to be higher or lower than the projections shown in Table 5 and Appendix E. From among these, some of the most significant factors are as follows:

- Program participation may be higher or lower than forecasted. High participation could result in higher costs; lower participation could result in lower costs.
- Volumes of wastes delivered per participant may be higher or lower than forecast. Greater volumes of waste will increase cost; lower volumes of waste will result in lower cost. This is particularly true of agricultural and other pesticides, which have a higher per-pound waste management cost than most other waste types.
- Many of the costs, including labor and waste management, are based on the State of Oregon's current contract with Philip Environmental Services. This contract expires in 2002. The new contract may have higher or lower unit costs. Agents of local governments may not be able to use the new contract under terms as favorable as the existing contract.
- Inflation. All costs shown are in 2002 constant dollars. Over time, some costs are likely to rise due to inflation. The Wasco County Landfill tipping fee is automatically adjusted on an annual basis to account for inflation. When the new landfill surcharge is added into the License Agreement, the County may want to clarify that the surcharge is also to be automatically adjusted to account for inflation.

Revenue projections are sensitive to the volume of waste delivered to the Wasco County Landfill. These projections, in turn, are tied to projections of population, waste generation, and recovery rates. If the disposal tonnage projections shown in Schedule D are too high, then not enough revenue may be available. In contrast, if the quantity of waste disposed is higher than the projection in Schedule D, then revenues will be higher than projected.

Throughout, the consultant has attempted to estimate costs based on reasonable, planning-level assumptions. The estimates are not, however, engineering-level cost projections. A 15% contingency has been added to the costs shown in Table 5 beginning in the year 2004.

5.5 Cash Flow Forecast

A dedicated fund will be established for the HHW collection service program. (Administration of this fund is described in Section 6.1 below.) This will allow revenues in excess of expenses to be carried over from one year to the next, which will allow for the creation of a contingency reserve. Having such a reserve will make management of the program more flexible and planning for events easier. Contingency funds could also be used for related projects (of a regional nature) not detailed in this plan, including a regional HHW prevention education effort.

The last lines of Table 5 show a simple cash flow model. It assumes that:

- $10,000 in DEQ planning grant funds and $3,500 in DEQ facility grant funds are available in the first year, while the IGA is being prepared. An additional $123,491 in DEQ facility grant funds are available in the next two years, while the facilities are being constructed.
- The landfill surcharge at the Wasco County Landfill commences at the beginning of the

second year (2004) of start-up (two years prior to the commencement of actual service).
- Sherman County begins making its contribution to program funding in the third year of start-up (one year prior to the commencement of actual service).

Under these assumptions (and other assumptions contained in Appendix E and this Plan), the program is fully funded for the three years of start up and the first five years of actual collection services, except in the very first year. During the first year, a small amount (less than $20,000) of additional revenue is needed to pay for preparing the IGA, revising the Landfill License Agreement, and other activities that are required to be completed before the landfill surcharge goes into effect. Wasco County plans to advance the money for this first year and will be reimbursed for this expense in the following year if the landfill surcharge is implemented.

If actual costs are 15% higher than projected in all categories of expenses (and thus the full amount of contingency funds shown in Table 5 are needed), then operating expenses will exceed revenues beginning in the second year of collection services (fifth year of the program), when CESQG and agricultural pesticide collections begin. This will necessitate a drawdown of the contingency reserve funds built up in previous years. If this trend continues, then by the sixth year of operations, all contingency reserves will be used up and there will be insufficient funds available to continue full service as described in Section 4 of this Plan.

This is unlikely to happen, as the managers overseeing the program would have had four years of declining reserves in which to reverse this trend, either by trimming expenses, or boosting revenues.

However, if costs end up being exactly as projected (and no contingency funds are required), Table 5 shows the program ending with a surplus of $222,000 at the end of the fifth year of services. Under this scenario, expenses never exceed revenues once the facilities are constructed, which means that the program could theoretically continue operations in perpetuity. In this case, once a healthy contingency reserve fund is built up, Wasco County could consider an appropriate reduction in the landfill surcharge.

Since participation and waste quantities largely drive program costs, the program managers will pay close attention to the program budget and costs and adjust service accordingly. For example, if the program appears to have the potential to exceed the budget in any year, attendance at events could be limited, promotion efforts could be scaled back, or contingency funds could be used. Fortunately, demand for hazardous waste collection can be divided into two categories. The first is residents and businesses who will seek out collection opportunities regardless of how infrequent they are. The second portion of program demand is more sensitive to the level of event promotion and publicity, and the convenience and frequency of events. These are factors that the program managers can more readily control. In this way, program costs can be controlled or limited from year to year.

This Plan proposes that the rate increase go into effect prior to the actual provision of collection services. This is proposed for two reasons: first, to generate revenue required to help pay for program start-up costs; and second, to build a reserve fund in order to provide for contingencies when program services begin, such as higher than projected participation. As part of the development of the intergovernmental agreement (see Section 6.1), the participating local governments will reconsider this approach and evaluate the possibility of delaying or adjusting the proposed rate increase so that ratepayers are not paying for services before they actually become available.

6. Program Management and Implementation

This section describes a basic structure for intergovernmental coordination between the cities and counties in the planning area, and management of the contractor that will provide the hazardous waste collection services described in Section 4.

Some educational activities and special collection activities such as rural motor oil collection may be provided by a different contractor, and are not discussed in detail in this Plan.

6.1 Intergovernmental Coordination

This collection program will be overseen by the three counties and interested cities, through the use of two legal agreements:

- An intergovernmental agreement (IGA) between the three counties and participating cities. This IGA will establish a Steering Committee and also designate a Lead Agency.
- A contract between the service provider (contractor) and the Lead Agency, acting on behalf of the Steering Committee.

Within the planning area, there are three county governments and twelve municipal governments. It is not necessary that all fifteen government entities enter into the IGA. For example, the four cities in Sherman County have existing IGAs with Sherman County where Sherman County provides for solid waste management, including the setting of rates. Since HHW and CESQG are a subset of solid waste, Sherman County could conceivably represent its four municipalities on the Steering Committee.

At a minimum, the participants in the IGA should include the three counties and those cities with a population over a certain size. Cities in the planning area are ranked by population as follows:

- The Dalles (12,185)
- Hood River (5,920)
- Cascade Locks (1,120)
- Dufur (590)
- Mosier (415)
- Maupin (410)
- Wasco (380) (represented by Sherman County)
- Moro (340) (represented by Sherman County)
- Rufus (270) (represented by Sherman County)
- Grass Valley (170) (represented by Sherman County)
- Antelope (60)
- Shaniko (25)

If the parties to the Intergovernmental Agreement were limited to the three counties and cities with populations over 1,000, then there would be six parties (the three counties, plus The Dalles, Hood River, and Cascade Locks). Since all cities in Sherman County are already represented by the County, such an agreement would provide for participation in the IGA by 96.6% of the residents of the planning area (not including an estimated 1,000 residents on tribal lands, who have their own solid waste system).

By adding Dufur, Mosier and Maupin to the IGA, bringing the number of IGA parties to nine, all residents except those of Antelope and Shaniko would be included, bringing representation to approximately 99.8% of the planning area.

Subsequent sections of this Plan refer to "IGA Participants". IGA Participants are assumed to include the three counties (Sherman County acting on behalf of its four cities as well), plus the cities of The Dalles, Hood River, and Cascade Locks, and possibly other cities in Wasco County as interested.

6.1.1 Elements of Intergovernmental Agreement

The primary purpose of the IGA is for the provision of hazardous waste collection services,

and the efficient coordination and oversight of those services.

Following Plan adoption, the IGA Participants will need to draft, revise, and adopt the IGA. Elements of this IGA will include the following:

- Definitions.
- A commitment by Wasco County to implement a per-ton landfill surcharge on wastes disposed of at the Wasco County Landfill (as discussed in Section 5.3.1). Money collected through this surcharge would be deposited into a dedicated fund to be used only for implementation of regional activities described in this HHW Plan.
- A commitment by all IGA Participants in Wasco and Hood River County to increase garbage collection and transfer station rates accordingly, and at the same time as the implementation of the landfill surcharge. (This provides for the landfill rate increase to be "passed back" to all users of the garbage system, regardless of whether they have subscription collection or self-haul to the transfer stations.)
- A commitment from Sherman County to pay a certain amount for a defined level of access to HHW and/or CESQG and agricultural pesticide services as described in the Plan. (This side agreement is required because Sherman County doesn't send waste to the Wasco County Landfill; see Section 5.3.3 for more details.) Alternatively, the IGA could provide for Sherman County's participation but allow levels of service and fees paid to vary from year to year.
- The establishment of a Steering Committee, described in Section 6.1.2, below.
- The designation of a Lead Agency from among the IGA Participants (described in Section 6.1.3, below). Wasco County has expressed willingness to serve as the Lead Agency, as long as its reasonable administrative expenses are reimbursed, and a reasonable IGA can be negotiated.
- The authorization of the Lead Agency to enter into a contract (or contracts) for the provision of regional services described in this Plan, on behalf of all of the IGA Participants. These services include the construction of permanent waste facilities, as well as provision of collection services.
- A description of the minimal requirements and standards of such contract(s), including:
  - that the contractor must indemnify all IGA Participants against liability;
  - waste management requirements (including use of the State's "Purchaser Agreement" for waste management options);
  - transporting and manifesting requirements;
  - insurance;
  - contractor identified as the waste "generator" (responsible for signing manifests); and
  - standards for accounting, billing, and compensation.
- A description of the responsibilities and obligations of the Lead Agency, and the responsibilities of the Steering Committee, as well as consultation and decision-making processes (Steering Committee voting procedures, etc.). This description will include a list of those activities which the Lead Agency is authorized to implement without consultation with the Steering Committee (such as paying contractor invoices), as well as those activities which the Lead Agency is required to obtain the approval of the Steering Committee (such as setting the annual budget). (These are discussed in Sections 6.1.2 and 6.1.3, below.)
- Sharing of liability (so that the lead agency isn't unfairly burdened with all liability with the contractor).
- A method for compensating the Lead Agency for the additional staff time required to manage and oversee the contractor. (Compensation is already estimated in Schedule C of Appendix E and assumes that start-up costs will be higher but will decrease as the program becomes established and some activities will become more routine in nature and easier to implement. This estimate is a

placeholder for purposes of cost estimating only.)

- A discussion of equity between geographic areas of the service region, and a method for ensuring that geographic classes of users have access to service and benefit that is consistent with their contribution to program revenues. This could be accomplished through annual program budgeting and promotion, as discussed below.
- Term of agreement, termination, and withdrawal of IGA Participants. The IGA will be re-evaluated during the fifth year of collection service. In the event that a participating local government chooses to withdraw from the IGA prior to the termination of the IGA, the IGA will provide for a method for equitably returning to that local government un-spent reserve funds collected from that local government or local government's ratepayers. In the event that the IGA is terminated or not extended, and reserve funds remain after all expenses are paid for, the IGA will also provide a method for re-distributing these reserve funds to the participating local governments. The individual local governments may choose to refund these to their ratepayers.
- Provision for financial audits.
- Method for dispute resolution.
- Other general IGA language (assignment, modification, severability, governing law, notification, etc.).

6.1.2 Composition and Responsibilities of Steering Committee

Composition of the Steering Committee will be determined by the Intergovernmental Agreement. At a minimum, it should include the three counties and the cities of The Dalles and Hood River. If the smaller cities are not included, it may be appropriate for the representatives of Wasco and Hood River Counties to be charged with being a liaison between the Committee and the smaller cities.

In addition to composition of the Steering Committee, the IGA will also need to establish:

- Quorum requirements.
- Voting procedures (for example, if decisions are made a simple majority of those present, a 2/3 majority, or require a consensus).
- The responsibilities of the Steering Committee.

Responsibilities of the Steering Committee could include:

- Participating in contractor selection, if required (see Section 6.2).
- Review of a draft(s) of the contract(s).
- Review and approval of the annual program budget. This could include decisions regarding how much money to maintain in reserve/contingency funds, as well as any limits on number of household, CESQG, and/or agricultural pesticide users, if needed in order to control costs. Limits could also be provided if program evaluation reveals that certain categories of users are "over-using" the system and inequities (for example, between counties) are developing.
- Review and approval of decisions regarding pre-registration requirements; scheduling of collection events; and coordination of promotional activities.
- Review and approval of alternate waste management options (consistent, however, with the guidelines contained in Section 4.17).
- Review and approval of user fees (if any) charged to households who use the facilities in-between collection events, as well as CESQGs and agricultural pesticide generators.
- Review of the contractor's annual report and review/approval of reimbursement schedules (see Section 6.3).

Each City and County represented on the Steering Committee will need to formally designate a representative to the Committee. Ideally, each representative would be authorized to vote on all issues before the Committee, without requiring consultation with its City Council or County Court/Board. If this is not amendable to the

elected officials, it would be best if they authorized their representative to vote on their behalf on as many issues as possible, so as to allow effective administration of the program and timely decision-making.

6.1.3 Responsibilities of Lead Agency

The Lead Agency will be responsible for the following:

- Leading development of the IGA.
- Determining a process for selecting a contractor(s) and conducting a public procurement process.
- Negotiating a contract(s) for services (including both construction of facilities and operations).
- Administering the contract(s) for services, including oversight of the contractor(s) to ensure full compliance.
- Reviewing contractor(s) invoices, paying the contractor(s), and settling any disagreements regarding compensation.
- Maintaining accounting records of expenses and funds available.
- Managing the development of an annual budget.
- Coordinating meetings of the Steering Committee and consulting with the Steering Committee on issues identified in Section 6.1.2.
- Coordinating the education and outreach activities either directly or overseeing the activities of the contractor.

6.2 Contractor Selection

Ultimately, selection of a contractor or contractors to provide the services described in this Plan will be the responsibility of the Lead Agency. Wasco County has recently decided to serve as the Lead Agency. Wasco County's public procurement and contracting rules will need to be reviewed. The method of contractor selection might involve a competitive solicitation. Alternatively, it might involve a sole source solicitation with Waste Connections, which already operates both transfer stations where the permanent facilities are expected to be located, and is the sole franchisee for all of Hood River County, The Dalles, and northern Wasco County.

6.3 Contract Issues

The following issues will need to be identified and negotiated as part of the contract for provision of hazardous waste collection services. Several of these issues are discussed in greater detail below.

- Construction and ownership of permanent facilities.
- Reimbursement for construction of permanent facilities.
- "Generator" status and waste management requirements.
- Service standards for HHW, CESQG, and agricultural pesticide collections.
- Reimbursement for operation of the collection system.
- Insurance requirements.
- Other requirements.
- Contract term.
- Indemnification.

The contract will address each of these issues in detail. However, service standards for HHW, CESQG and agricultural pesticide collections, and payment for provision of these services will be addressed more generally. In order to provide for flexibility and improved cost-effectiveness over time, the contract will require the development of an annual program work plan and budget. These annual documents will act as task orders (work authorizations) for actual collection services and system operation to be provided (and paid for) under the contract.

6.3.1 Construction, Reimbursement, and Ownership of Permanent Facilities

The contract will need to provide standards for the construction of the two permanent collection facilities. Perhaps the easiest way to do this is through performance standards that require

adherence to DEQ's guidance for permanent facilities (or rules, if the rules are adopted before the contract is completed). The contract will also need to discuss payment of the contractor to reimburse the contractor's expenses associated with facility construction. At a minimum, the contractor will be reimbursed for reasonable construction costs and a reasonable amount of staff time for management and oversight of facility construction.

The facilities will be owned by the Lead Agency during the first five years of operation. At the end of this period, ownership may be maintained by Wasco County or transferred to the landowner, lessee, or facility operator as mutually agreed upon.

6.3.2 Generator Status and Waste Management

The contractor will be designated as the waste "generator" when waste is shipped for treatment, storage, or disposal. As the "generator", contractor staff will sign manifests and will assume primary liability under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act; also known as "Superfund") for proper transportation and management of the wastes.

Because of the potential for liability resulting from improper waste management, the contract will specify that all waste collected under this program (with the exception of motor oil, lead acid batteries, latex paint, and local re-use) must be managed under either the State of Oregon's or State of Washington's contracts for hazardous waste management (see Section 4.17), unless an exemption is granted (see next paragraph). While not eliminating liability, use of these contracts provides the contractor with the same level of facility oversight as the states are willing to accept and may also provide for additional insurance coverage.

Any waste management options used by the contractor and not provided under one of the state contracts must be approved by the Lead Agency, in consultation with the Steering Committee.

6.3.3 Service Standards

The contract will specify the general types of services to be provided, as described in this Plan. It will note that the actual services to be provided in any given year (including participation limits or goals, if any) will be set forth in writing as part of the annual program budget and work plan.

6.3.4 Contractor Reimbursement

Reimbursement of the contractor for provision of services should be structured to meet the following criteria:

- Provide for fair reimbursement of reasonable expenses.
- Provide for a reasonable profit.
- Avoid unnecessary expenses; provide for cost-effective service.
- Provide incentives to realize cost efficiencies.
- Provide incentives to maximize the level of service offered, given the budget available.
- Avoid cost over-runs (over budget).
- Easy to administer both for the contractor, and the Lead Agency.
- Provide for flexibility to adapt to changing circumstances.

The contract will specify allowable and non-allowable costs, as well as an operating margin or rate of return for the contractor's profit. This profit calculation could include or exclude waste management costs if the State's contract is used for waste management.

Actual payment amounts will be limited based on the annual program budget, which will be negotiated between the contractor and the Lead Agency, in consultation with the Steering Committee. This annual budgeting process provides several advantages, including:

- Ability to modify, add, or delete services and service levels as desired,
- Ability to modify reimbursement terms as the operator gains experience with the program and is able to better forecast actual costs,
- Ability to retroactively compensate the contractor if the previous year's costs exceeded reimbursement limits for reasons outside the contractor's control.

The contract will require the development of an annual work plan and budget, which will be a cooperative effort between the contractor and the local governments. However, final approval of the annual budget will be the responsibility of the Lead Agency (working with the Steering Committee), not the contractor. The approved annual work plan and budget will serve as a year-long "task order" (work authorization) for work to be performed under the contract. Payment will only be provided for work performed under these task orders.

In order to conduct annual budget negotiations, the contractor will be required to report actual costs for each year. Costs will be reported in categories determined by the contract (the list of allowable cost types). This reporting will greatly enhance the ability of the Lead Agency and Steering Committee to work with the contractor to develop realistic annual budgets that meet the criteria above.

The actual reimbursement of the contractor could be based on actual costs, or, alternatively, the contractor could be paid using a formula that compensates for fixed costs and variable costs separately. For example, an annual work plan and budget could provide for the payment of a fixed sum for management and staffing, and then provide a variable fee based on number of households, CESQGs, and/or agricultural pesticide generators serviced, and/or actual volumes of wastes managed. The annual fixed sum would provide a financial incentive for the contractor to perform management and staffing as cost-effectively as possible, and the variable fee would provide an incentive to the contractor to maximize the number of participants (within a not-to-exceed amount, of course).

6.3.5 Insurance Requirements

The contract will require the contractor to provide insurance policies covering vehicle liability (including MCS-90, which provides cash availability to pay for immediate clean-up in the event of spills), worker's compensation, general liability, pollution liability, and umbrella liability (for all liability expenses not covered by other insurance). The insurance policies must be underwritten by an U.S. based company with good ratings (A- or better from AM Best, or A or better from Standard & Poors), and must have reasonable deductibles.

All insurance policies will need to name the Lead Agency and all signatories to the Intergovernmental Agreement as additional insureds.

Of these insurance requirements, pollution liability is potentially the most expensive. The exact cost of this insurance has not been determined at this time but will most likely vary significantly depending on the amount of coverage required. A stand-alone policy with a high level of coverage could easily cost more than $10,000 per year. For planning purposes, the cost estimates in Table 5 and Appendix E assume insurance costs (to the contractor) of $8,000 per year. Contract requirements as set forth in this Plan (including the use of the State's contracts for waste management, and compliance with DEQ Guidelines for facilities) should help to reduce this cost. The fact that the facilities are co-located with transfer stations also means that it may be possible to provide pollution liability insurance as part of an existing policy, which could result in significant savings. In fact, at least one U.S. community has obtained pollution liability coverage for their HHW collection service at no additional charge. Since the HHW collection program reduces the amount of hazardous wastes sent to the town's landfill, it is viewed not as a new liability but rather as merely shifting risk and

liability from one set of facilities (transfer station, solid waste landfill) to another (HHW collection, TSDF).

In the event that a high level of liability insurance is desired, and costs exceed the level budgeted in Table 5 and Appendix E, three options are available:

- Rely on a portion of the contingency funds to cover additional insurance costs (which average just over $30,000 per year during the first five years of operations).
- Increase the tipping fee surcharge to pay for this additional cost.
- Remove waste management costs from the contractor's list of expenses used to calculate profit. Table 5 assumes an 8% profit to the contractor on all operations-related costs except for local government oversight and the cost of insurance. One justification for profit is that it is provided as a reward for acceptance of risk. The greatest risk in the provision of HHW collection service is probably pollution liability. If a very protective (and therefore expensive) insurance policy is required (and paid for), then this risk will be reduced and it may be reasonable to remove waste management expenses from the calculation of profit. This would reduce average annual operating expenses by more than $9,600 a year.

Although not a contract-related issue, the Lead Agency will also include the facilities (as long as it owns them) in its own general property liability insurance policy.

6.3.6 Contract Term

As a condition of the DEQ grants, the counties will be required to provide collection services for a minimum of five years. As such, the contract for operations of the HHW collection program should be for a period of at least five years. At the end of the first five years, the contract could be re-negotiated, re-bid, or extended through a series of one-, two-, or five-year extensions.

6.3.7 Other Requirements

Other contractor requirements, to be included in the contract, will include the following:

Program coordination and management

- Working with the Steering Committee, schedule events and facility service; guarantee availability of sites, staff, and subcontractors (if any) for each event;
- Establish record-keeping system;
- With Steering Committee, conduct periodic program evaluation and prepare annual report;
- Work with Steering Committee to prepare an annual work plan and budget for collection services;
- Ensure adequately insured subcontractors;
- Assure compliance with all DEQ permits;
- Maintain accounting records; participate in financial audit as required.

Staffing responsibilities

- Develop job descriptions;
- Hire, train, maintain current training;
- Medical monitoring (baseline and ongoing);
- Provide staffing.

Facility responsibilities

- Conduct periodic facility audits;
- Purchase replacement equipment and supplies as needed;
- Provide for routine maintenance of vehicle and facilities, including all equipment;
- Ensure that all permit requirements are met, including 90- or 180-day limitation on waste accumulation.

Waste management responsibilities

- Establish waste handling protocols and management methods;
- Review TSD and end disposal facilities, based on contract conditions;
- Obtain approval from the Lead Agency (and Steering Committee) for all waste management methods used that are not provided under one of the state contracts;

- Establish contract for transport and management by hazardous waste firms;
- Establish contract for transport and management of solid waste and recyclables;
- Oversee packing methods;
- Sign and track manifests for wastes shipped;
- Establish inspection procedures, forms and oversee implementation.

Publicity and outreach responsibilities

- Coordinate any pre-registration requirements;
- Coordinate "on-call" appointment services as needed;
- With Steering Committee members, other local governments, and other partners, conduct program publicity and outreach.

6.4 Program Staffing

Program management and education/outreach activities will be conducted by the contractor working in conjunction with the Steering Committee. Promotion and outreach activities will also involve solid waste companies, other cities, volunteers, and other entities.

In addition to management and promotion, a minimum of four to five part-time positions need to be filled in order to staff this program:

- Hazardous waste chemist (1)
- Hazardous waste specialist (1 based at The Dalles and 1 at Hood River)
- Waste technician (1 at The Dalles and 1 at Hood River)

Smaller events will require 1 chemist, 1 hazardous waste specialist, and 1 technician. Larger events will require an additional hazardous waste specialist and may require an additional technician. In addition, other staff will be needed for traffic control at the collection events.

It is assumed that the hazardous waste chemist will be a sub-contracted individual (or employee of a sub-contracted company) who will also serve as the lead technical advisor of the events. It is also assumed that the two hazardous waste specialists and two waste technicians will be employees of Waste Connections who work at the transfer stations, and thus will also be available for special "on-call" collection services. The hazardous waste specialist at The Dalles may also be the contractor's program manager, with oversight responsibility for all collection activities.

The roles and responsibilities of each of these positions are described in detail below. All staff working with HHW, CESQG, and agricultural pesticide waste must be on the payroll of the contractor or some other entity (for the work to be performed), and adequate workers' compensation insurance must be provided. Depending on working conditions and locations, traffic control may be provided by trained volunteers (unpaid) who sign a waiver releasing the contractor and local governments from liability.

6.4.1 Hazardous Waste Chemist

The Hazardous Waste Chemist will serve as the technical lead on waste identification, sorting, and packing, as well as supporting in the area of safety. The individual will have a basic science background or equivalent specialized training and experience. The individual will have a minimum of OSHA 40-hour training plus additional specialized training related to segregation, packaging, and shipping of household hazardous wastes. This person will have had extensive hands-on experience with household hazardous waste collection and will perform the following tasks:

a. Review the operating procedures and ensure safe handling, segregation and packing;
b. Make any on-site determinations regarding unknown or unacceptable wastes;
c. Oversee the sorting, packing, and consolidation of wastes; and
d. Provide ongoing training and technical assistance to other program staff in all of these areas.

6.4.2 Hazardous Waste Specialists

The Hazardous Waste Specialists will serve as the event managers. Each Specialist will have a minimum of OSHA 40-hour training, depending on the work expected from them. They will also receive specialized training in HHW management as well as hands-on training under the supervision of a Chemist. The hazardous waste specialists will perform the following types of tasks:

a. Define each staff person's tasks;
b. Define the appropriate personal protective equipment (PPE) for each task;
c. Review the operating procedures and ensure safe handling, segregation and packing;
d. Determine the site set up for the collection events;
e. Oversee set-up of site;
f. Manage the on-site paperwork/processing of any users if volume-based fees are charged;
g. Unload waste and segregate into basic groups;
h. Consolidate flammable liquids, under the supervision of the Hazardous Waste Chemist;
i. Lab pack wastes, under the supervision of the Hazardous Waste Chemist;
j. Oversee the labeling and storage of drums and containers;
k. Move full containers (drums, etc);
l. Oversee take-down of the event; and
m. Accept hazardous wastes from special (non-event) users (movers, etc.).

One of the Hazardous Waste Specialists will also be the program/event/facility manager. Additional responsibilities during collection events include staff oversight, signing of manifests, recordkeeping, and coordinating efforts with the hazardous waste chemist, who serves as the lead technical resource. Over time, and with sufficient experience, the lead Hazardous Waste Specialist may be able to assume some of the responsibilities of the Hazardous Waste Chemist.

6.4.3 Waste Technicians

The waste technicians will receive training in on-site procedures, emergency response procedures and basic safety procedures. They will perform the following types of tasks:

a. Help set-up site;
b. Help direct traffic, ask survey questions, hand out informational materials to participants;
c. Help unload wastes from vehicles;
d. Handle non-hazardous latex paint (i.e., stacking containers onto pallets or into boxes or pouring into drums);
e. Handle used motor oil and lead acid batteries; and
f. Remove solid waste or consolidate corrugated cardboard boxes for recycling.

6.4.4 Sources of Staff

It is assumed that the hazardous waste chemist will be a contracted individual, possibly from outside of the service area, as extensive experience with identification and management of HHW and CESQG waste is not a common skill. This individual may be employed by a private hazardous waste firm (such as those maintained under Oregon and Washington States' "purchaser programs"). HHW programs in the Portland Metro area or the Washington Tri-Cities area may provide a pool of individuals from which to draw, as well as community college, university, or industry chemistry or laboratory specialists.

Other staff will be trained employees of the local contractor, supplemented initially and then on an as-needed basis by trained staff from a hazardous waste firm such as the State of Oregon's contractor. The hazardous waste specialists need to be regular employees who work at the two transfer stations, so that there is at least one person on site at most times to manage unscheduled waste deliveries (as a contingency).

Training requirements, particularly for the hazardous waste specialists, are fairly extensive (and expensive), which is another reason to draw from the contractor's permanent staff. A budget for start-up and ongoing training expenses is included in Schedule C of Appendix E.

6.5 Staff Training and Health & Safety

At the collection events and at the permanent facility, the staff will follow standard operating procedures that will be reviewed at the outset of each collection day. Each staff person will be provided with appropriate personal protective equipment (PPE) for the tasks they are performing. The staff will be trained in emergency procedures such as how to limit and deal with minor spills, how and where to evacuate and who to call in the case of major emergencies.

The establishment of health and safety policies and procedures will protect the workers and the general public from potential safety and health hazards posed at the site. The contractor must also comply with Oregon and Federal OSHA requirements regarding worker safety. This involves implementing safety procedures regarding operations, personnel training, and personnel health monitoring.

6.5.1 Operational Safety Procedures

Standard operational safety procedures will be implemented by the contractor. The correct level of personal protective equipment (PPE), such as such as respirators, gloves, boots, helmets, protective jumpsuits, and reflective traffic vests will be established to fit the level of hazard exposure. There will be a procedure for entering and exiting the waste handling areas. Safety equipment will be provided and stored in accessible areas, and checked prior to any events or waste handling. Animals and unauthorized people must be kept out of the active areas of the facility, which will have locks on gates and doors and have or be located at sites with security fencing. There will be an accessible facility drawing that shows fencing and signs, emergency equipment areas, storage areas for PPE and spill response equipment, and a shower and eyewash station.

6.5.2 Personnel Training

All employees working onsite will be trained and informed as to the hazards they may be exposed to and safe work practices. Hazardous waste specialists will attend a 40-hour hazardous waste personal protection and safety course and an annual 8-hour refresher course. Waste technicians should already be trained as part of their other responsibilities at the transfer stations but will be provided with 40-hour hazardous waste personal protection and safety training if their work responsibilities expand to involve more than handling latex paint, oil, automotive batteries, and non-hazardous solid waste.

There will be a written training plan for each job description, which includes the type and amount of both introductory and continuing training for each position. The contractor will maintain training records and check that employees have met individual work task training requirements.

6.5.3 Personnel Health Monitoring

A medical evaluation program will be instituted for the following employees:

- Any employee who is or may be exposed to hazardous substances or health hazards at or above the Permissible Exposure Limits or, if there is no Permissible Exposure Limit, above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year.
- Any employee who wears a respirator during part of a day.
- Employees exhibiting symptoms due to possible overexposure involving hazardous substances or health hazards from an emergency response or hazardous waste operation.

Medical examinations and consultations will be required of these employees prior to employment at the facility and events. A medical examination

should also be performed as soon as possible, upon notification by an employee either that the employee has developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards or that the employee has been injured or exposed above the Permissible Exposure Limits (PELs) or published exposure levels in an emergency situation. Routine medical monitoring will occur at least annually, and an exit exam will be provided to all employees when they end employment.

6.6 Program Outreach

The contractor will work with the counties, cities, waste collection companies, fire departments, poison control professionals, real estate agents, and other program partners to educate area residents and businesses about safe management of hazardous waste. The outreach effort will focus on three separate areas: waste prevention, safe use and storage of products, and waste management opportunities (curbside collection, transfer stations, collection events).

Except for the staff time involved, many of these approaches are available at little or no cost.

- Inserts into/notations on local utility bills such as garbage and water bills.
- Press releases to local newspapers/radio stations. Newspapers include the *Hood River News*, *The Dalles Daily Chronicle*, and the *Sherman County Journal*.
- Interviews/call-ins on local radio stations such as KIHR (Hood River) and KACI (The Dalles).
- A booth at the County Fairs.
- Presentations before community groups such as real estate agents, Chambers of Commerce, Rotary, and farmers/orchardists associations.
- Presentations in area schools.
- Distribution of educational materials provided at no cost to the County by DEQ, such as the *Hazardless Home Handbook* and other information on alternatives to hazardous products.
- Fliers posted or handed out at the transfer stations.
- Information on checkstands at grocery stores and other retail outlets (particularly where hazardous materials are sold).

6.7 Measurement of Program Success

Through record maintenance and short interviews of event users, the Steering Committee will measure the following metrics of program success on an annual basis:

- Pounds of waste managed, by waste type and source (households, CESQGs, farmers).
- Percent reused or recycled
- Cost per pound managed
- Number of households served/year
- Number of CESQGs served/year
- Number of farmers (agricultural pesticide generators) served/year
- Number of new users per year
- Number of household clean-outs (movers or those cleaning out for a relative) per year (% of all residential real estate transactions).

user survey?

In the event that waste volumes and/or participation fail to meet the Steering Committee's expectations, participation may be increased by evaluating the convenience (time and location) of events, and increasing promotion of events and education of the community.

In the event that participation and waste volumes are higher than anticipated, and the program budget is inadequate to manage these waste volumes, methods for controlling and/or decreasing the amount of waste delivered include requiring pre-registration at events and/or reducing the promotion of events.

7. Implementation Plan and Timelines

This Plan is divided into two periods: short-term and medium-term. The short-term period extends through design, permitting, and construction of

the permanent facilities, and other work necessary to prepare for the services described in this Plan. It is assumed that the short-term period will last approximately three years.

The medium-term planning period begins once the permanent facilities open for service, and continues throughout the first five years of collection services there.

7.1 Short-Term (Years One through Three)

This period commences with adoption of this Plan by the cities and counties. Major activities to be completed during this period include the following:

7.1.1 Intergovernmental Coordination and Program Funding

- Prepare and submit application to DEQ for two facility grants. One application may be submitted in 2002, followed by the second application in 2003.
- Prepare and submit application to DEQ for a planning grant.
- Negotiate grant funding contracts with DEQ.
- Revision of the Wasco County Landfill License Agreement and establishment of the Wasco County Landfill hazardous waste program tipping fee surcharge(s), effective either January 1, 2004, the date that the IGA becomes effective, or some other date.
- Negotiation of an Intergovernmental Agreement.
- Concurrent approval of the Intergovernmental Agreement and rate increases by the local governments. Each local government should adopt the IGA and the rate increases together (at the same time), except for Sherman County which is not a partner to the Wasco County Landfill rate change. These resolutions could be written so that they do not take effect until a date after a certain number of local governments have passed similar resolutions. Since the Wasco County Landfill rates change every January 1, the start of 2004 would be a good time to implement the landfill surcharge and local rate increases. This would require adoption of the IGA and approval of rate increases by mid-autumn of 2003.
- Concurrent implementation of transfer station and collection service rate changes by Wasco County, City of The Dalles, Hood River County, City of Hood River, and City of Cascade Locks (and possibly other smaller cities in Wasco County).
- Designation of the representatives of the Steering Committee.

All subsequent activities are contingent upon the receipt of DEQ grants and the successful negotiation of the IGA.

7.1.2 Contractor Selection

- Solicitation of a contractor(s) by the Lead Agency, including the public procurement process.
- Contract negotiations.

7.1.3 Design Facilities and Apply for Permits

- Convene meeting between DEQ and local agency(s) with permitting authority. Determine coordinated procedure for obtaining permits and exact sequence of permit applications.
- Prepare building/engineering plan, site plan, and operations plan. This may involve the services of a professional engineer or architect, under subcontract to the selected contractor. Because the storage facilities will most likely be fully-equipped pre-fabricated units, engineering requirements are relatively

small, and include design of the concrete pad, secondary containment, interface of the pre-fabricated unit to the pad and utilities, pole-barn canopy roof, and fencing. General site design must also address access and traffic flow. If pre-fabricated units are used, the exact model, design, and floor plan of the units will need to be determined at this time. This may require the issuance of a request for bids or proposals to select the manufacturer and units. Alternatively, the contractor may choose to have the storage units constructed on-site. This may increase storage capacity but will require significantly higher engineering and construction costs. Local requirements of the building/ engineering and site plans will need to be determined. DEQ guidance regarding the contents of the engineering plan and operations plan is included in Appendix A.

- Submit permit applications to DEQ, local agencies. Participate in any hearings and permit review meetings.

7.1.4 During and After Facility Construction

- Conduct any additional request of bids from construction subcontractors. Evaluate bids, select subcontractors, and negotiate contracts.
- Prepare the site, including access and any necessary utility improvements.
- Provide construction management and oversight.
- Post-construction inspection and approval.
- Procure and install equipment (fire extinguishers, safety shower, eye wash station, tables, carts, drums, drum dolly, containment pallets, totes, absorbant, spill kits, PPE, etc.).
- Procure and install signage.
- Complete any final facility permit inspections (DEQ, local agency) prior to opening.
- Continue to implement community education plan.

7.1.5 Other Preparation for Service

These activities may be started at any time. Some may be required as part of the engineering plan and operations plan.

- Review State of Oregon and State of Washington contracts for HHW services. Select contract mechanism(s) and negotiate agreement with appropriate agency(s).
- Review and approve of TSD and end disposal facilities, based on State of Oregon or Washington contracts, or third-party environmental compliance audits (most should be already available).
- Establish record-keeping system.
- Prepare facility audit protocol and checklists.
- Develop job descriptions.
- Establish waste handling protocols, management methods.
- Establish subcontract for transport and management of solid waste and recyclables.
- Purchase truck or trailer and retrofit with canopy, vents, shelves, wall braces, and required safety equipment.
- Hire facility/event staff.
- Train staff.
- Baseline medical monitoring.
- Negotiate work plan and budget for first year of operations.

- Schedule events and facility service for the first year of the medium-term, guaranteeing availability of sites, contractor staff, and subcontractors for each event.

- Prepare and begin to implement community education plan.

7.2 Medium-Term (Years Four through Eight)

The medium-term period begins with the opening of the permanent facility and the first acceptance of HHW from the public. It is assumed that the first several years of the medium term will be a time of dramatic growth in services, participation, and quantities of waste collected. The contractor, Lead Agency and Steering Committee will need to pay particular attention to program costs and revise services if needed in order to avoid exceeding the program's budget. Experience in other communities is that participation continues to increase after the first several years, although at a slower rate, eventually stabilizing (with only small fluctuations) after seven or more years of operation.

Activities to be completed during this period include the following:

- Begin operation of the permanent facility.

- Begin satellite collection events.

- On an annual basis, prepare annual reports, and negotiate annual work plans and budgets.

- Begin services to CESQGs (and agricultural pesticide collections) in the second year of the medium-term period.

- Implement the waste re-use program. Evaluate and expand program, if appropriate.

- All other responsibilities described elsewhere.

- Any other activities required by DEQ or local permits.

- Program monitoring and evaluation, as described in Section 6.7, above.

AGENDA STAFF REPORT
CITY OF THE DALLES

MEETING DATE	AGENDA LOCATION	AGENDA REPORT #
October 13, 2003	Discussion Item	

TO: Honorable Mayor and City Council

FROM: Dave Anderson, Water Quality Manager
Brian R. Stahl, Director of Public Works

THRU: Nolan K. Young, City Manager

DATE: September 30, 2003

ISSUE: **IMPLEMENTATION OF TRI-COUNTY HOUSEHOLD HAZARDOUS WASTE MANAGEMENT PROGRAM.**

RELATED CITY COUNCIL GOAL: not applicable

PREVIOUS AGENDA REPORT NUMBERS: Staff Report #01-064 dated June 23, 2001; Memorandum to Council dated July 3, 2002 with draft Tri-County HHW Management Plan; Staff Report #02-074 dated July 16, 2002; Consent Agenda Report dated August 28, 2002.

BACKGROUND: At its September 9, 2002 meeting, The Dalles City Council formally adopted the Tri-County Household Hazardous Management Plan. That Plan was also adopted by Wasco, Sherman, and Hood River Counties, and the incorporated municipalities of Hood River, Cascade Locks, Mosier, Dufur, and Maupin. Implementation of that plan will provide services for the proper management and disposal for hazardous wastes generated in Wasco, Sherman and Hood River Counties. This report is being provided to the City Council to initiate the process of implementing the garbage collection surcharge that the Plan identified to fund the program and that is to be effective on January 1, 2004.

Since the adoption of the Plan, Wasco County has contracted with Kathy Kiwala to facilitate development of the Intergovernmental Agreement (IGA) between all the participating jurisdictions to implement the program, to apply for grants from DEQ for the construction of the program facilities, and to coordinate the local funding needed for the program through implementation of a solid waste surcharge at the Wasco County Landfill which is to be passed through to local garbage collection services. Attached to this report is a brief memo from Ms. Kiwala providing an update on the status of program implementation.
To date, the Steering Committee has met with Ms. Kiwala on one occasion to review project needs and time-lines; they will meet again on October 7th. The garbage collection surcharge is to

be effective January 1, 2004. Work is progressing on the IGA and, while it is not completed as of the writing of this report, it is anticipated to be presented to City Council at the September 9 meeting, or before if possible.

Another task that is proceeding is validation of the rate model to see of the previously anticipated rates are still valid. At the time of Plan adoption, the surcharge rates were anticipated to be $6.30/ton at the landfill, $3.70/month for commercial customers (1½ cubic yard dumpster collected weekly), and about $.50/month for residential garbage collection services (one 32-gallon container collected weekly). These cost estimates are being validated with current costs for hazardous waste disposal, insurance, permits, and other variables. That modeling is expected to be completed on October 10 and will be presented to City Council at the meeting.

A third issue that will be presented to the Council at the meeting is a "final" decision regarding whether Sherman County will continue to participate in the program or not. That decision is expected to be made on October 1 and the rate modeling will be adjusted to reflect that decision.

This issue is being presented to Council at this time as a Discussion Item to provide an opportunity to receive information relative to the implementation of the Plan. Staff and the consultant will also be seeking direction from the City Council about when it would like these issues brought back for action on the garbage collection surcharge.

BUDGET IMPLICATIONS: None at this time. With future action by City Council, residential and commercial garbage collection rates would need to be increased January 1, 2004.

ALTERNATIVES: discussion item only.

DATE: September 4, 2003

TO: The Dalles City Council

FROM: Kathy Kiwala, HHW Project Consultant

SUBJECT: Upcoming Actions on the Tri County Household Hazardous Waste Program

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The purpose of this memo is to update the Council on the progress of the Household Hazardous Waste Plan and to alert them to upcoming decisions that will come before the Council.

Last summer, on September 9, 2002, The Dalles City Council adopted the regional Household Hazardous Waste (HHW) Plan. That Plan was developed with input from representatives from the cities of The Dalles, Hood River, Cascade Locks, Sherman, Hood River and Wasco counties, DEQ and the local solid waste industry. The HHW Plan is a coordinated plan for the collection and safe disposal of hazardous waste from households, small businesses and farmers within the Hood River, Sherman and Wasco county area. It is a unique program for two reasons. First, because of the many governments coordinating and supporting this regional service. Second, because the program will accept hazardous waste from the variety of generators (usually a program such as this will only accept from households). The estimated 1,507 businesses with conditionally exempt hazardous waste, the 46,300 people living in households in the tri-county area, and the many farmers and orchardists would be able to use this convenient program.

With the preliminary planning work accomplished, the Plan is moving into the implementation phase. There is much that will need to be accomplished in the upcoming months. A committee of participating governments will develop an intergovernmental agreement, which will then be adopted by participating governments. Wasco County will need to approve a landfill fee which will provide the majority of the funding for this program (grants are another source of funding). As a result of that fee, cities and counties will need to adopt changes to garbage collection rates. The IGA and collection rate changes will come before our Council during mid October through early November in order for the new rates to become effective on the usual date of January 1, 2004.

Wasco County, as the lead agency, is coordinating the committee working on the IGA and other implementation actions. Dave Anderson is representing The Dalles on that committee. Information will be brought to the Council when the IGA and rate work are ready for discussion and Council action. Any questions or issues to be addressed before that presentation could be forwarded to Dave Anderson.

WASCO COUNTY

Wasco County Court
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The Dalles, Oregon 97058-2237
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Fax: (541) 298-3650

Dan Erickson, *County Judge*
Scott McKay, *County Commissioner*
Sherry Holliday, *County Commissioner*

12-24-04

December 31, 2003

Mr. Nolan Young
City of The Dalles
313 Court Street
The Dalles, OR 97058

RE: INTERGOVERNMENTAL AGREEMENT FOR THE TRI-COUNTY HOUSEHOLD HAZARDOUS WASTE MANAGEMENT PROGRAM

Dear Mr. Young:

Wasco County is pleased to be sending you, for your records, one original of the Intergovernmental Agreement for the Tri-County Household Hazardous Waste Management Program. This Agreement has been signed by the Cities of Hood River, Mosier, The Dalles, Dufur, Maupin, Cascade Locks and the Counties of Hood River, Sherman and Wasco. This document represents many hours of planning and work, over several years, by these governmental entities. The Agreement, the Plan and your continued involvement will provide many benefits to our communities with this unique program and service.

Other aspects of this phase are set to begin. The Household Hazardous Waste Surcharge was approved by all participating entities (Sherman County developed a separate funding mechanism) and becomes effective January 1, 2004. That surcharge, along with grants, will begin to fund activities for the next phase--the building of the facilities, hiring a consultant and the handling of necessary administrative costs. Planning for the Steering Committee is also beginning.

As a Party to this Agreement, your governmental entity has the option to appoint a representative to serve on the Steering Committee which will guide this program. Please consider who you may want to designate to participate in this group and contact our office with the name and address of your designee. The minimal commitment entails quarterly meetings, with the first meeting to occur in February or early March of 2004. At that meeting, the Committee will create bylaws, appoint a Vice Chair, and address other organizational and program related details. I encourage you to have your City represented on that Committee.

JAN 12 2004

I look forward to a successful partnership and the start of household hazardous waste collections in 2006.

Yours very truly,

Dan Ericksen
WASCO COUNTY JUDGE

ENCLOSURE

HOUSEHOLD HAZARDOUS WASTE IMPLEMENTATION PROGRAM

Tri-County Area Counties of
Wasco, Sherman, and Hood River
Intergovernmental Agreement

2003

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INTERGOVERNMENTAL AGREEMENT BY AND BETWEEN THE COUNTIES OF WASCO, HOOD RIVER AND SHERMAN, AND THE CITIES OF THE DALLES, MOSIER, DUFUR, MAUPIN, HOOD RIVER AND CASCADE LOCKS TO IMPLEMENT THE HOUSEHOLD HAZARDOUS WASTE MANAGEMENT PLAN

This Intergovernmental AGREEMENT is made and entered into in 2003 by and between the political subdivisions in Oregon of the Counties of Wasco, Sherman, and Hood River, and the incorporated municipalities of the Cities of The Dalles, Hood River, Cascade Locks, Mosier, Dufur, and Maupin.

Recitals

WHEREAS, it is in the interest of public health, safety and the environment to provide alternatives to disposal of hazardous waste generated by households, conditionally exempt small quantity generators and agricultural activities as defined in Chapter 459.411 ORS; and

WHEREAS, these Counties and Cities jointly prepared, and, subsequently adopted in the year 2002, a Household Hazardous Waste Management Plan for the tri-county area; and

WHEREAS, the State of Oregon has declared it a matter of statewide concern to promote intergovernmental cooperation for the purpose of furthering economy and efficiency in local government; and

WHEREAS, the legislature has given general authority for intergovernmental agreements by units of local government pursuant to the provisions of ORS 190.101 et. seq; and

WHEREAS, counties and cities have the authority pursuant to Chapter 190 ORS to enter into intergovernmental agreements to provide services and facilities through the joint and cooperative exercise of powers, privileges and authority; and

WHEREAS, these Counties and Cities desire to enter into an agreement regarding their respective rights and obligations as between themselves; and

WHEREAS, the Counties of Wasco, Sherman, and Hood River, and the Cities of The Dalles, Hood River, Cascade Locks, Mosier, Dufur, and Maupin (each a "Party" and collectively the "Parties") desire to enter into this

Intergovernmental Agreement for the purpose of setting forth their mutual agreements and undertakings by which they will cooperatively undertake to finance, acquire, construct and operate the Household Hazardous Waste Program;

NOW, THEREFORE, in consideration of mutual undertakings and agreements contained herein, the Parties hereto agree as follows:

1. PURPOSE. The purpose of this Agreement is to establish and implement a workable program to provide for the collection and proper management of common hazardous wastes from households and conditionally exempt small quantity generators (CESQG), and agricultural activities, throughout the cities and counties of the Parties.

2. DEFINITIONS OF TERMS. For the purposes of this Intergovernmental Agreement, all other terms used in this Agreement, future contracts and Steering Committee decisions shall have the meanings as specified in the Household Hazardous Waste Management Plan.

2.1 **Administrative Expenses** means expenses reasonably incurred by the Lead Agency as a consequence of fulfilling its responsibilities, authorities and duties described in this Agreement. Examples include staff time, legal expenses, contractor expenses, copying/duplication, and other necessary services associated with activities including development of this Agreement, selection of contractors, construction management/oversight, and contract management.

2.2 **Collection Facility** means the occupied area, buildings, roadways, parking lots, temporary and permanent structures, fences, gates, drainage facilities and related appurtenances constructed and used exclusively for the collection and storage of hazardous waste from households and conditionally exempt generators, as well as agricultural pesticide wastes.

2.3 **Construction Costs** means the actual or anticipated costs, including designs therefore, for construction of a collection facility, including but not limited to permitting and acquiring other regulatory approvals, clearing, grading, paving, preparing access roads and parking areas, concrete work and foundations, buildings, roofing, fencing, signs, phone, electrical, landscaping, rubbish containers, security alarm, and other appurtenances thereof.

2.4 **Household Hazardous Waste Contractor(s)** means a licensed and permitted waste management firm(s) hired under contract to operate the collection facilities, provide collection services, properly manage, transport and/or dispose of the collected wastes.

2.5 **Household Hazardous Waste Management Plan (Plan)** means the Plan, dated August 7, 2002, that has been adopted by the counties of Wasco, Hood River, and Sherman, and the cities of The Dalles, Hood River, Cascade Locks, Mosier, Maupin, and Dufur.

2.6 **Household Hazardous Waste Program** means the services described in Sections 4 – 7 of the adopted Household Hazardous Waste Management Plan, including the provision of permanent collection facilities and collection services for household hazardous waste, hazardous waste from conditionally exempt generators, and waste agricultural pesticides.

2.7 **Household Hazardous Waste Program Fund** means a dedicated fund, managed by the Lead Agency, from which monies may only be used for the implementation of the Household Hazardous Waste Program.

2.8 **Member** means a representative of a Party to this Agreement, who serves on the Steering Committee and has an official vote.

2.9 **Operating Costs** means the actual or anticipated costs incurred in the operation of a collection facility, and satellite collection events, subsequent to the construction of said facility, including but not limited to: site attendance, clerical work, administration, auditing, facilities maintenance, advertising and publicity, insurance, bonding, utilities, electrical, payments to contractors, disposal fees and costs for Household Hazardous Wastes or any other wastes, and any other operational purposes.

2.10 **Parties** means the counties of Wasco, Sherman, and Hood River, and the cities of The Dalles, Hood River, Cascade Locks, Mosier, Dufur, and Maupin. Party means any one of the Parties of this Intergovernmental Agreement.

2.11 **Special Waste** shall have the meaning assigned to it in the North Wasco County Solid Waste Disposal License Agreement, that being that it is solid waste that is (i) Beneficial Use Waste or (ii) Acceptable waste resulting from an industrial, agricultural, or construction, demolition and/or manufacturing operation or process or waste which requires special handling or extraordinary management at the North Wasco County Landfill.

3. **LEAD AGENCY.** Wasco County will assume the role as Lead Agency for the management and implementation of this Plan. The Lead Agency will be a voting Member of the Steering Committee.

3.1 **Responsibilities of Lead Agency.** Wasco County, through its designated representative, shall be responsible for the day-to-day administration of the Household Hazardous Waste Program, with oversight by the Steering Committee.

3.2 Authority and Duties of the Lead Agency. The Lead Agency will be responsible for the following:

(a) Determining processes for selecting contractors and conducting public procurement processes.

(b) Negotiating contracts and/or leases for services (including both construction of facilities and operations).

(c) Administering the contracts for services, including oversight of the contractor(s) to ensure full compliance.

(d) Reviewing contractors' invoices, paying the contractors, and settling any disagreements regarding compensation.

(e) Maintaining accounting records of revenues, expenses and funds available.

(f) Managing the development of an annual budget.

(g) Coordinating meetings of the Steering Committee and acting as Chair of the Steering Committee.

(h) Obtaining approval from the Steering Committee for the annual program budget, any limits on program participation, decisions regarding the implementation and requirements of pre-registration for collection services, scheduling and location of collection services, any user fees charged to residents desiring to use collection facilities at times other than regularly-scheduled collection events, and of other classes of users desiring to participate in collection services in excess of participation limits imposed for the purposes of annual budgeting.

(i) Coordinating the education and outreach activities either directly or overseeing the activities of the contractor.

(j) Requiring that the contractors comply with all relevant regulations.

(k) Maintain ownership of the collection facilities through the initial five years of operation.

(l) Be responsible for applying for and administering current and future grants and other funding sources for the HHW program.

3.3 Contract Authorization. Wasco County, as Lead Agency, with approval of Steering Committee, is hereby authorized to enter into contracts for the provision of regional services, as described in the HHW Management Plan, on behalf of all Parties. The contract(s) shall include provisions for the construction of permanent facilities, and for the provision of collection and disposal services for household hazardous waste, waste from CESQGs, and waste agricultural pesticides. Such contract(s) shall include, at a minimum:

(a) The contractor must indemnify and hold harmless all IGA Parties against liability for the provision of all services including operation of the facility and collection events, storage, transportation, and off-site processing and/or disposal of all materials;

(b) Insurance requirements, including that the Contractors' certificates of insurance must name each Party of this IGA as an additional insured;

(c) Requirements for storage, transportation, manifesting, waste removal, waste disposition, and record keeping, including that all waste be transported by licensed transporters to permitted processing and/or disposal facilities;
(d) Service Contractor identified as the waste "generator" (responsible for signing manifests) of all hazardous wastes accepted by the Contractor at the site or events;
(e) Standards for accounting, billing, compensation, and reporting, including the development of an annual program report and a requirement that the Contractor supply complete manifest documentation for all hazardous wastes received and transported through and including final disposal;
(f) Contractor not assign any rights nor subcontract any of his/her obligations without the prior written consent of the Lead Agency; and
(g) Contractor will perform any agreement as an independent contractor with complete control over his/her employees, agents and operations.

4. COMPENSATION FOR LEAD AGENCY. Actual Administrative Expenses incurred by the Lead Agency will be reimbursed from the Household Hazardous Waste Fund on a quarterly basis, after review and approval by the Steering Committee. The Administrative Expenses are projected by the Plan to be approximately $32,000 in the calendar year 2003; $42,000 in 2004; $32,000 in 2005; $16,000 in 2005; and approximately $11,000 per year in all subsequent years.

5. STEERING COMMITTEE ESTABLISHED. A Steering Committee shall be established to oversee the Lead Agency and direct the implementation of the Plan. Each Party to this Agreement may designate a representative to serve as their voting Member of the Steering Committee.

5.1 Responsibilities of the Steering Committee. Responsibilities shall include:
(a) Establish bylaws and procedures.
(b) Review and approval of proposed contract(s).
(c) Review and approval of the annual program budget. This may include decisions regarding how much money to maintain in reserve/contingency funds, as well as any limits on number of household, CESQG, and/or agricultural pesticide users, if needed in order to control costs. The steering committee may also decide to shift educational efforts and/or impose participation limits if program evaluation reveals that certain categories of users are "over-using" the system and inequities (for example, between counties) are developing.
(d) Review and approval of decisions regarding pre-registration requirements, scheduling of events and locations of satellite collection events, and coordination of promotional activities.

(e) Review and approval of user fees (if any) charged to waste generators who use the facilities in-between regularly-scheduled collection events, or who desire to use collection services in excess of participation limits established by the Steering Committee for reasons described above.
(f) Review of the contractor's annual report and review/approval of reimbursement schedules.

5.2 Decision Making of the Steering Committee. Decisions made by the Steering Committee regarding review and approval of program budgets, participation limits (if any), pre-registration standards, scheduling of services, and approval of user fees shall be binding on the Lead Agency.

5.3 Steering Committee Chair. The Steering Committee shall be chaired by the representative of the Lead Agency. The Chair shall be the principal officer of HHW Steering Committee and shall preside at all Committee meetings. In addition to presiding at Committee meetings, the duties and powers of the Chair shall include:

(a) Scheduling Committee meetings;
(b) Preserving order at Committee meetings;
(c) Enforcing the rules of the Steering Committee;
(d) Determining the order of business for the Committee;
(e) The right to require written motions prior to Committee consideration; and,
(f) Keeping or causing to be kept permanent records of all Committee proceedings, including minutes of all meetings of the Steering Committee, as well as all official documents, resolutions, and actions of the Committee. Minutes of that meeting shall be distributed to the Committee as soon as practicable.

5.4 Steering Committee Vice-Chair. At the Steering Committee's first meeting, the Committee shall elect a Vice-Chair from among the Members of the Committee. The Vice-Chair shall assume the duties and powers of the Chair in the Chair's absence.

5.5 Steering Committee Meetings. The Steering Committee shall meet regularly, at least four (4) times each year. Special meetings may be called by the Chair or by a majority of the Members of the Steering Committee.

(a) Written notice of all meetings shall be served on all Members of the Committee not less than twenty-four (24) hours prior to the meeting, and shall contain the time and place of meeting and an agenda of subjects to be considered. A facsimile or email notice shall be accepted as appropriate written notice of all meetings.
(b) All meetings shall be open to the public, except for executive sessions, as allowed by State law.

(c) A quorum shall consist of a majority of the voting Members of the Committee. If neither the Chair nor Vice-Chair are present at a meeting, there shall be no quorum. No action of the Steering Committee shall be valid or binding unless adopted by the affirmative vote of a majority of the voting Members present, provided there is at least a quorum present.

6. IMPLEMENTATION. As Parties to this IGA, the Parties agree to the following commitments:

6.1 Implementation of Surcharge. Wasco County hereby agrees to implement a hazardous waste surcharge on waste originating from Wasco, Hood River and Sherman Counties, excluding Special Waste, and disposed of at the Wasco County Landfill. In 2004, the surcharge shall be $6.35 per ton. On January 1 of each year thereafter, this surcharge shall be adjusted in a percentage equal to the CPI percentage adjustment of the Tipping Fee charged to Wasco County customers at the Wasco County Landfill. The surcharge will become effective on January 1, 2004.

6.2 Use of Funds Collected From Surcharge. All money collected from this surcharge will be deposited in a dedicated fund, administered by Wasco County and called the Household Hazardous Waste Management Fund. Monies in this fund are to be used only for the implementation of regional activities described in the Household Hazardous Waste Management Plan as may be amended. If the budget does not meet expectations, the Lead Agency shall notify the Steering Committee, but in no event shall the Lead Agency be responsible for solely funding any portion of the HHW Program.

6.3 IGA Party Commitments. All Members, with the exception of Sherman County, hereby agree to pass through this Hazardous Waste Surcharge by increasing garbage collection and transfer station rates accordingly, to become effective on January 1, 2004. This provides for the landfill rate increase to be passed back to all users of the system, regardless of whether they have subscription collection or self-haul to the transfer stations or landfill.

Sherman County hereby agrees to pay $21,000 total payable in either five (5) equal annual payments of $4,200 beginning in 2006 or seven (7) equal payments of $3,000 per year beginning in 2004 for one collection event every other year and allowing Sherman County residents, conditionally exempt small quantity generators (CESQG), and agricultural generators to use HHW Program events held in Wasco and Hood River Counties. Use of the HHW Program events in Wasco and Hood River Counties may be defined by the Steering Committee. Sherman County will be subject to all other terms of this Agreement.

Failure by the Parties to pass or approve HHW Program Surcharge or, in the case of Sherman County, to pay agreed upon share of HHW Program costs, during the term of this Agreement will result in a breach of this Agreement. The Lead Agency and Steering Committee shall seek resolution through binding arbitration, as per section 16 of this Agreement.

7. SHARING OF LIABILITY AND INDEMNIFICATION

7.1 Contractor Requirements. Section 3.3 of this Agreement describes the Lead Agency's responsibilities to require insurance of the Lead Agency's contractor(s) as well as indemnification by the Lead Agency's contractor(s) of all Parties of this Agreement. These requirements are intended to protect the Parties from liability arising out of the provision of hazardous waste collection services.

7.2 Procedure to Assign Liability. In the event that liability does arise out of the provision of HHW, Conditionally Exempt Small Quantity Generator, or agricultural pesticide collection activities conducted under this Agreement, including but not limited to any and all liability imposed by State or Federal law or regulation, such as fines, penalties, clean up expenses, legal fees and other costs and expenses resulting from any such action or any such proceeding by virtue of any Federal or State law or regulation, and in the event that such liability is assigned to any Party, including the Lead Agency, the following procedure shall apply:

(a) The Party shall be responsible for that portion of liability for which the Party was directly responsible.

(b) All remaining liabilities shall be shared jointly by all Parties of this Agreement. Parties shall share by population stated in the Household Hazardous Waste Management Plan all fines, penalties, costs and expenses in connection therewith including reasonable attorney's fees.

7.3. Survival of Obligations. The obligations under this section shall survive the termination of this Agreement.

8. ADDITIONAL USERS. The Parties anticipate that other agencies (such as other cities, counties, or Native American tribes) may desire to participate in the Household Hazardous Waste Program. The Lead Agency may, with the approval of the Steering Committee and on such conditions as the Steering Committee may set, contract with those other agencies to participate in the Household Hazardous Waste Program, provided that the Parties to this IGA do not pay any associated additional costs nor incur any associated additional liability.

9. INSPECTION OF PREMISES AND RECORDS.

9.1 The officials of any Party may inspect the Household Hazardous Waste sites and facilities during hours when the facilities are open for business, or at such other times as the Contractor(s) may allow.

9.2 The officials of any Party may examine any records of the Household Hazardous Waste facility and any records of the Lead Agency related to the Program, including financial records, upon reasonable request to the Committee. The examination shall be allowed promptly. Such examination shall be made at the expense of the examining Party. Such examination of any of the Household Hazardous Waste Contractor's records shall be in accordance with the terms and conditions of the contractor's agreement with the Lead Agency.

10. TERM OF AGREEMENT; TERMINATION; WITHDRAWAL OF PARTIES

10.1 Term of Agreement. This Agreement shall remain in full force and effect until five (5) full consecutive calendar years of provision of collection services, or until through December 31, 2010, whichever comes first. Thereafter, unless terminated, the Agreement shall automatically renew annually. This Agreement becomes effective upon the date of the last signature below or by December 31, 2003, whichever is first.

10.2 Terminating Agreement. By affirmative vote of two-thirds of the Parties to the Agreement at the time of the vote, this Agreement may be terminated for any reason after the completion of the initial five (5) years of collection service. The termination date shall be the conclusion of any calendar year (January 1 to December 31) in which the vote is taken.

10.3 Withdrawal of Parties. After the conclusion of the initial five-year (5) collection service term, any Party may terminate at the end of any calendar year its participation in the Household Hazardous Waste Program and this Agreement, by giving notice to the Steering Committee at least one hundred eighty (180) days prior to the end of such calendar year.

10.4 Withdrawal of Lead Agency. In the event that Wasco County chooses to terminate their participation in this Agreement after the conclusion of the initial five-year (5) collection service term, then the entire Agreement will be terminated, as described in Section 10.6.

10.5 Withdrawing Parties Payout. In the event that any Party other than the Lead Agency, chooses to terminate their participation in this Agreement, the Lead Agency shall compensate such Party as follows:

(a) The value of the Household Hazardous Waste Program Fund will be calculated for the last day of the calendar year in which the withdrawing

Party is a participant and provides notice of termination. This value will include all revenues during the calendar year (including those paid into the fund the following year) as well as all expenses incurred during the calendar year (including those paid out of the fund the following year). This number will be called "end of year reserve amount."

(b) Using populations contained in the Household Hazardous Waste Management Plan, a proportion will be calculated as the terminating Party's population divided by the population of all Parties.

(c) This proportion will be multiplied by the end of year reserve amount calculated above. The resulting amount will be paid by the Lead Agency to the terminating Party no later than March 31 of the year following the year in which membership is terminated.

10.6 Disposition of Program Property and Funds. In the event of termination of this agreement, the Lead Agency shall:

(a) Pay all outstanding obligations.

(b) Sell any buildings, equipment and appurtenances owned by the Lead Agency that have been paid for from the Household Hazardous Waste Program Fund. For said facilities, the Party where such facility is located will have the right of first refusal. If such Party is a municipality, the County government where the facility is located shall have the right of second refusal. Parties agree to negotiate in good faith over the disposition of said items if they choose to exercise said rights.

(c) Within 30 days of termination, cease the collection of revenues through the landfill surcharge levied on waste from affected jurisdictions.

(d) Terminate any outstanding contracts for service which name the Parties, or amend such contracts to remove reference to the Parties.

(e) Prepare an accounting of all Administrative Expenses incurred by the Lead Agency as a result of termination of this Agreement, such as staff costs, real estate transaction expenses, and attorney's fees.

(f) Once the preceding actions have been completed, but no more than 12 months following termination of the Agreement, the Lead Agency will distribute any remaining assets in the Household Hazardous Waste Program Fund as follows. First the Lead Agency shall be paid the actual Administrative Expenses. All remaining monies will be distributed to Parties in amounts proportional to the population of each Party divided by

the population of all Parties, using populations contained in the Household Hazardous Waste Management Pian. Similarly, if the HHW Program's debts exceed assets, Parties will share obligations by the same proportionality.

11. INDEMNIFICATION. Each Party of this Agreement shall be responsib e for damage to persons or property resulting from negligence on the part of itself, its employees, its agents, or its officers. No Party assumes any responsibility for the consequences of any act or omission of any person, firm or corporation not a party to this Agreement.

12. MODIFICATION. This Agreement shall not be modified or amended in any manner except by an instrument in writing and signed by all the signed by all the Parties participating at that time.

13. ASSIGNMENT. No Party to this Agreement shall assign its right or obligations under this Intergovernmental Agreement without the prior written consent of the other Parties hereto.

14. SEVERABILITY. If any provision of this Agreement shall be declared illegal, void or unenforceable, the other provisions shall not be affected, but shali remain in full force and effect.

15. GOVERNING LAW. This Agreement shall be governed by federal law and the laws of the State of Oregon.

16. DISPUTE RESOLUTION. The Parties agree to negotiate in good faith to resolve all disputes arising under the articles of this Agreement. If negotiation between these Parties fails to resolve any such dispute to the satisfaction of the Parties, then the issue shall be resolved through binding arbitration. The Parties shall agree to the selection of the arbitrator. The non-prevailing Party shall be responsible for any costs for the services of the arbitrator. The decision of the arbitrator shall be final and binding on the Parties hereto.

17. NOTIFICATION. All notices required to be given or authorized to be given hereunder shall be in writing and either personally delivered or sent by certified United States mail to the other party at the address shown below, or at such other address specified by a party in a letter sent to the other party hereto by certified United States mail.

County Judge, Wasco County, 511 Washington St, The Dalles, OR 97058
County Administrator, Hood River County, 309 State St, Hood River, OR 97031
County Judge, Sherman County, PO Box 365, Moro, OR, 97039
City Manager, City of The Dalles, 313 Court St, The Dalles, OR 97058
City Recorder, City of Dufur, PO Box 145, Dufur, OR 97021

City Recorder, City of Mosier, PO Box 456, Mosier, OR 97040
City Recorder, City of Maupin, PO Box 308, Maupin, OR 97037
City Manager, City of Hood River, PO Box 27, Hood River, OR 97031
City Manager, City of Cascade Locks, PO Box 308, Cascade Locks, OR 97014

18. EFFECTIVE DATE AND DURATION. This Agreement becomes effective upon the date of the last signature below or by December 31, 2003, whichever is first. It remains in effect until five (5) full consecutive calendar years of provision of collection services, or until December 31, 2010, whichever comes first, at which time Parties may agree to terminate or renew the Agreement, as per section 10 of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Intergovernmental Agreement and become effective upon the date of the last signature below or December 31, 2003, whichever comes first.

WASCO COUNTY COURT

Dan Ericksen, Judge

Date: 10/22/03

Approved as to Form:

Eric Nisley, County Counsel

HOOD RIVER COUNTY BOARD OF COUNTY COMMISSIONERS

Roger Schock, Chair

Date: 11/3/03

Approved as to Form:

Lesley Apple Haskell, County Counsel

SHERMAN COUNTY COURT

Mike McArthur, Judge

Date: 11-26-03

Approved as to Form:

Will Carey, County Counsel

THE DALLES CITY COUNCIL

~~Robb E. Van Cleave~~, Mayor

Date: 11-3-03

Approved as to Form:

Gene Parker, City Attorney

HOOD RIVER CITY COUNCIL

Paul Cummings, Mayor

Date: 11-24-03

Approved as to Form:

Alexandra Sosnkowski, City Attorney

DUFUR CITY COUNCIL

Daniel Wolff, Mayor

Date: 11-12-03

Approved as to Form:

Dirk Doyle, City Attorney

MAUPIN CITY COUNCIL

Dennis Ross, Mayor

Date: 11-19-03

Approved as to Form:

Daniel Van Vactor, City Attorney

MOSIER CITY COUNCIL

William J. Ward, Mayor

Date: 11-5-03

Approved as to Form:

Dan Kerns, City Attorney

CASCADE LOCKS CITY COUNCIL

Ralph Hesgard, Mayor

Date: 11.24.03

Approved as to Form:

Will Carey, City Attorney

Tri-County Hazardons Waste Management Program
Steering Committee Meeting #13
April 10th, 2007

The meeting opened at 9:10 A.M.

Present: *Glenn Pierce, Pat Bozanich, Kathy Schwartz, Lynnette Benjamin, Kathi Hall , Kristy Tibbets,* Wasco County; *Mike Miles*, Maupin; *Sandy Macnab*, Sherman County; *Mike Matthews*, City of Hood River; *Steve Everroad*, City of Hood River; *David Skakel*, Mosier; *Bill Lennox*, Wasco County Commissioner; *Liz Clark*, DEQ; *Pamela Pawelek*, Waste Connections, Inc; *Steve Kramer*, Mel's Sanitary

Members Absent: *Merle Keys*, City of Dufur; *Dave Anderson*, City of The Dalles;

Welcome and Introductions
Today the steering committee was joined by Bill Lennox, Wasco County Commissioner. Also attending were Kathy Schwartz, Director of Wasco Sherman Health Department, and her future replacement, Lynnette Benjamin.

Review and Adoption of October 16, 2006 Minutes
Meeting minutes were amended to reflect the correct month of "October" and the correct spelling of Sandy Macnab's last name. Steve Everroad motioned to adopt the minutes as amended. Mike Miles seconded his motion.

Fiscal Report
Kathi Hall presented the fiscal report. Wasco County has a new financial system, so reports will have a new look. The beginning balance was higher than expected as not all expenditures had been paid out at the time of report. Both the interest and surcharge were higher than expected- revenue is at nearly 100%, even though we're only 9 months into the fiscal year.

Personnel services are over 100%- Pat will present a proposal on ways to correct this.

There have been 8 collection events. Two events have not been billed yet (3/30/07 & 3/31/07). Financially, the news is good. The events were not as costly as projected.

Steve Everroad motioned to accept the fiscal report. Mike Miles seconded his motion.

OLD BUSINESS
Progress Report
Facilities Update
The Dalles facility is up and running. The last few things needed are a larger exit sign and a welcome sign with instructions to visitors.

The Hood River facility has been presenting more problems. Because it was "simple", it was not tracked as closely and some complications arose. The engineering as-builts are not accurate; they do not show the new plan and moving of the canopy supports. Basically, they are drawings "as-planned". No final inspection has been done either, because the contractor didn't think the facility needed one since it is portable, and the

canopy is temporary. However, since there is electricity in the facility, an inspection is needed.

Operations plans for both facilities have been submitted and accepted.

David Skakel expressed concern over the viability of the Hood River site. Last week at a wasteshed meeting in Hood River, the issue arose regarding Ag collections there and the fact that parking and space is very tight. It was suggested that the first and possibly second Ag events be conducted at the Co. Road Dept. where there is more room. Theoretically, amounts of Ag waste should decrease over time, and the later events would be manageable at the Hood River site itself. Ag/universal waste is different from CEG and HHW waste in the fact that it is taken away immediately after the event, so even though the HR site isn't very large, storage wouldn't be an issue.

2007 Collection Events Report

Collections have been very successful in removing a great deal of hazardous material from the local environment. Roughly 17860 lbs of material has been collected including CEG waste.

More than 8000 lbs Ag waste, including:

- 3500 lbs Pesticides
- 2500 lbs Toxic liquids
- 1500 lbs Petroleum based pesticides

For these events, promotion targeted local growers. Information was distributed via OSU Ag Extension newsletter, pesticide dealers, the USDA and local Soil and Water Conservation Districts. Ads ran in newspapers and on the radio. A great database of contacts was established through these events.

The CEG/Ag event brought in more material than any other hazardous waste event ever held in our region. About 2 people passed through every 15 minutes, from 8 A.M. to 4:45 P.M. The next day at the HHW event there was spill over from the CEG/Ag event. Congressman Greg Walden even attended and brought some capacitors from old radios. The total for the HHW event was 99 cars. Only two people brought latex paint in, which isn't bad- people are cooperating quite well. Also, no one from outside the Tri-County area tried to bring materials to the events, so no one had to be turned away.

David Skakel mentioned that the Gorge Re-Use It center has acquired a building for storing latex paint, though people are still not encouraged to bring in leftovers. However, contractors and paint retailers do bring in materials.

Staff Trained

Three Waste Connections staff and Pat have received the 24 hour HAZWOPER training. The Waste Connections staff will be performing the regular weekly inspections on the facilities. They will also be able to take drop-offs by appointment if desired. There is an 8 hour refresher course available, which Pat will take at the annual conference in June, at Troutdale. The EPA has certain requirements that have to be covered, but it's up to the trainer to target specific needs of the audience.

NEW BUSINESS

Recommended Budget Revisions: FY 2006-2007

Proposal 1: *Reimbursement for Extra Time*

Glenn and Pat have already worked over their allocated hours for this fiscal year. As it turns out, their jobs require more time than originally anticipated, so by the end of February all monies for personnel services had been used up. The 2006/07 budget modification proposal would allow for the Tri- County Hazardous Waste Management Program to continue paying for personnel services and allow Wasco County to recapture some of the money paid out to fund these positions, once the Tri- County funds had fallen short. It would also allow for the expansion of Pat's FTE to .34 (from .25) to give her enough time to successfully do her job. (See proposal for complete details.)
Mike Miles motioned to approve the budget revision. Steve Everroad seconded his motion and it passed unanimously.

Proposal 2: *Funding of Education and Training*

Funding for education and training were not built into the FY 2006/07 budget. This proposal would allow the payment of $1,289 to pay for:

$250 June 4 – 6 NAHMMA conference and 8 hour HAZWOPER refresher
$189 Food and lodging at conference (Edgefield Manor)

$300 June 21 – 23 Association of Oregon Recyclers Conference
$400 Food and lodging at conference (Bend)

$150 Annual Tri-County Program membership in National Association of Hazardous Materials Management Association (NAHMMA)

Attending these trainings would be very good for Pat in terms of networking, bringing back ideas/materials and making new connections. (See proposal for complete details.)
David Skakel asked if Pat would possibly make any presentations to ORRA or related groups next year. The Tri- County Hazardous Waste Management Program has really broken ground on the HHW field in it's setting up of the program, facilities, and intergovernmental agreements and we have lots to share with others on how we did it. A panel discussion was suggested, in conjunction with DEQ, on strategy for events/infrastructure.
Mike Miles motioned to approve the budget revision. Steve Everroad seconded his motion and it passed unanimously.

Adopt Proposed Budget: FY 2007-2008 (Preliminary)

Proposal 1: *Increase Pat's Time for 2007/08*

This proposal would increase Pat's time for 2007/08 from .25 to .34, so she will have sufficient time to complete her necessary duties, as discussed earlier. (See proposal for complete details.) Steve Everroad motioned to accept this proposal. David Skakel seconded his motion and it passed unanimously.

Proposal 2: *Adoption of 2007/08 Budget; Creation of Recycling Coordinator Position*

At events there have been a lot of questions on what to do with waste, alternative products, and so forth. Information has been given out to steer people towards more environmentally friendly methods. Phillip Services Corp. was chosen for our disposal

contract because they are also environmentally friendly, recycling hazardous materials all over the U.S. Our hazardous waste management plan includes getting more involved in recycling, and so it seemed logical to manage the recycling end through the Tri-County Hazardous Waste Management Program.

Two key factors were explained- we already have all the players at the table and we also have enough money to fund a Tri-County Coordinator for recycling. Intergovernmental agreements have already been signed, everything works well and this would provide an excellent vehicle for bringing a recycling coordinator on board.

The recycling coordinator would be an employee of Wasco County, funded through the tipping fee, who would report the Steering Committee (since this would be an additional service to programs already developed, and there is adequate funding, there would be no need to raise any rates). The budget is in good shape monetarily and can easily take on the funding of this position. Expenses for disposal services were overestimated roughly tenfold and revenue items are doing better than projected.

Wasco and Sherman counties are substantially below recycling rate standards. Currently, Wasco County is at about 26%, including a 2% credit. This is 9% below their DEQ mandated rate of 35%. On the other hand, Hood River County is doing much better- 40%, including their 4% credit. Pat has been working on major revisions to the recycling plan to bring up rates. The Recycling Coordinator position would manage recycling education efforts for all 3 counties. Hood River County strongly supports establishment of the recycling position and Sherman County actually voted in support of creating it.

This is a very time consuming position. This position could be filled by Pat or by Pat and a .5 FTE assistant position. Currently (after motion to revise 2006-07 budget) Pat is .34 (1/3) FTE in HHW. With this position, she could be 1/3 HHW and 2/3 recycling. Pat expressed that she would be working in program development geared towards community based adult education.

Discussion followed on scope of work that the (assistant) .5 FTE would take on. Suggestions included working with schools and holding composting classes, however it was decided that more research would be needed before saying definitively what that person's tasks and goals would be. It was brought up that schools are a large producer of waste and would be good to target from a commercial standpoint, even if they aren't as effective as a vessel for boosting recycling rates.

Kathi Hall shared two different budgets with us (**See Attached**) that fully explained the fiscal implications of choosing one of these options- either Pat Full Time or Pat Full Time + .5 FTE Assistant. (*Full time position would be a little more than 1 FTE*) Support was voiced for taking on Pat Full Time + .5 FTE Assistant.

The budget could support either position without dipping into the carryover balance, so there would be no need to increase fees. Furthermore, there would be no need to change any intergovernmental agreements, amending the bylaws would suffice. The proposed budget would include:

- Changes to personnel
- More travel monies

- More office supplies, including a computer, as well as educational materials
- Add furniture for the .5 FTE
- $150K for FY 07-08 PSC collection and disposal services. We spent ~ $30,000 for our first eight events and expect to spend another $70,000 for the remaining events, for a total of $100,000 in FY 06-07. We anticipate increasing participation by about 50% for the new FY, so $150,000 is proposed for that period.

It was decided to vote in Dave Anderson's absence, as it is felt he would be a supporter of the decision. He will be brought up to speed as soon as possible. David Skakel expressed a possible conflict of interest, as he may be interested in the job, and stated that he would abstain from voting. He also expressed again that there should be a subcommittee created to look in depth at what the position would entail and decide on the scope/purpose of the job. Kathy Schwartz voiced her support of forming a subcommittee to decide on tasks, as well as the fact that she would need to talk to Todd at planning and straighten out discussions on internal staffing needs.

Mike Motioned to approve the budget as written, including the funding of staffing Pat full time and adding a .5 FTE assistant, with the condition that job descriptions be developed and looked at thoroughly. Steve Everroad seconded his motion. The motion approved by all, except for David Skakel who abstained from voting.

It was understood that Pat would most likely need a small amount of time to complete the enforcement ordinance before taking on the full time HHW position. Therefore, Pat will become full time about October 1, 2007.

Special Appointment Drop Off
Waste Connections needs to develop a specific protocol for special appointment drop-offs. The current general assumption is that a person would call the transfer station and arrange a time to come and drop off materials, though the protocol would need to be more structured than that and a trained staff person would have to be on site. Pamela Pawelek will address this issue.

E-Waste Collection
Pat has been talking with StRUT (Student Recycling Used Technology) about doing some collection events that combine E-Waste and HHW. StRUT programs accept computers, cell phones and so forth. At Maupin High School, the StRUT students take the E-Waste and rebuild it.

PSC said in their proposal that they would be willing to look at E-Waste collection. Concern was expressed that traffic would be too heavy if E-Waste and HHW collection events were combined, however, there is enough room at both facilities. Hood River garbage already accepts E-Waste.

David Skakel wondered if there is an established avenue for disposing of E-Waste, besides our program. It was responded that there is, however we are more visible. We would not be supporting StRUT financially, just providing a collection location. The committee decided to table the matter until we can be joined by a representative of PSC

and StRUT (at our next meeting) to get more clarity on how we can help as well as potential downsides.

Housekeeping
The steering committee formally motioned to adopt the $400 dollar cost share for Ag/CEG events, as discussed at our last meeting and via email. Steve Everroad motioned to accept the cost share. Mike Miles seconded his motion and it passed unanimously.

Loose Ends
ORRA Tour
Oregon Refuse & Recycling Association (ORRA) is a 200 member voluntary association of solid waste management companies and businesses which specialize in offering equipment and services important to the industry. They will be touring The Dalles facility in and Mike O'Donnell will be attending to make a presentation on the functionality of the site.

Promotion
The Tri- County Hazardous Waste Management Program has received really great press. The opening of the HHW facilities was listed as one of the top 10 things that happened in the gorge during 2006. Pat shared a folder of articles about the program. For future promotion of the program, Pat plans to be working towards forming partnerships with The Dalles and Hood River Master Gardeners to promote safer alternatives to gardeners.

The Wasco Sherman Health Department has added a hazardous waste section to its website, featuring this program. The website includes information for both HHW and Ag/CEG. It also includes information on what to do with ammo, explosives and radioactives, as well as a schedule of upcoming collection events. Please visit http://www.wshd.org/wshd/waste_overview.htm and check it out! It was suggested that maybe next year, the Tri-County Program could develop its own website.

Though the Moro collection event was originally scheduled to only collect HHW, Moro people will be encouraged to bring Ag waste during the morning. Afternoon will then be for HHW. The subcommittee decided that it was alright with them, as long as it was okay with PSC.

Event Schedule
The event schedule has changed since our last meeting. Pat will email out a finalized version to everyone.

Next Meeting
The next meeting will be held here, sometime after all summer collection events have been completed. There will be 10 more events this fiscal year and 6 in the next fiscal year (Maupin- 4/21, Cascade Locks- 4/28, The Dalles Disposal- 5/5, Hood River Garbage- 5/12, Moro- 5/19, Mcl's Sanitary Service, Tygh Valley- 6/16, Hood River Garbage- 6/30, The Dalles Disposal- 9/15, Odell- 9/22, Hood River Garbage- 10/13, Mosier- 10/20, Cascade Locks- 11/13). The agenda will be sent out via email once it's been worked out. Kathi will email out a finalized budget, which may include some adjustments. A subcommittee will be formed to discuss the new positions.

meeting adjourned 11 am

Wasco County Wasteshed Recovery Plan Update

2007 – 2009

Submitted by
Pat Bozanich,
Tri-County Hazardous Waste and Recycling Program Manager
October 18, 2007

Wasco County Wasteshed
2007-2009 Recovery Plan Update

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Wasco County Wasteshed
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Executive Summary

The recovery goal for the Wasco County Wasteshed is 35%. Wasco County's calculated recovery rate for 2005 was 24.1%. The Wasteshed received a 2% credit for waste prevention/reuse/composting activities, which raised our total recovery rate to 26.1%. Even with this credit, Wasco County is still 9% below our DEQ-mandated goal. Our low recovery rate has triggered a statutorily-required review of our current recycling service levels and the development of a plan to reach our recovery goal of 35% no later than 2009. This report describes that plan and the process used to develop it.

To develop the Plan Update, a committee which included representatives from Wasco County Environmental Health, the franchised garbage and recycle haulers, a DEQ representative and others, identified barriers to achieving a higher recovery rate and then determined methods for overcoming them. A variety of barriers were identified, chief among these was the lack of convenient opportunities for rural customers to recycle. The lack of financial incentives was also explored. Other barriers included a lack of accurate information about what, where and how to recycle. Some barriers related to the difficulty of obtaining accurate reporting information from businesses like private scrap haulers.

This Recovery Plan Update focuses on improving the recovery rate through improved recycling services and education efforts. The rural nature of Wasco County presents a different set of challenges to increased recovery rates than those faced by urban areas. Unlike our Metro counterparts who have been dedicating resources to improving recycling opportunities for fifteen years, we face challenges related to providing a basic, realistic opportunity to recycle to our citizens.

As a result, the first element of this plan focuses on improving the recycling infrastructure in the County, including expanding curbside service, and making the depot system more reflective of new sorting and preparation practices, as well as more responsive to the needs of citizens. Needs in both the commercial and residential sectors were evaluated and actions are planned to address them.

In the residential sector, curbside recycling will be expanded to all Northern Wasco County garbage service customers. Residents of The Dalles and its urban growth area will continue to receive weekly service. All other The Dalles Disposal customers will begin to receive alternate week curbside service. A 20 gallon, mini-can option will be provided as a new service level. This will provide customers with a financial incentive to recycle. We also propose that all recycling depots serving customers in Southern Wasco County be open Saturday mornings and, with the exception of the Dufur depot, will begin to take commingled sorts that include mixed paper and plastics. A recycling depot is proposed for development in Maupin. A grant proposal has been submitted to the DEQ to cover the capital and set-up costs of this depot.

In the commercial sector, we recommend a number of improvements that we believe will substantially improve recycling rates: the establishment of weekly recycling collection routes in The Dalles and the urban growth area; the provision of desk-side containers and sixty-gallon roll carts for recyclables; that business owners be provided with recycling set-up and educational assistance services; and that schools and other institutions be included in this increased service mix..

At this point we recommend that yard debris services remain as they are, but that promotion of these services be increased. We plan to establish a compost demonstration site and to do more promotion of home composing.

Improved public outreach and education is the second element in the Plan Update. The focus of this educational effort will be basic for the first two years: what, where, how and why to recycle. This effort will coincide with planned changes in the recycling collection infrastructure, providing a natural hook to secure more publicity and interest.

Because we anticipate that many of the initial recovery gains will be in the commercial sector, the emphasis will be on providing hands-on help to businesses and institutional users of the system. As we document improvements in commercial and residential recycling, the focus will shift to improving multi-family recycling rates.

An important element in implementing this Plan Update is the ability to have staff dedicated to planning, implementing and promoting improved regional recovery services. The Tri-County Hazardous Waste Management Program Steering Committee voted to dedicate more than 1 FTE to this effort, making a total of 1.5 FTE available to work on recycling, waste prevention and hazardous waste collection and reduction issues in Wasco, Hood River and Sherman Counties.

Although there are a number of challenges related to implementing a region-wide recovery perspective, the potential for increased recovery through improved coordination of services and education efforts is good. The proposed system enhancements for Northern Wasco County will make its residential services consistent with Hood River County. This means that the same recovery message can be used in both counties.

It also means that a regional Master Recycler/Composter Program can be developed and taught. As in other areas, Master Recycler volunteers can help implement this Plan and will provide a base of educated and dedicated individuals who can help their neighbors understand recycling-related issues.

A 10.4% increase in commercial rates is recommended to pay for the proposed enhancement of recycling services. No other rate increases are anticipated to result from implementation of this Plan Update.

Recovery rates reflect a mix of activities within a wasteshed, some of which are beyond the scope of this Plan Update. Implementation of this Plan is expected to double the recycling tonnage collected in our wasteshed by 2009.

Wasco County Wasteshed
2007-2009 Recovery Plan Update

Introduction

The recovery goal for the Wasco County Wasteshed is 35%. Wasco County's calculated recovery rate for 2005 was 24.1%. The Wasteshed received a 2% credit for waste prevention/reuse/composting activities, which raised our total recovery rate to 26.1%. Even with this credit, Wasco County is still 9% below our mandated goal. Our low recovery rate has triggered a statutorily-required review of our current recycling service levels and the development of a plan to reach our recovery goal of 35% no later than 2009. This report describes that plan and the process used to develop it.

Plan Update Process

1. Identify issues affecting the reporting of recycled materials.

2. Clarify existing recycling service levels in the County.

3. Identify the "low hanging fruit" - the easiest and most cost-effective ways to improve recycling services and recovery rates.

4. Identify barriers to greater recycling participation.

5. Explore strategies for overcoming those barriers.

6. Cost-out improvement options and prioritize the most feasible.

7. Develop partnerships, negotiate service options, refine plans and involve the appropriate jurisdictions.

8. Finalize a plan and set timelines for implementation.

The primary participants in this process were: Glenn Pierce and Pat Bozanich, Wasco Sherman Health Department; Erwin Swetnam, Jacque Betts, The Dalles Disposal; Joe Wonderlick, Waste Connections, Inc.; Steve Kramer, Mel's Sanitary Service and Bruce Lumper, DEQ. Mike Miles and Dennis Ross, City of Maupin; Darryl Wolf, Dufur; Jeff Milsten, Young Life; Debbie Holbrook, Shaniko; Robin Motes, Antelope; Mary Lou Perry, DEQ and others were also consulted in the process.

Step 1 Identifying Reporting Issues

There is a concern that more recycling is happening in the Wasco wasteshed than is being reported – that tonnage is escaping the system for one reason or another. A number of reporting issues were identified. After researching the reporting process Pat Bozanich determined that some reporting concerns were valid while others were not.

Among the valid concerns:

A & P Recycling
A & P Recycling has not been consistent in reporting its activities and tonnages to the DEQ; they have been fined repeatedly for non-reporting.

Scrap Metal Dealers
There are several scrap metal dealers who do not report their tonnages. Most of these dealers go to Schnitzer Steel. Schnitzer only tracks tonnages from customers with accounts. It does not track individual small dealers who function on a cash basis – like our small, local dealers. Tonnages collected from dealers without accounts are generally credited to the Metro region.

Attempts were made to identify scrap dealers and to get them to report. One agreed to talk off the record and gave what is generally considered to be a low estimate of his tonnage. Everyone else either failed to return calls or refused to participate. In response to these discussions the Wasco County Maintenance Department has started its own metal recycling program and will track its tonnages for us.

Pat Bozanich is talking with the DEQ about how we might allocate some of the non-account scrap metal back to our Wasteshed.

What Counts and What Doesn't
The issue of scrap dealer reporting becomes further complicated by DEQ's reporting rules. DEQ is not consistent in stating which items count toward our recovery rate. Written information seems to conflict with other information. For example, in the paper *Recovered Materials: What Does and Does Not Count Toward Recovery Rate*, it states that "...appliances handled by scrap metal dealers" do not count, but I was told that used appliances that Sears, for example, sells to scrap dealers would count.

Discarded vehicle parts or parts of vehicles are also excluded. As Code Enforcement Officer for Wasco County, I can testify that tons of "discarded vehicles or parts of vehicles" are definitely post-consumer; I order people to remove them from their yards. Even if we could get more scrap dealers to report, how would we determine what percentage of their tonnage qualified for the rate?

Conclusion
We identified a few new sources of tonnage (waste motor oil burned for fuel; city park yard waste used to create farm compost) but as the search to identify leakages from the

system continues it seems clear that resources would be better spent expanding recycling opportunities in the Wasteshed. We believe we should be given credit for non-account scrap metal delivered to Schnitzer, at least at the level granted us in prior years.

Step 2 Overview of Present Services

Wasco County had an estimated population of 23,593 in 2005. Most of that population is settled in The Dalles (12,520) and its urban growth area (15,472 total). The county is large, 2,396 square miles, and mostly rural. Two County-licensed garbage haulers serve most of the population. Madras Disposal serves two Wasco County towns and at least one large residential facility.

The Dalles Disposal serves about 80% of the residents of Wasco County and operates a transfer station in The Dalles. The transfer station is open six days a week. It houses a hazardous waste collection and storage facility in addition to a recycling depot. The hazardous waste facility is open for at least four events a year and will also begin to function on an appointment basis to accommodate people with short disposal timelines.

The Dalles Disposal provides curbside recycling services in The Dalles and along Highway 30 from The Dalles through Rowena and on to Mosier. A few homes out Mill Creek Road also receive service. Weekly curbside service is available in The Dalles and its Urban Growth Area (UGA). Subscription-based yard debris pick-up is also available in these areas. Along the Highway 30/Mosier route, recyclables are picked up twice monthly. The Mill Creek route is serviced monthly. The Dalles Disposal recycles all paper grades, plastic bottles and (now) tubs, tin and aluminum, glass, motor oil, milk and drink cartons, yard debris automotive batteries.

The Dalles Disposal also hosts a free yard debris drop-off month in April and a free yard debris collection week in October. Participation in these events has been low.

Mel's Sanitary Service provides garbage service to most of the other residents of the County and operates a small transfer station in Tygh Valley. They supply no curbside recycling services. There is a recycling depot at the transfer station. It is open from 10 – 2 Tuesday through Friday. They deliver their recyclables to A & P Recycling in The Dalles; as a result they do not commingle recyclables and take a limited range of materials. They will host one hazardous waste collection event this year.

Madras Sanitary Service is not licensed as a hauler in the County but it does service Young Life, a combination residential/camp facility as well as a small community-run transfer station in Shaniko. In Antelope, waste and a small amount of recycling are collected by community volunteers on a weekly basis; when the dumpster is full it is delivered to Madras Sanitary.

A & P Recycling is an independent recycling collector. They have a depot in The Dalles open 24 hours a day. They only take source separated recyclables. They service the Dufur recycling depot and receive recyclables from Mel's Sanitary and the public.

There are two free-standing recycling depots in the County. The one in Dufur is operated by the local Lions Club. It is open to the public on Saturdays. Many area businesses have keys to the facility and can bring recyclables as they please. This is a covered facility with a small baler. It was initially built with a DEQ grant. Recyclables are picked up by A & P Recycling on an irregular basis. Proceeds from the recyclables are used for scholarships and community enhancement. The Lions Club collects 70% more recyclables than Mel's Sanitary Service.

The second depot is a twenty yard drop box in Mosier. It is always accessible. It is collected on a weekly basis. 500.5 tons of material were collected from this site last year. The Dalles Disposal services this depot.

The Northern Wasco Landfill receives all garbage from the two local haulers as well as out-of-area loads. It has a limited recycling depot.

Step 3 Identifying Recycling Opportunities

Residential Sector Recovery Opportunities

There are two major opportunities to increase recovery from the residential sector. The first is to expand curbside recycling services throughout Northern Wasco County. The other is to revive the current recycling program through a combination of increased and effective public education and expanded service levels.

Expand curbside recycling service

The Dalles Disposal has approximately 4,100 residential customers, of those 3,767 have curbside recycling and 329 do not. 225 of the recycling customers have once or twice monthly pick-up. That means that about 550 customers or 13% of TDD customers do not have weekly curbside service. Increasing recycling pick-up from monthly to weekly in Portland in 1991 almost doubled participation rates and more than doubled the tons of recyclables collected at the curb. Extending weekly recycling services to the un- and underserved could provide a substantial boost to County tonnages.

Revive current program

Recycling rates on The Dalles Disposal routes are very low. They report that, on average, 9.5% of residents in The Dalles/Urban Growth Area (UGA) recycle weekly. That percentage goes up to 16% on the rural/Mosier routes which are collected once or twice a month. For comparison, the lowest performing routes in the City of Portland run at about 26%.

Commercial Sector Recovery Opportunities

The opportunities for recovering more recyclables from the commercial sector are excellent. Research indicates that nationally, businesses generate half of all solid waste; most of that waste is recyclable. This is particularly true of office and retail wastes - the majority of our business sector. These wastes are relatively simple to capture and manage.

At present, The Dalles Disposal has 746 commercial clients. Fewer than half (309) have recycling service with The Dalles Disposal. Most participating businesses are only recycling cardboard which means there is a lot more paper fiber that can be captured.

Mel's Sanitary in Southern Wasco County has 153 commercial customers, 43 of these are government agencies or schools. There is no commercial recycling service. Businesses must organize their own recycling efforts. A few have back-hauling services through their suppliers, others bring their recyclables to the recycling depots at Dufur, Mel's Sanitary, or A&P Recycling.

Yard Waste Recovery Opportunities

In the Portland/Metro region yard waste is about 11% of the waste stream. Although yard debris is a lower proportion of the waste stream in rural areas than in urban, it is still a large amount of tonnage. In 2006, Hood River Garbage, a sister firm of TDD, recycled more than three times the yard debris of TDD, even though residents of The Dalles have by-subscription curbside yard debris collection. One of the differences is that Hood River Garbage has free, residential, yard debris drop-off at the transfer station each Wednesday.

A weekly, free yard debris day, combined with a chipping or composting operation at TDD or the North Wasco Landfill would increase recovery tonnages.

TDD provides free yard debris service during the month of April and for one week in October. Promotion and participation in these events has been low. These are both good months for generating yard waste, so increased promotion should improve participation.

An improved system for dealing with yard waste could also help reduce local air pollution caused by backyard burning.

Step 4 Identifying Barriers to Increased Recycling

Barriers to Residential Recycling Program Participation

Residential recycling service level is not consistent

In The Dalles Disposal (TDD) service area there are about 4,100 residential customers. 554 or 13.5% of those customers do not have weekly curbside connection; 329 have no curbside recycling, 210 have twice a month, 15 have monthly pick-up. There is no curbside service in Southern Wasco County. In addition, the hours, types of recyclables accepted and method of preparation vary from system to system.

Across the country, communities with weekly curbside recycling service on the same day as garbage have the highest recycling rates. Recycling participation rates almost doubled when Portland switched from monthly to weekly-on-the-same-day as garbage service.

Inconsistent service levels have a number of negative impacts on recycling activity. Weekly, same day as garbage service, is easy to remember – when you put out your

garbage you also put out your recycling. Once or twice monthly service puts the burden to remember, not just to put the recycling out, but which day to put it out on, onto the customer – an already overburdened soul. One or two missed pick-ups can lead to large quantities of recyclables sitting on the back porch.

Lack of financial incentive to recycle
Customers who recycle or reduce substantial portions of their waste receive no financial benefit from their good behavior. Although many recyclers receive psychological satisfaction from their actions, a financial incentive has been shown to increase program participation.

Depots maintain varied hours
Customers without curbside service have to pre-plan recycling activity so they can get to a facility during open hours. Few facilities are open 24/7 and some have highly restricted hours. Instead of lugging containers to the curb, these recyclers are required to load their car, drive to a depot and unload their own recyclables. Some communities do not have depots, so citizens must drive long distances to participate. Again, items tend to pile up between depot visits and many people have limited space in their homes for storage..

Depots have inconsistent material and sorting requirements
In addition to the variation in depot hours and days, an additional barrier is that the depots are not consistent in the materials they accept or the sorting and preparation required. TDD transfer station and the Mosier depot take the most materials and the most commingled sort. Depot operations using A&P Recycling require more sorting and don't take mixed paper – a large portion of the waste stream.

Variations in service levels, depot hours and sorting requirements complicate public education efforts.
Given the variability in recycling opportunities, designing a County-wide recycling promotion and education plan with a consistent message is a challenge. To be an effective motivator a message has to include specific actions an individual can take to recycle more and prepare their recyclables better. The message can not be cluttered with addenda.

Rental and transportation costs for containers make recycling difficult in Antelope, Shaniko and Young Life.
The cost of renting and transporting waste and recyclables from these communities outweighs tipping fees. The communities serviced by Madras Sanitary tend to keep garbage costs low by burning cardboard and other paper fibers during the winter. The combined population of Shaniko and Antelope is 75, too small to expend a lot of resources to assist them at this point. Young Life has about 30 year-round households and a high transitory-resident population during the summer. Garbage costs are an issue for them.

Lack of staffing leads to poor recycling planning, education and outreach efforts
Wasco County's recovery goal is 35%. Our actual 2005 rate was 26.1% which included a 2% credit for reduction, reuse and composting activities. The DEQ has required a technical review of Wasco County's solid waste system and a formal Recovery Plan Update because the County is at less than 75% of the way to its statutory recovery goal.

In June 2006, the County hired a 0.5 FTE Solid Waste Coordinator to deal with waste-related issues. More than half of that position has been tasked with Coordinating the Tri-County Hazardous Waste Management Program, an effective way to remove toxins from our environment. The Tri-County Program is also capturing waste that will count toward Wasco County's recovery goal. Most of the remaining .16 FTE has been spent on reporting, administrative and solid waste code enforcement duties. Planning and implementing an effective recovery plan for the County has been on the back burner. Neither TDD nor Mel's Sanitary has the staff or expertise to bring us closer to our mandated recovery goal.

Barriers to Commercial Recycling Program Participation

Lack of regular collection service
TDD has 746 commercial customers, fewer than half of those have recycling service and even fewer of those recycle more than cardboard. Their commercial recycling services are on an on-call basis. There are no regular routes. As with residential recycling, lack of regular collection service puts the onus for planning and scheduling service on the customer – it is just one more burden related to recycling. The more consistent, easy and regular the service, the higher the participation rates will be.

TDD does not presently have the staff or trucks to offer weekly commercial recycling services.

Southern Wasco County has no commercial recycling pick-up. Dufur area businesses have keys to the recycling facility and can deliver recyclables at their convenience. A few stores have suppliers who back-haul cardboard.

Inconvenient collection and storage systems
Bag and rack collection systems are awkward and, when full, the bags are very heavy. They were developed for older office paper recycling programs. Their size, lack of portability and implied sorting requirements do not lend themselves comfortably to new commingled recycling sorts. Many janitors strongly disliked dealing with this system. Without the buy-in of janitorial staff no system will work effectively.

Desk-side collection boxes are an important element in an effective system; none are presently being distributed. If an employee does not have a handy place to collect recyclables s/he is less likely to participate in a recycling effort.

Lack of information and support services
TDD does not have the staff or expertise to actively promote recycling and waste prevention services. Mel's does not even provide commercial recycling services. As a

result, outreach to the business community has been minimal. Front office staff at TDD are uninformed about what, where and how to recycle commercial materials. Businesses must drive to TDD to pick-up bag and rack systems. They receive no written information about what is recyclable or how to sort it; how to set-up an effective recycling program; or how to educate and motivate staff to participate. Even the active recyclers seem unaware of the range of items that can be commingled.

There is no follow-up to see if additional services or information are necessary. This lack of information and services has resulted in requests from several downtown business owners to create a free-standing depot to meet their recycling needs.

Barriers to Increased Yard Debris Recovery

Rural backyard burning

Most rural customers who do not hire out their gardening services burn their yard debris. This is an on-site solution that does not require a truck or out-of-pocket expense. Increased lot sizes often mean that rural yard waste has more woody waste and less grass waste than urban debris. This results in larger volumes and less weight than urban waste which means higher transportation costs per ton.

Disposal fees

At TDD transfer station yard debris receives a $5.33 discount over trash for a level pick-up load (~3 cubic yards), but the cost is still $16.80 load. This fee serves as a disincentive for those who can burn their debris.

Perceived curbside participation penalty

Although there is weekly, curbside, yard debris pick-up in The Dalles it is on a subscription only basis and involves an additional monthly fee. No curbside yard debris collection is available in the rest of the county.

Hauled to Metro region

Yard debris is not composted in the local area. It is hauled to the Metro region for processing. This is an expensive and inefficient system.

Lack of collection and storage space

The Dalles Disposal transfer station has limited space for collecting yard debris as does the Northern Wasco Landfill.

Tub grinders expensive to own and maintain

Pre-chipping debris before hauling to Metro region would decrease transportation costs, but would require additional space and capital investment.

Step 5 Exploring Strategies to Overcome Barriers

Residential Sector Strategies

Residential recycling service level is not consistent

We investigated expanding weekly curbside recycling services to all TDD customers. In Northern Wasco County this would mean providing curbside services to the 13.5% who have no, or less than weekly recycling service. Two models were looked at. The first expanded weekly curbside recycling to everyone, the second was to provide alternate week curbside pick-up to all TDD customers.

The first model would directly address all the barriers in TDD service area. Service for everyone would be weekly and on the same day as garbage – the gold standard to encourage recycling. As the attached financial analysis indicates, the costs to ratepayers would be high.

The second model created two tiers of service; maintaining those with weekly service and providing everyone else with alternate week service. This option expanded curbside service to everyone in the territory. Alternate week service is easier to remember than the current first and third week schedule currently offered. It also makes better use of resources.

Lack of financial incentive to recycle

Many jurisdictions have instituted a rate for a smaller, 20 gallon garbage can. The lower rate provides a financial incentive to those who recycle and shop to reduce their waste. The smaller can also serves as a visual reminder to neighbors that recycling can save them money every month. This visual prompt, with recycling bins alongside, has proved an effective way to demonstrate the power of recycling.

Depots maintain varied hours

The Mosier recycling depot, serviced by TDD, is a free-standing 30 yard drop-box. The public can access it 24 hours a day. TDD transfer station recycling area is open Monday – Saturday, 9:00am – 5:00 pm. Mel's Sanitary transfer station in Tygh Valley is open from 10:00 am until 2:00 pm Tuesday through Friday. The Dufur recycling depot, which is operated by the local Lion's Club, is open for several hours each Saturday. Shaniko has containers for recyclables, but they are no longer used. The local volunteer who picks up garbage for Antelope residents also accepts recyclables and delivers them to Madras Sanitary when he transports the garbage dumpster.

With the exception of the Mosier depot and TDD transfer station, each of these facilities is operated by a different entity. The Dufur depot is run by community volunteers and is open the most limited hours. However, most area businesses have a key to the Dufur depot and they can deliver material at a time that fits their schedules. As mentioned earlier, this community-run depot collects more recyclables than the transfer station at Mel's Sanitary, so the limited hours, but 24 hour business access, seem to work for the community.

Two depot-access initiatives are planned: to start a new depot in Maupin and to coordinate the open hours of the Maupin, Tygh Valley (Mel's Sanitary) and Dufur depots so they all have Saturday morning hours.

Depots have inconsistent material and sorting requirements
There are two intermediate markets for recyclables in Wasco County: A&P Recycling and TDD. Each has different sorting requirements. A&P requires source separation of materials and only accepts high-graded paper. TDD separates cardboard and glass, commingles all other materials and takes all paper grades.

Mel's Sanitary has been using an intermediate market that only accepts limited materials and has higher preparation standards than is now typical; it is considering switching to a less restrictive market. This switch would allow them to take a broader range of material and also make sorting and preparation simpler for their customers. The Maupin Depot will most likely be serviced by Mel's, so a change to the less restrictive intermediate marketer will make the Tygh Valley, Maupin, Mosier and TDD depots consistent.

With these depots beginning to accept commingled sorts, the recycling rate at these depots (given significant education and promotion) should increase measurably; commingling generally increases participation by at least 4%. Accepting a broader range of material will also lead to greater tonnages.

The Dufur Depot is run by volunteers. They use the restrictive outlet as their market and they are committed to source separating recyclables. Unlike Mel's Sanitary, they also take plastic bottles. This is a successful, volunteer-run depot whose revenues support local activities. They should be able to call their own shots about markets.

Variations in service levels, depot hours and sorting requirements complicate public education efforts
With TDD adopting two service levels instead of four, communicating about recycling opportunities will be simplified.. As depot hours and sorts become more consistent public confusion and frustration should diminish.

Rental and transportation costs for containers make recycling expensive in Antelope, Shaniko and Young Life
The challenge here is financial. We could ramp up education efforts and provide recycling containers in Shaniko and Antelope, but they are so small (75 total residents) and distant that this area will remain a low priority for the near future.

Pat Bozanich has been working with a representative from Young Life to help them clarify their waste streams and to connect them with markets. We may be able to tie better services for Antelope and Shaniko into a broader, long-term plan.

Lack of staffing leads to poor recycling planning, education and outreach efforts
Having a position tasked with planning, implementing and evaluating all waste recovery efforts in the Wasco County Wasteshed is essential if we are to meet our mandated goals.

To improve services and increase public participation will require some significant changes in the way recycling is done in the County as well as a major public education effort. The garbage haulers do not have the expertise or the legal responsibility to do this; Wasco County does.

This lack of time and expertise is not just a problem in Wasco County. It is also an issue in Hood River and Sherman Counties. Although Hood River County is currently meeting its state mandated recovery rate, program participating is not improving. Like Wasco County, Sherman County is below its statutory-required level. Unlike their counterparts in the urban areas of the state, none of these wastesheds have a position tasked with planning and implementing strategies for increasing the waste recovery rate.

The Steering Committee of the Tri-County Hazardous Waste Management Program which provides hazardous waste planning, collection and disposal services to all three wastesheds, recently recognized this deficit. Program partners, who also share responsibility for reaching DEQ mandated recovery rates, recently voted to increase Program services to include recycling education and planning. The Tri-County Program voted to fund 1.15 FTE to improve recycling and waste prevention planning and education services in its member jurisdictions.

Trained community volunteers can significantly increase the effectiveness of public education and outreach services. The Master Recycler/Composter Program, a community education program focused on waste prevention and recycling, has proven to be an effective means of motivating people to change their waste-related habits. The program, modeled on programs like the Master Gardeners, provides 30 hours of training to selected individuals, those participants then "pay back" their training by educating others and by setting up recycling and waste prevention systems in their workplaces, schools or other institutions.

In the Metro region, as well as less populous parts of the state, the Master Recycler Program has demonstrated its effectiveness in substantially expanding education, outreach and hands-on recycling efforts. It also creates a base of educated citizens who act as opinion leaders for waste-related issues.

Commercial Sector Strategies

Lack of regular collection service

If their costs are reflected in the rate base, TDD has agreed to hire an additional driver and buy a used recycling truck so it can supply commercial customers with regular, weekly, recycling pick-up. Since the commercial sector will benefit from this service enhancement the costs will be reflected in their rates. A rate impact sheet is attached.

Inconvenient collection and storage systems

Although more expensive than bag and rack systems, covered roll carts are much more convenient to use; they hold more material, are portable and don't require lifting by janitorial personnel. They roll from place to place. This larger size allows for commingling of material and the use of stickers to designate use. Material is protected

from the rain and maintains its value after set-out. The use of recycling roll carts can result in increased system efficiencies and decreased driver injuries because the service is more automated.

Desk-side recycling containers allow workers to accumulate paper in a consistent, visually appealing way and will provide a visual prompt for recycling.

Where feasible, TDD will switch commercial recycling customers from bag and rack systems to covered roll carts. Desk-side containers will also be supplied. These costs will be included in commercial garbage rates.

Lack of information and support services
The Tri-County Program-funded positions mentioned in the residential section would also supply services to commercial customers, including system set-up, signage and employee education services. Master Recyclers often initiate recycling and waste prevention activities in their workplaces, community centers and churches. Brochures and other support materials will be produced to inform employees and reinforce participation. Many jurisdictions have recognition programs for businesses with good environmental practices, we may institute one for the Tri-County region.

Yard Debris Recovery Strategies

Backyard Burning
Many urban jurisdictions have banned backyard burning; some as a way to address air pollution problems, others to encourage yard debris recycling programs. Banning backyard burning in a rural area is a much more complex issue. It would not be prudent to institute a burn ban unless feasible, low cost, alternatives were already in place.

Perceived curbside participation penalty
Only 6% of The Dalles residents participate in the curbside yard debris program. This means two things. It is an expensive and inefficient program to operate. And it is not diverting much material from the waste stream.

Many jurisdictions provide curbside yard debris recycling to all residents and build the program cost into the rate base. Participation in these programs is higher than in subscription-based programs because citizens do not perceive that there is a participation penalty and they tend to feel that since they are paying for it, they should use it. More participants mean more cost effective service (better truck and driver utilization) and more diversion from the waste stream.

Disposal fees
Material hauled to Metro region
Lack of collection and storage space
Tub grinders are expensive to own and maintain
Metro area composting programs may be reaching capacity

Hood River Garbage accepts household yard debris for free on Wednesdays. They have a much higher yard debris recycling rate than TDD. However, the debris is hauled to the Metro area for composting and increased fuel prices are threatening the continuation of that program. The drive from Wasco County is even longer. A free yard debris day at TDD would increase the amount of material received, but would not deal with a lack of storage space or the ability to grind material to increase transport efficiency. The same constraints presently apply to absorbing significant increases in The Dalles curbside program.

The ideal solution would be to have a local, commercial composting operation that could use our material. We briefly explored the option of starting a composting operation, but quickly ran into issues involving siting, cost and expertise.

Possible yard debris recovery solutions

Increasing the number of home composters would decrease the waste stream without putting additional stress on the present yard debris infrastructure. The OSU Master Gardener Program started and helps staff the Hood River compost demonstration site. Wasco County also has an active Master Gardener Program. The Master Recycler/Composter Program may also produce compost enthusiasts who will help with such an educational effort.

As noted earlier, rural yard debris tends to include more limbs and less grass than urban programs. Some method of helping residents chip woody waste would improve the opportunity to home compost.

Establishing a composting demonstration site in northern Wasco County, and improving home composting education in the county presently look like the most cost-effective methods for handing yard debris waste. Increasing participation in The Dalles curbside yard debris program by switching from a subscription-based program and spreading costs over the rate base might prove to be a good choice in 2009 if we are still short of our goal. A decrease in fuel prices or the establishment of a local commercial composing operation would make this option more appealing. We should do what we can to encourage the development of a local commercial composting facility.

TDD currently offers free yard debris drop-off during the month of April and during one week in October – both of which are prime yard debris generation periods. These opportunities are not well publicized. Increasing promotion of these opportunities could substantially improve participation, but as noted earlier, there are physical constraints at TDD that argue for moving with some caution in this direction.

Summary of Proposed Solutions and Rate Impacts

Garbage and Recycling Program Enhancements TDD Service Area

Residential Sector

Standardize residential curbside recycling service levels in TDD territory

Universal weekly curbside recycling

Best choice, but expensive

Rural customers receive alternate week curbside collection

Good second choice. Improved system efficiencies mean no rate impact.

New garbage service level - Mini cans (20 gallon)

Provides rate incentive for decreased garbage/increased recycling activity

Visual prompt for recycling and waste prevention

Individuals need to buy own cans. No rate impact.

Increased recycling education and outreach

Publications – half/yearly, recycling schedules, how-to brochures, etc.

Billing statements – recycling day and reason reminders, mini-can promo

Presentations to community groups

Event Booths – Cherry Festival, Earth day, etc.

Education and promotion publication funds are already included in TDD rate base. Institute Master Recycle/Composter Program with DEQ grant.

Commercial Sector

Physical enhancements

Weekly recycling route

65 gal roll carts for recycling

Desk-side recycling containers

TDD buys used truck, roll carts and containers, hires additional staff.; Costs into new commercial rate base.10.4% rate increase for commercial customers.

Education and Promotion

Promotion of new services

System set-up services

Waste audits for business and institutions

Work with schools to implement programs and increase awareness

Create 1.0 FTE Tri-County Hazardous Waste and Recycling Program Manager position. Hire .5 FTE Community Recycling Specialist. Positions to be funded through Tri-County Hazardous Waste Management Program.

Create and distribute newsletter, brochures, fact sheets and schedules. TDD has funds allocated for most of this promotional activity.

Yard Debris Waste

Improve home composting education effort

Partner with Master Gardeners and others to develop a home composting demonstration site

Create brochures and other educational resources

Investigate a roving chipper program to help encourage home composting

Master Gardeners and Master Recyclers could help with education efforts, demonstration site development and classes.

Materials for sit development could be donated by local businesses.

Improve promotion of April and October free yard debris recycling opportunities

Increased promotion will boost participation levels without overloading system

No rate impact

Encourage the development of a commercial composting facility in the region

Get listed on Needs and Issues Inventory

No rate impact

Garbage and Recycling Program Enhancements, South County

Open new South County depot in Maupiu

The City of Maupin is very interested in developing a recycling depot, but funding for transportation and disposal services is an issue. Explore using avoided disposal fees to cover ongoing costs.

Dependent on funding from DEQ to buy container and cover first year's disposal fees. A grant application for $14,892 has been submitted to the DEQ.

Standardize depot hours

Institute Saturday morning hours at all depots

No rate impact anticipated

Standardize materials collected and sorting requirements at depots

Institute a commingled sort at all depots, except Dufur which is run by community volunteers

No rate impact anticipated

Open discussions with Madras Sanitary about service delivery in Wasco County

County-wide Service Enhancements

Develop Master Recycler/Composter Program

Will increase recycling-composting knowledge base

Will create/reinforce waste reduction opinion leaders

Expand education and outreach workforce

Create Tri-County Program Manager and Community Recycling Specialist positions. Apply for DEQ grant for creation of educational materials, displays and brochures.

Obtaining 2% Waste Prevention Credits

This Recovery Plan Update focuses on improving the recovery rate through improved recycling services and education efforts. Other than improving home composting education, it does not directly address efforts to obtain 2% credits. There are two reasons for that: it allows staff to focus on measurable results; and the region-wide recovery perspective inherent in the Tri-County Recycling Program means that the needs of Wasco County will not be the primary driver in determining future educational efforts. We anticipate we will eventually qualify for several 2% credits but those results will flow from our broader efforts and not be free standing.

Timelines

Garbage and Recycling Program Enhancements TDD Service Area

Residential Sector

February 2008

New Services Coming Soon campaign starts

April 2008

Alternate weekly curbside recycling begins

New garbage service level - Mini cans (20 gallon)

Commercial Sector

October 2007

Recovery Plan Update, including the 10.4% rate increase for commercial accounts, adopted by Wasco County Solid Waste Advisory Committee

November 2007

Recovery Plan Update, including the 10.4% rate increase for commercial accounts, adopted by The Dalles City Council.

December 2007

Education and Promotion campaign begins

Outreach to schools begins

January 2008, ongoing

Weekly service implemented

Roll carts delivered

Set-up/educational services provided

Yard Debris Waste

February 2008, ongoing

Encourage the development of regional commercial composting facility

March and April 2008

Improve promotion of April free yard debris recycling opportunity

June 2008

Improve home composting education effort

October and November 2008

Promote November free yard debris recycling opportunity

Garbage and Recycling Program Enhancements, South County

February 2008

Increased recycling education and outreach begins

April 2008

Standardize depot hours

Standardize materials collected and sorting requirements at depots

Summer 2008

Open new South County depot in Maupin

County-wide Service Enhancements

Spring 2009

Hold Master Recycler/Composter Program training

Projected Impacts of Program Improvements

According to the DEQ, Wasco County disposed of 21,354 tons of waste and recovered 6,786 in 2005. This resulted in a recycling rate of 24.1%.

Impact of Residential Collection Improvements

Increases in the residential recycling rate will come from two sources: 1) The extension of alternate week curbside service; and 2) increased education and promotion activity.

The Dalles Disposal has approximately 4,100 residential customers, of those 3767 have curbside recycling and 329 do not. 225 of the recycling customers have once or twice monthly pick-up. That means that it is difficult to communicate clearly with about 550 or 13% of TDD customers about recycling service levels. It also means that 8% of customers have no recycling service at all.

When Portland increased recycling pick-up from monthly to weekly in 1991, participation rates increased by 80% and the tons of recyclables collected at the curb more than doubled. While the situation in TDD territory is not analogous, because a much smaller proportion of customers will benefit from the change to alternate week recycling collection, the 80% figure does indicate that consistent service matters.

Current recycling rates on The Dalles Disposal routes are very low. They report that, on average, 9.5% of residents in the urban area recycle weekly. That percentage goes up to 16% on the rural/Mosier routes which are collected once or twice a month. For comparison, the lowest performing routes in the City of Portland run at about 26%.

Research also indicates that adding mixed scrap paper adds about 4 percentage points to the residential recycling rate and that commingling recyclables can add another 4% (10% in the City of Portland). Although the current TDD program includes both these elements, many people remain confused about what is recyclable curbside.

The addition of mini-can service will provide a rate incentive to recycle more material.

Given these data, projecting an increase of TDD residential recycling tonnage from the 772 tons collected in 2006 to 1,500 tons by 2009 seems reasonable.

Impact of Commercial Collection Improvements

In 2001 Metro estimated that commercial waste accounted for more than 50% of the region's landfilled material, with an additional 20 - 25% already being recycled. Wasco County's combined residential and commercial recycling rate is 24.1%. This indicates that much less than 25% of the commercial waste is currently making it into Wasco recycling bins.

On-route commercial collection for TDD in 2006 was about 614 tons. Providing weekly commercial recycling collection, supplying more user-friendly collection containers, emphasizing mixed paper collection and providing additional education and promotion support to business and institutional customers should increase commercial tonnage to 1800 tons by 2009.

Impact of Yard Debris Collection Improvements

No infrastructure or rate changes are targeted for the yard debris program, however, increased promotion of the free yard debris events in April and October should increase yard debris tonnage by about 20%, or 85 tons by 2009.

Impact of Depot Collection Improvements

The Mosier depot collects about 50 tons of recyclables a year. Users have access 24 hours a day. The Maupin depot would not be quite that accessible, but Saturday morning hours are planned. We anticipate that a Maupin Depot would collect 35 tons annually.

In 2006, the Dufur Lions Depot collected 22.91 tons of recyclables. Mel's Sanitary collected 16.59. Some of that difference may reflect the ability of working people to use Mel's depot which is only open Tuesday – Friday from 10:00 am – 2:00 pm.

Aligning South County depot hours so citizens would have regular Saturday morning access would simplify communication and provide service to citizens who work regular work weeks. Switching to a commingled mix at all but the Dufur depot and updating

preparation requirements will make the depots more user friendly. Actively promoting the depots will also increase use.

We anticipate that expanding curbside collection in TDD territory might have a slight negative impact on collection at the Mosier Depot and at The Dalles Transfer Station.

Overall, we believe that tonnage from South County depots will increase from about 39.5 tons to 85 tons by 2009.

Summary of Projected Impacts of Program Improvements

Collected and Anticipated Tonnage	2005	2006	2009
TDD residential	663	772	1,500
TDD commercial	600	614	1,800
TDD depots	320	630	630
South County depots	11*	39.5	85
Totals	**1,504**	**2,055.5**	**4,015**

*Does not include Dufur depot.

North Central Public Health District

Material Safety Data Sheets

Archives

The contents of this book provide a list of known hazardous chemicals that have been used at the North Central Public Health District.

Product Name	Maunfacture	MSDS
HIV 1/2 STAT-PAK	Clearview	1
10 Neutral Germicidal Cleaner	Essential Industries Inc.	2
20/10 Winterized Windshield Washer	20/10 Products Inc.	3
4 natural Cleaner	Essential Industries Inc.	4
Alcohol Isopropyl 70%	J.T. Baker	5
Alcohol Methyl Gal	J.T. Baker	6
AR-19	Chemserach Div. of NCH Corp	7
Benzal Konium Chloride Solution	Nice-Pak Products Inc	8
Biaton (United 77)	United Laboratories	9
Biotron	United Laboratories	10
Bounce Back	Spartan Chemical	11
Carpet Brite	Kleenco Products Inc.	12
Carpet Pre-treat 61	Clausen Carpet Solutions	13
Concentrated Window Cleaner	Spartan Chemical	14
Coolingcare 8149	ECOLAB	15
Counter top Magic	Magic American Products Inc.	16
Curel Fragrance Free	Baush & Lomb	17
Curel Original Formula	Baush & Lomb	18
Defoamer	Spartan Chemical	19
Derma Pro	Gojo Industries Inc.	20
Derma Pro Loion Skin Cleanser	Gojo Industries Inc.	21
Desk and Office Cleaner	3M	22
DMQ Damp Mop neutral disinfectant Cleanser	Spartan Chemical	23
DMQ Floor Cleaner	Spartan Chemicals	24
Duo-Zyme (United 55)	United Laboratories	25
Dust Sheen	Ball (for W.W. Grainger)	26
Extraction Cleaner Concentrate	JohnsonDiversey Inc.	27
Formalin 10%	PML Microbioloists	28
Gas Dryer and Gas Line Antifreeze	Prestone	29
Germicidal Cleaning Solution	Nice-Pak Products Inc	30
Glass Cleaner Concentrate	ENFORCER Products Inc.	31
Gojo Lotion skin Cleanser	Gojo Industries Inc.	32
Hemogolbin	Hemocue	33
Hibiclens	Zeneca	34
Histofreezer Portable Cryosurgical System	Orasure	35
Hygenix In-line replacement cartridge	Waterbury Companies Inc	36
Isopropyl Alcohol	L.T. York Co	37
Kwik Kleen 500	Chemical Compounding Co.	38
Lemon Shine-up RTU	JohnsonDiversey Inc.	39
Liquid Antimicrobial Soap	Dial	40

Liquid Bleach	Dial Corp.	41
Liqui-Zyme (united 455)	United Laboratories	42
Lite Touch RTU	JohnsonDiversey Inc.	43
Lo-Foam Steam Extract Cleaner Concentrate	Share Corporation	44
Lubricant Jelly	K-Y	45
Lubriderm Lotion Scented/unscented	Consumer Health	46
M11 All purpose Cleaner	General Paint and Supply	47
Machine	IEC Centrifuge Mobel MB	48
maintenance One concentrated All Purpose Cleaner (M-11)	General Paint & Manufacturing Com.	49
Marker Board Cleaner	Complete Packing Corporation	50
Med Chem Germicidal Sol.	Medical Chemical Corp.	51
Metricide 28	Metrex Research Corp.	S2
Micro-cover-white aero	Chemsearch	S3
Moisture Barrier (united 101)	United Laboratories	54
Mulit Guard 3100	Water Care Division of Ecolab Inc.	55
Multistix	Miles Inc.	56
NABC Urinal Screens with Deodorizing Block	Spartan Chemical	57
Neutral Cleaner #4	Essential Industries Inc.	58
Neutral Germicidal Cleaner # 10	Essential Industries Inc.	59
Neutralizer Aerosol	Glade	60
Nitrite Test Kit #4797-0	Nu-calgon Wholesaler Inc.	61
Old English Funiture Polish	Reckitt & Coleman Inc.	62
On an' On	Spartan Chemical	63
On Base	Spartan Chemical	64
Oral Fluid Collection Device Perservation Solution	Orasure Technologies, Inc.	65
Para Blocks and Crystals (Urinal Block)	Fresh Products	66
Pearlux Pearlized Hand Cleaner	Spartan Chemical	67
Pentel corrections Pen	Pentel	68
Pink Lotion Skin Cleaner	Kutol Products Company	69
Pink Marvel (united 50)	United Laboratories	70
Ploy Stat hCG Test	Polymedco	71
Pro Strip	JohnsonDiversey Inc.	72
PVA Fixative	PML Microbiologists	73
QuickVue	Quidel Corp.	74
Repel	Clausen Carpet Solutions	75
RP 70S	Ciba	76
Rubber Cement	Sanford	77
Sani-dex Solution	Nice-Pak Products Inc	78
Scotts Liquid gold wood cleaner	Scotts Liquid Gold-INC	79
Scrubs In-A-Bucket	ITW Dymon	80
Serum Separation Tubes	Becton Dicinson & Co	81
Shineline Emulsifier Plus	Spartan Chemical	82

Shineseal	Spartan Chemical	83
Snapback Spray Buff	JohnsonDiversey Inc.	84
Soft Scrub	Clorox	85
Soft Scrub with Bleach Cleasnser	Clorox	86
Soft Sense Skin Essentials Lotion	Baush & Lomb	87
Solv All (united 180)	United Laboratories	88
Sparcling	Spartan chemical	89
Speed Clean	MidMark Corp.	90
Spray De-Icer	Prestone	91
Sterilizing and Disinfection Solution	Procide	92
Sure Klean Weather Seal Siloxane PD	Prosoco Inc.	93
Terra Glaze	Spartan chemical	94
Toner Black	Cannon	95
Toner Black	Xerox	96
Tower Lay-up Inhibitor	Spartan chemical	97
Transport Media	Gen-Probe	98
Treated collection Pad	Orasure Technologies, Inc.	99
Trendsetter	Spartan Chemical	100
Triple Z (United 000)	United Laboratories	101
Tsumura Medical Derma Scrub	Tsumura	102
Tums	SmithKline Beecham	103
Ty-Ion B20	Nu-calgon Wholesaler Inc.	104
Ty-Ion C-70	Nu-calgon Wholesaler Inc.	105
United 101 Moisture barrier and Electrical Lubricant	ECOLAB INC.	106
Urinal Block-Cherry FR12	United Laboratories	107
Vanishing act (united 231)	United Laboratories	108
Vectra Floor Finish	JohnsonDiversey Inc.	109
Visi-Max	United Laboratories	110
Vons Bleach	KIK International Inc.	111
WCS 215	United Laboratories	112
Winter Storm Ice Melter	North American Salt company	113

Wasco County
Opportunity to Recycle Report 2009
County Provided Programs and Activities

TriCounty Hazardous Waste & Recycling Program

Wasco County is the lead participant in the TriCounty Hazardous Waste & Recycling Program ("the Program"), which provides hazardous waste collection services plus recycling education and outreach efforts to residents of Wasco, Sherman and Hood River counties. It is a partnership between Wasco, Sherman and Hood River counties and the local governments of The Dalles, Hood River, Dufur, Maupin, Mosier and Cascade Locks. The Program is funded through a surcharge ($7.28 per ton in 2009), on waste from these counties received at the Northern Wasco County Landfill outside of The Dalles, as well as a contribution from Sherman County (whose municipal solid waste does not go to this landfill). The program's revenues have been in the range of $325,000 to $350,000 annually the past few years.

The North Central Public Health Department is the lead agency in this coalition. Program staff are Cindy Brown, Coordinator; David Skakel, Solid Waste Specialist; and Jodi TePoel, LINK/AmeriCorp intern. Public Health staff who also work on the Program include Glenn Pierce, Environmental Health Specialist Supervisor; Tanya Wray, Program Secretary; Gloria Perry, Administrative Assistant; and Kathi Hall, Business Manager.

Hazardous Waste Collection Services

The Program provides event-based collection and disposal services to households, businesses (conditionally exempt generators or CEGs), orchardists and farmers of the TriCounty area. The program owns two hazardous waste collection facilities, one in The Dalles and one in Hood River. The Hood River site had significant improvements completed this summer, with a new concrete pad, small retaining wall, and expanded paving. TriCounty contracts with PSC Environmental LLC to collect and dispose of the hazardous wastes. Collection and disposal is free for residents of Wasco, Sherman and Hood River counties. It is also free, up to a limit of $400 per event, for agricultural producers and CEGs. However, as the program has not yet gotten close to budget limits, no customer has been required to pay for disposal of their materials.

For 2009, the fourth season for the operation of these hazardous waste collection events, the Program held 16 household and 7 agricultural/business events. A special collection was also held on-site for North Wasco County School District 21. Residents of the tri-county area were notified of the events through two direct mail postcards sent during the year. The Program collected 109,469 pounds (almost 55 tons) of wastes; an increase of 19% over 2008. This was almost equally split between household and agricultural/business waste. Household waste totaled 51,569 (47%) and agricultural/business waste totaled 57,900 pounds (53%). The greatest increase from the year prior was in the agricultural/business waste, which more than doubled from the amount collected in 2008. The number of participants (as measured by vehicle counts) only slightly increased, from1082 in 2008 to 1101 in 2009. $98,145 was spent with contractor PSC in 2009, which is still below the targeted budget level of $150,000 when the Program is in full operation with a greater number of events and a larger percentage of households served.

Participants at all household hazardous waste collection events were offered information about safer alternatives to hazardous products. Free copies of Metro's The Hazardless Home Handbook and Natural Gardening were distributed to interested participants. A total of 849 free publications were distributed in the TriCounty area: 463 in Hood River County, 380 in Wasco County, and 6 in Sherman County. Both

Program staff completed 8-hour "refresher" OSHA health and safety courses on the management of household and CEG hazardous waste.

The Program addressed medical waste issues in several ways. Starting in February 2009, the Program provides for free sharps disposal for residents at Hood River Garbage Service. This allows residents of Hood River County the same option as those in Wasco County, as The Dalles Disposal's current operating plan includes free sharps disposal for residents. Through December 2009, a total of over 150 sharps containers have been disposed of through this effort at Hood River Garbage, a good service to the public. Program staff developed a brochure on the correct ways to dispose of medical waste (sharps and unused medications), which was distributed to local pharmacies and medical offices. Staff were on a local radio show discussing proper ways to dispose of medical waste, and sent several press releases on the topic.

Recycling Education and Outreach

Program staff perform recycling education and outreach activities on behalf of all three counties as well as the haulers. For example, Program staff serve as a resource for the haulers for such activities as developing brochures, helping with field trips, and taking advantage of public speaking opportunities including community groups and media. Staff had booths at the Hood River Earth Day and Gorge EcoFest, and are currently developing materials for "ready-to-go" displays to do more "tabling" outreach at festivals, fairs and special events. The Program has a website, www.tricountyrecycle.com, which went live in May 2009. It is continually being updated and expanded to serve the Program and public's needs.

Over 24,000 copies of the half-yearly newsletter were sent out to all residents of Wasco, Sherman and Hood River counties. Required for wastesheds by the Oregon Department of Environmental Quality, the newsletter was sent out in Spring 2009 and Fall 2009. Topics included "Let's Talk Trash!" on waste generation and recovery, list of local resale businesses, HHW event listings, what to put in blue bin, Oregon E-cycles, bottle bin expansion, "Sustainability: What does that mean, anyway?", Earth Machine compost bin, home medical waste (sharps and unused medications), and introducing Master Recycler program.

Several brochures were developed in 2009: proper motor oil recycling and disposal (in partnership with Hood River Watershed Group), disposing of medical waste, composting, and newly translated "How and How to Recycle" in Spanish for The Dalles Disposal and Hood River Garbage. These brochures help the local haulers fulfill their requirements for customer education about recycling opportunities.

A Master Recycler volunteer training program was launched in the fall, with 13 volunteers completing a series of 8 classes and two field trips. They will then perform a minimum of 30 hours "payback" volunteering in the tri-county area to teach people about recycling, waste reduction, composting and other sustainability issues. Program staff are currently training on a database program called "Volunteer Squared" database program for tracking Master Recycler volunteers, hours and activities.

The Program is also involved with rural recycling depots. Staff helped with the installation and promotion of the new depot in Maupin; helps with the expense of hauling co-mingled recycling from south Wasco County; and provided two additional recycling 30-yard containers to be put in rotation with the current containers at the Tygh Valley transfer station and the new Maupin site. Staff is helping with discussions on how to handle problems with the current recycling depot in Mosier. Solutions include

promoting expanded curbside recycling opportunities in Mosier, better signage to prevent garbage dumping, and possible relocation to a Wasco County site at the south edge of town.

The Program Coordinator serves as the regional contact for the Oregon Green Schools program. Sherman Junior/Senior High School was certified as an Oregon Green School in May 2009. This is the only school currently certified in the tri-county area; at one time, there were 4 schools certified but these certifications have lapsed and will need to be renewed through a new application process. Challenges at schools, including reduced staff, program cuts and funding struggles, make it difficult to recruit schools for the Oregon Green Schools program. It is also difficult for TriCounty program staff to consistently work with school staff and students, along with all the other varied duties of the program.

Electronics recycling was addressed in several ways. The Program continues to work with, support and refer residents to StRUT (Students Recycling Used Technology) which is based at the old Petersburg School outside of The Dalles. To promote the new Oregon E-cycles program introduced in January 2009, the Program published a number of print ads, wrote press releases, and included information in its two newsletters.

Promotion of Waste Reduction

To encourage waste reduction and waste-based business efforts in the tri-county area, the Program started a General Grants program. The first successful applicant is Opportunity Connections, which is starting a document shredding business to serve the Gorge area.

The Program maintains a ClearStream beverage container recycling loan program to help with event recycling, such as at games and sporting events, festivals and fairs. Residents can borrow these containers to help collect pop cans and plastic bottles at their events, reducing the amount of waste generated and increasing the amount of recycling achieved. A total of 75 ClearStream containers are available for short- and long-term loan in the TriCounty area. The program has partnered with the Hood River Lion's "LEOS" youth group to manage the ClearStream loan program in Hood River, based out of the Soul Café on 12th St.

Residential composting opportunities expanded, as in March the Program took over management of the compost bin distribution program (formerly handled by Hood River Public Health). The availability of the Earth Machine compost bins at both transfer stations was advertised in both print and radio media, as well as promoted in the newsletters and at HHW events. A total of 432 bins were sold through December 2009; a great increase over previous sales of 65-75 bins annually through the old program. According to information provided by the bin manufacturer, residents who compost at home can divert a minimum of 650 pounds per years from the solid waste stream.

The Program partnered with the Wasco County Master Gardeners, OSU Extension, and Northern Wasco County School D21 to develop The Dalles Imagination Garden ("DIG") in the port area, which includes a compost demonstration area with a number of composting bins. Staff held composting classes both at the DIG and at the Utopia Community Garden to help people learn how to reduce waste by composting. The Program offers "mini-grants" for area schools to help them get started with, or expand, on-site composting; Mosier Community School is the first successful applicant, and has installed a 2-bin hot composting system. Program staff are overseeing this effort and working to deal with problems such as odor and complaints from nearby residents.

The Program hired Cascadia Consulting to conduct a study on the best ways to handle organics in the gorge. This was a goal included in the 2007-09 Wasco County Wasteshed Recovery Plan, and regional composting and biomass for energy production have been a topic of discussion for a number of stakeholders especially in the Hood River area. Fall 2009 marked the first few months of the research and data collection for the study, which is to be completed in Spring 2010.

Staff Training and Capacity Building

Program staff attended a number of conferences in order to better understand the recycling industry and how to motivate people's behavior toward waste prevention and recycling --- GoGreen 09, Association of Oregon Recyclers (AOR) conference and annual forums, NAHMMA conference, SWANA conference and forum. Program staff studied the concepts of "community-based social marketing" November training in Portland, which uses marketing techniques to help encourage sustainable behavior changes, include identifying barriers and benefits to adopting a behavior, such as starting to recycle at home or reducing waste by reusing shopping bags.

Program staff also made a presentation at the June 2009 AOR conference in June on community partnerships to promote recycling in rural areas, and are on the planning committee for the 2010 conference.

The new Oregon paint stewardship program held a series of meetings for interested stakeholders in Fall 2009, which program staff attended and participated in representing local government concerns. Program staff were also invited to be part of a state level product stewardship committee, to oversee on-going efforts in this area for Oregon.

207 HOUSEHOLD HAZARDOUS WASTE FUND
23 PUBLIC HEALTH
7207 HOUSEHOLD HAZARDOUS WASTE

Account Number		2008 Actuals	2009 Actuals	2010 Revised Budget	2011 Proposed Budget	2011 Approved Budget	2011 Adopted Budget
51000	PERSONAL SERVICES						
51176	BUSINESS MANAGER	2,025.80	4,421.70	4,908.00	4,909.00	4,909.00	4,909.00
51177	CLINICAL PROGRAM SECRETARY	3,750.94	9,494.93	11,056.00	10,747.00	10,747.00	10,747.00
51189	SOLID WASTE COORDINATOR	33,627.82	35,176.62	22,091.00	40,568.00	40,568.00	40,568.00
51195	SUPVSING EH SPECIALIST	8,581.71	9,854.41	11,371.00	11,970.00	11,970.00	11,970.00
51201	RECYCLE COORDINATOR	7,306.15	22,773.95	60,427.00	40,007.00	60,985.00	60,985.00
51602	OVERTIME	1,637.70	178.98	0.00	0.00	0.00	0.00
51621	CELL PHONE ALLOWANCE	0.00	50.00	114.00	120.00	120.00	120.00
51640	LONGEVITY	0.00	100.00	294.00	306.00	306.00	306.00
51681	COMP/HOLIDAY BANK CASHOUT	148.98	0.00	0.00	0.00	0.00	0.00
51701	FICA	3,894.37	5,571.99	7,591.00	7,463.00	10,063.00	10,063.00
51703	UNEMPLOYMENT INSURANCE	0.00	14,441.47	0.00	0.00	0.00	0.00
51705	WORKERS' COMPENSATION	854.83	912.91	1,315.00	1,666.00	2,353.00	2,353.00
51721	PERS	5,348.90	6,057.84	10,590.00	8,200.00	10,717.00	10,717.00
51729	HEALTH INSURANCE	9,421.24	22,337.63	39,517.00	32,241.00	45,891.00	45,891.00
51730	DENTAL INSURANCE	634.05	1,281.71	1,966.00	1,766.00	2,473.00	2,473.00
51732	LONG TERM DISABILITY	230.55	364.17	378.00	520.00	712.00	712.00
51733	LIFE INSURANCE	31.35	59.66	85.00	71.00	98.00	98.00
	Total PERSONAL SERVICES	77,494.39	133,077.97	171,703.00	160,554.00	201,912.00	201,912.00
52000	MATERIALS & SERVICES						
52101	ADVERTISING & PROMOTIONS	3,366.50	36,098.60	54,000.00	40,000.00	40,000.00	40,000.00
52103	AGENCY LICENSES/ASSESS/PERMITS	490.33	1,337.13	1,100.00	2,500.00	2,500.00	2,500.00
52113	INSURANCE & BONDS	0.00	0.00	8,000.00	0.00	0.00	0.00
52115	LEGAL NOTICES & PUBLISHING	0.00	479.91	0.00	300.00	300.00	300.00
52116	POSTAGE	72.00-	16,943.86	16,000.00	16,000.00	16,000.00	16,000.00

207 HOUSEHOLD HAZARDOUS WASTE FUND
23 PUBLIC HEALTH
7207 HOUSEHOLD HAZARDOUS WASTE

Account Number		2008 Actuals	2009 Actuals	2010 Revised Budget	2011 Proposed Budget	2011 Approved Budget	2011 Adopted Budget
52120	RENT - OFFICE	0.00	0.00	0.00	500.00	500.00	500.00
52122	TELEPHONE	91.87	366.93	500.00	500.00	500.00	500.00
52148	GENERAL GRANTS	0.00	0.00	50,000.00	50,000.00	50,000.00	50,000.00
52149	MINI GRANTS	0.00	0.00	15,000.00	15,000.00	15,000.00	15,000.00
52327	LAND LEASE	9,999.84	9,833.18	10,000.00	10,000.00	10,000.00	10,000.00
52401	CONTRACTED SERVICES	0.00	7,775.38	380,494.00	0.00	0.00	0.00
52429	CONTR SRVCS - PROFESSIONAL	62,100.35	114,735.48	260,000.00	260,000.00	260,000.00	260,000.00
52604	EQUIPMENT - OFFICE	1,116.86	2,929.10	1,000.00	2,500.00	2,500.00	2,500.00
52632	EQUIPMENT RENTAL	0.00	0.00	0.00	200.00	200.00	200.00
52656	GAS & OIL	0.00	481.61	600.00	600.00	600.00	600.00
52657	VEHICLE - REPAIR & MAINTEANCE	0.00	0.00	1,000.00	1,000.00	1,000.00	1,000.00
52711	MEALS LODGING & REGISTRATION	1,445.68	6,646.82	7,500.00	7,500.00	7,500.00	7,500.00
52731	TRAVEL & MILEAGE	634.17	606.25	2,000.00	2,000.00	2,000.00	2,000.00
52801	BLDG REPAIR & MAINT	15,000.00	6,202.97	6,000.00	6,000.00	6,000.00	6,000.00
52910	SUPPLIES - OFFICE	5,454.44	22,017.49	3,000.00	3,000.00	3,000.00	3,000.00
52919	SUPPLIES - EQUIPMENT	0.00	0.00	0.00	16,000.00	16,000.00	16,000.00
52936	SUPPLIES - PROGRAMED	0.00	9,495.26	16,000.00	10,000.00	10,000.00	10,000.00
	Total MATERIALS & SERVICES	99,628.04	235,949.97	842,194.00	443,600.00	443,600.00	443,600.00
53000	CAPITAL OUTLAY						
53101	BUILDINGS	0.00	8,315.30	50,000.00	25,000.00	25,000.00	25,000.00
53111	CAPITAL EXPENDITURES	0.00	0.00	20,000.00	50,000.00	50,000.00	50,000.00
53201	VEHICLES	22,715.00	0.00	0.00	0.00	0.00	0.00
	Total CAPITAL OUTLAY	22,715.00	8,315.30	70,000.00	75,000.00	75,000.00	75,000.00
57000	CONTINGENCY						

207 HOUSEHOLD HAZARDOUS WASTE FUND
23 PUBLIC HEALTH
7207 HOUSEHOLD HAZARDOUS WASTE

Account Number			2008 Actuals	2009 Actuals	2010 Revised Budget	2011 Proposed Budget	2011 Approved Budget	2011 Adopted Budget
57207	CONTINGENCY		0.00	0.00	3,976.00	427,536.00	386,178.00	386,178.00
Total	CONTINGENCY		0.00	0.00	3,976.00	427,536.00	386,178.00	386,178.00
Total	HOUSEHOLD HAZARDOUS WASTE		199,837.43	377,343.24	1,087,873.00	1,106,690.00	1,106,690.00	1,106,690.00
Total	PUBLIC HEALTH		199,837.43	377,343.24	1,087,873.00	1,106,690.00	1,106,690.00	1,106,690.00
Total	HOUSEHOLD HAZARDOUS WASTE FUND		199,837.43	377,343.24	1,087,873.00	1,106,690.00	1,106,690.00	1,106,690.00

207 HOUSEHOLD HAZARDOUS WASTE FUND
00 NON-DEPARTMENTAL RESOURCES
1207 HOUSEHOLD HAZARDOUS WASTE RESOURCES

Account Number			2008 Actuals	2009 Actuals	2010 Revised Budget	2011 Proposed Budget	2011 Approved Budget	2011 Adopted Budget
400	BEGINNING FUND BALANCE							
400.207	BEGINNING FUND BALANCE		456,613.54	606,557.23	680,673.00	757,990.00	757,990.00	757,990.00
Total	BEGINNING FUND BALANCE		456,613.54	606,557.23	680,673.00	757,990.00	757,990.00	757,990.00
417	INVESTMENT EARNINGS							
417.104	INTEREST EARNED		24,428.27	12,662.98	14,000.00	0.00	0.00	0.00
Total	INVESTMENT EARNINGS		24,428.27	12,662.98	14,000.00	0.00	0.00	0.00
Total	HOUSEHOLD HAZARDOUS WASTE RESOURC		481,041.81	619,220.21	694,673.00	757,990.00	757,990.00	757,990.00
Total	NON-DEPARTMENTAL RESOURCES		481,041.81	619,220.21	694,673.00	757,990.00	757,990.00	757,990.00

207 HOUSEHOLD HAZARDOUS WASTE FUND
23 PUBLIC HEALTH
7207 HOUSEHOLD HAZARDOUS WASTE

Account Number		2008 Actuals	2009 Actuals	2010 Revised Budget	2011 Proposed Budget	2011 Approved Budget	2011 Adopted Budget
411	LICENSES FEES & PERMITS						
411.148	HHW SURCHARGE	321,152.85	407,759.99	375,000.00	320,000.00	320,000.00	320,000.00
411.185	USER FEES	0.00	50.00	0.00	0.00	0.00	0.00
Total	LICENSES FEES & PERMITS	321,152.85	407,809.99	375,000.00	320,000.00	320,000.00	320,000.00
412	INTERGOV'T REV - NON SINGLE AUDIT						
Total	INTERGOV'T REV - NON SINGLE AUDIT	0.00	0.00	0.00	0.00	0.00	0.00
414	CHARGES FOR SERVICES						
414.323	SHERMAN COUNTY	4,200.00	4,200.00	4,200.00	4,200.00	4,200.00	4,200.00
Total	CHARGES FOR SERVICES	4,200.00	4,200.00	4,200.00	4,200.00	4,200.00	4,200.00
420	SALE OF FIXED ASSETS						
420.453	EQUIPMENT SOLD	0.00	8,260.00	7,000.00	17,500.00	17,500.00	17,500.00
Total	SALE OF FIXED ASSETS	0.00	8,260.00	7,000.00	17,500.00	17,500.00	17,500.00
421	MISCELLANEOUS						
421.241	MISC RECEIPTS	0.00	2,843.14	0.00	0.00	0.00	0.00
421.246	POSTAGE REIMBURSEMENT	0.00	0.00	7,000.00	7,000.00	7,000.00	7,000.00
Total	MISCELLANEOUS	0.00	2,843.14	7,000.00	7,000.00	7,000.00	7,000.00
Total	HOUSEHOLD HAZARDOUS WASTE	325,352.85	423,113.13	393,200.00	348,700.00	348,700.00	348,700.00
Total	PUBLIC HEALTH	325,352.85	423,113.13	393,200.00	348,700.00	348,700.00	348,700.00
Total	HOUSEHOLD HAZARDOUS WASTE FUND	806,394.66	1,042,333.34	1,087,873.00	1,106,690.00	1,106,690.00	1,106,690.00

CITY of THE DALLES
313 COURT STREET
THE DALLES, OREGON 97058

(541) 296-5481 ext. 1125
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AGENDA STAFF REPORT

MEETING DATE	AGENDA LOCATION	AGENDA REPORT #
September 27, 2010	Discussion Items 13, A	10-080

TO: Honorable Mayor and City Council

FROM: Dick Gassman, Senior Planner
Community Development Department

THRU: Nolan Young, City Manager

DATE: September 27, 2010

ISSUE: Discussion item to review Chenoweth Interchange Area Management Plan Overlay District for supplemental Transportation System Development Charges

RELATED CITY COUNCIL GOAL: N/A

PREVIOUS AGENDA REPORT NUMBERS: N/A

BACKGROUND: In 2005 when the City rezoned property owned by WM3 from Industrial to Commercial/Light Industrial at the corner of I-84 and River Road, the Oregon Department of Transportation (ODOT) appealed. A settlement on the appeal was entered into between ODOT, the City and WM3. That agreement called for an Interchange Area Management Plan (IAMP) to study the capability of the Chenowith Interchange to handle traffic that would be generated by future development on the lands east of I-84.
Work on the IAMP began in September 2008 and was completed with the City's adoption of the IAMP on July 12, 2010 with Ordinance 10-1306.

The IAMP provides for a separate Transportation SDC fee to help pay for some of the major capital transportation projects identified in the IAMP. To fully implement the IAMP the City will next consider adopting regulations providing for a supplemental SDC for developments in the IAMP study area. Only transportation SDC fees are involved. The attached Figure A is a map of the area, and shows the study area.

PROCESS: This is a discussion item. Discussion items are generally informal in nature and give the staff an opportunity to present issues to the Council and seek guidance prior to a more formal process. Whether the Council opens the session to the public is up to the Council. A public hearing to consider adoption of the SDC fees will be held at a later date, if the Council gives direction to staff to proceed.

NOTIFICATION: No individual notices have been sent for this work session.

ISSUES:

1. Regulations for an Overlay District in the study area.
2. Which projects are included in the IAMP and the costs of those projects.
3. Cost sharing between ODOT, City of The Dalles, SDC fees, and property owners.
4. Amount of SDC fees.
5. Temporary reductions in existing SDC fees.
6. Need for intensive use of the study area.

DISCUSSION:

1. Regulations for an Overlay District in the study area.

Attached is a copy of a Memorandum with code amendments from the Angelo Planning Group dated November 16, 2009 setting out the background and proposed language to implement a new overlay district in the study area. If the Council proceeds with establishing supplemental SDC fees for the projects in the study area, the City will need to adopt code language similar to that proposed.

2. Which projects are included in the IAMP and the costs of those projects.

Attached are Tables 7-1 and 7-2 of the IAMP showing which projects are included as projected needed enhancements for the area.

3. Cost sharing between ODOT, City of The Dalles, SDC fees, and property owners.

Each of the identified projects has been assigned an estimated cost for the purpose of determining the SDC fee. The total cost of all the projects is $40,827,784. One scenario of the cost division between the City, ODOT, SDC fees and property owners is attached. In the scenario attached, a total of $15,976,732 has been allocated to be paid out of SDC fees. The amount of the SDC fee will be determined in part by how much of these improvement costs are assigned to the SDC category. Council will eventually need to determine how much of the total overall costs should be put into the SDC category.

4. Cost of SDC fees.

The cost of SDC fees is based on a mathematical calculation of the projected costs of the projects to be paid by the SDC fees, divided by the number of trips that can be generated within the system, as enhanced with the list of area improvements. The more projects that are proposed to be paid by SDC fees, the higher the resultant fee. If projects are taken out of the SDC category, the fee will be lower. However, if projects are removed from the SDC category, some other source of revenue will need to be identified.

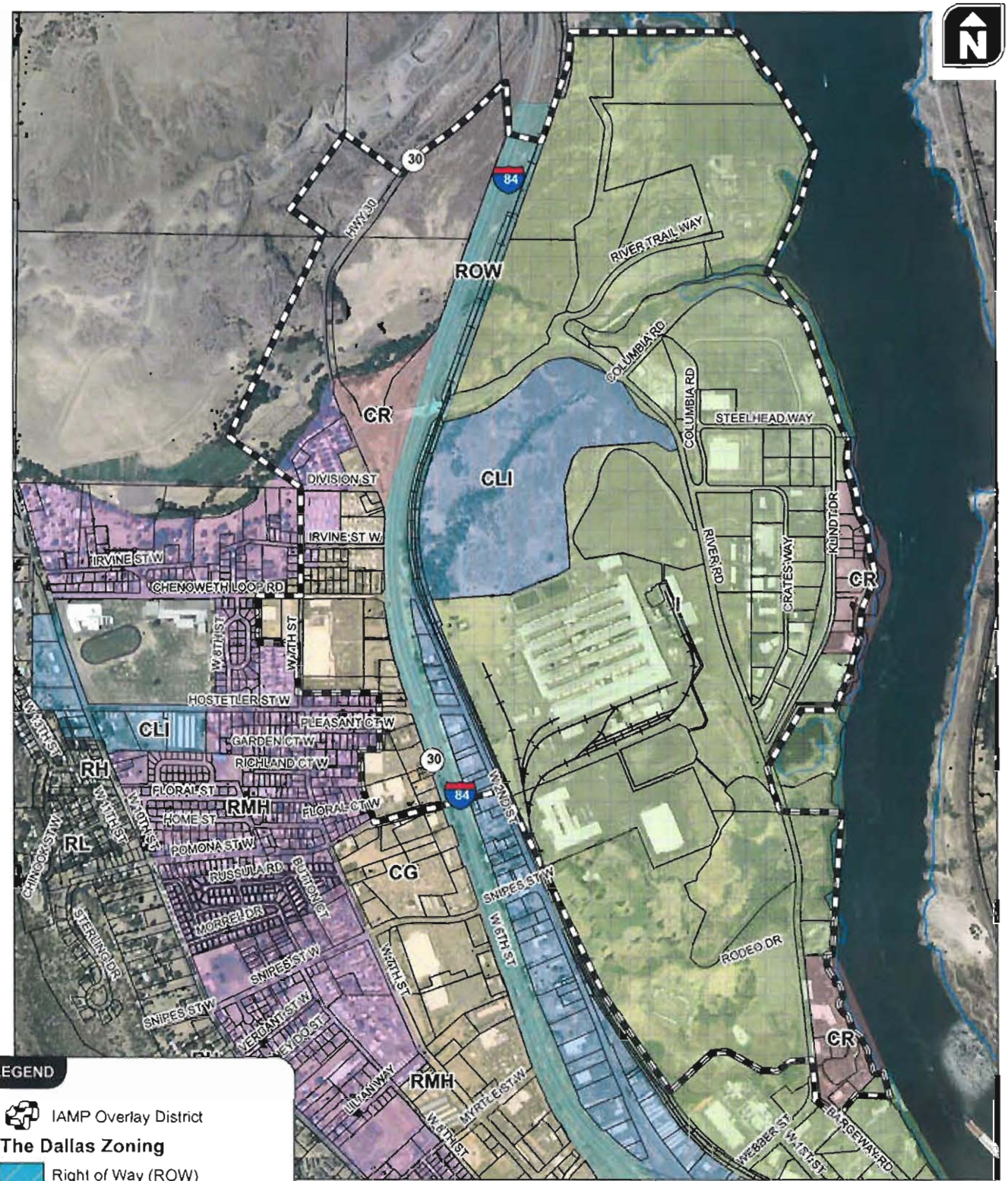
5. Temporary provisions for existing SDC fees.

The City has adopted Resolution 10-1305 which temporarily reduces certain of the existing SDC fees. It should be clarified whether this reduction would also apply to transportation SDC fees for development in the IAMP study area.

6. Need for intensive use of the study area.

The study area includes most of the available industrial and commercial zoned property in the City. It is essential that the City maximize the use of this land as this land is not easily supplemented. In order to develop this area to its full potential it may be necessary to add a third entrance to the site. The IAMP has identified the Hostetler undercrossing as the preferred option. There is no known source of funds to pay for this project other than the SDC fees that are generated within the study area and set aside for these projects.

CONCLUSION: At the end of the discussion, staff will ask the Council for guidance on the issues raised above and on the overall issue of proceeding with a public hearing. Time may be critical because if the Council defers the adoption of the supplemental SDC fees, we may lose significant revenue.



LEGEND

IAMP Overlay District

The Dallas Zoning

- Right of Way (ROW)
- General Commercial (CG)
- Commercial/Light Industrial (CLI)
- Recreational Commercial (CR)
- Industrial (I)
- Mobile Home Residential (RMH)

CHENOWETH INTERCHANGE AREA
THE DALLES, OREGON

FIGURE A

Kittelson & Associates, Inc.
transportation engineering / planning

H:\proffile\19600 - I-84 Chenoweth IAMP\GIS_Report\Exhibit A-OverlayDistrict.mxd

Angelo planning group

LAND USE PLANNING · TRANSPORTATION PLANNING · PROJECT MANAGEMENT

Memorandum

Date: **November 16, 2009**

To: Marc Butorac, PE, PTOE, Kittelson & Associates, Inc.
Susan Wright, PE, Kittelson & Associates, Inc.
Casey Bergh, Kittelson & Associates, Inc.

From: Darci Rudzinski, AICP
DJ Heffernan

Re: I-84/Chenoweth Interchange Area Management Plan – Proposed IAMP Overlay District Code Amendments

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Overview

This memorandum contains proposed regulatory language that, once adopted, will be relied upon to implement the I-84/Chenoweth IAMP. Proposed language is being provided in conformance with OAR 734-051-0155(2), which states that "prior to adoption by the Oregon Transportation Commission, the Department will work with local governments on any amendments to local comprehensive plans and transportation system plans and local land use and subdivision codes to ensure the proposed... Interchange Area Management Plan is consistent with the local plan and codes."

Adopting new code language will require that the city amend the adopted Comprehensive Plan and Land Use map and establish an IAMP Overlay District consistent with the IAMP "Land Use Study Area," as shown in Figure 1-1, through a legislative amendment process.

City of The Dalles Land Use and Development Ordinance – Proposed Code Language

The action of adopting the IAMP requires a Transportation Planning Rule (TPR) compliance review. The TPR requires that local governments adopt land use regulations consistent with state and federal requirements "to protect transportation facilities, corridors, and sites for their identified functions (OAR 660-012-0045(2))." To ensure that local land use actions are consistent with the transportation facility planning within the IAMP, the recommendation is that the City adopt a new Overlay Zone section in the Land Use and Development Ordinance (LUDO or "Development Code").

The City requires Site Plan Review, an Administrative Action pursuant to Section 3.020.040, for all uses allowed in General Commercial, Commercial/Light Industrial, and Industrial zone districts.

Proposed code language ties IAMP-related access management requirements to Site Plan Review.[1] Access management review would also occur when a change in use is proposed, as defined by the existing LUDO.

Existing standards for traffic impact studies are established in Section 10.060 (Street Requirements), which requires traffic studies for all proposed development of 16 dwelling units or more, all development projected to generate more than 400 average daily vehicle trips, or potentially for development near an intersection that is already operating at or below level of service "D." To ensure consistency with the assumptions of the IAMP, proposed code language requires a Transportation Assessment Report for development within the Overlay District. Proposals that include a zone change and/or comprehensive plan amendment that results in an increase in trips as compared to the Trip Allocation Budget, or exceed the Trip Allocation Budget by 25 percent, or increase the number of allocated trips by 25 weekday p.m. peak hour trips or more, would be required to submit a Traffic Impact Analysis pursuant to this new chapter.

The recommended language also addresses TPR Section -0060, which requires that amendments to functional plans, acknowledged comprehensive plans, and land use regulations that significantly affect an existing or planned transportation facility ensure that the allowed land uses are consistent with the identified function, capacity, and performance standards of the facility.

To reflect the joint effort required in planning for the interchange area, adopting the attached language will codify how the City will coordinate with ODOT in reviewing land use and development applications in the Overlay District and when updates to the IAMP will occur.

[1] The City's access spacing standards defer to the Oregon Highway Plan standards for state facilities (Section 6.050.C, "ODOT access classification systems and standards shall apply to all roadways on the ODOT State Highway System").

Section 5.130
CIOD - CHENOWETH INTERCHANGE OVERLAY DISTRICT

5.130.010 Purpose

The purpose of the CIOD – Chenoweth Interchange Overlay District is the long-range preservation of operational efficiency and safety of the I-84/Chenoweth Interchange. The I-84/Chenoweth Interchange is the principal access to the Port of The Dalles and industrial land in the western part of the city, an area located directly east of the interchange. In addition to this primary function, the Chenoweth Interchange is an important facility for accessing the Discovery Center and existing commercial lands in the vicinity of the city's industrial center. The interchange also serves local residential and commercial traffic circulating from I-84 to Highway 30 and West 6th Street.

5.130.010 Boundary of the CIOD

The boundary of the CIOD is shown on The Dalles Comprehensive Land Use Plan Map and Zoning Map.

5.130.020 Applicability

The provisions of this section shall apply to any Administrative, Quasi-judicial, or Legislative land use application pursuant to Section 3.020 that is for a parcel wholly or partially within the CIOD, as defined by Section 5.130.010. Any conflict between the standards of the CIOD and those contained within other chapters of the Land Use and Development Ordinance shall be resolved in favor of the CIOD.

5.130.030 Permitted Land Uses

Uses allowed in the underlying zoning district are allowed subject to other applicable provisions in the Development Ordinance and Chapter 5, Zone District Regulations.

5.130.040 Access Management

In addition to the standards and requirements of the Access Management section of this ordinance (Section 6.050), parcels wholly or partially within the CIOD are governed by the Access Management Plan in the I-84/Chenoweth Interchange Area Management Plan (IAMP). The following applies to land use and development applications for parcels within the IAMP Overlay District that are subject to Section 3.030 Site Plan Review or Section 6.150 Changes to Uses and Structures.

A. Access Approval

1. Access to local streets within the CIOD shall be subject to joint review by the City and the Oregon Department of Transportation (ODOT) and, where applicable by Wasco County. Coordination of this review will occur pursuant to Section 5.130.070.

2. Approval of an access permit is an Administrative Action and is based on the standards contained in this Chapter, the provisions of Section 6.050 Access Management, and the Access Management Plan in the I-84/Chenoweth IAMP. Where the recommendations of the

Access Management Plan conflict with other access and spacing requirements in Section 6,050 of the LUDO, the Access Management Plan shall govern.

5.130.050 Trip Allocations

The I-84 Chenoweth IAMP transportation methodology assumed the trip generation potential for each developable and re-developable parcel within the CIOD based on existing zoning. Based on the potential total trips for all parcels, the IAMP designed a package of programmed improvements necessary to support the assumed level of future development. The trip allocation for each parcel is shown in the I-84 Chenoweth IAMP Volume 1 Appendix C..

A. Development or redevelopment of parcels within the IAMP Overlay District will be assessed a Supplemental Transportation System Development Charge (STSDC) that will be dedicated to transportation improvements in the vicinity of the I-84 Chenoweth Interchange, as identified in the adopted I-84/Chenoweth IAMP.

B. The STSDC will be based on weekday p.m. peak hour trips generated by a proposed development and calculated pursuant to 5.130.070.

C. Development that does not exceed the trip allocation identified for the parcel in Volume 1 Appendix "C" of the I-84/Chenoweth IAMP will be charged a STSDC based on the threshold rate, as established in the STSDC Ordinance (City Ordinance No. XX).

D. Each trip generated by a proposed development that exceeds the trip allocation identified for the parcel in Volume 1 Appendix "C" of the I-84/Chenoweth IAMP will be charged at a higher surcharge rate, as established in the STSDC Ordinance (City Ordinance No. XX), in order to offset the cost of improvements required to build-out the CIOD.

5.130.060 Expiration of Vehicle Trips

The following rules apply to allocation of vehicle trips pursuant to the I-84 Chenoweth IAMP against the adopted Trip Generation Potential.

A. Vehicle trip allocations granted through development approval are approved at the time of Site Plan Review.

B. Vehicle trips shall not be allocated based solely on approval of a comprehensive plan amendment or zone change, unless consolidated with a subdivision or planned development application.

C. Approved vehicle trip allocations shall expire at the same time as the development decision expires, in accordance with Site Plan Review procedures (Section 3.030.070, Time Limits and Extensions).

5.130.070 Administration

This section delineates the responsibilities of the City and ODOT to monitor and evaluate vehicle trip generation on the Chenoweth Interchange in The Dalles from development approval under this section.

A. Transportation Assessment Report

For all development applications located within the CIOD, the applicant shall prepare and submit to the City a Transportation Assessment Report that documents the following:

a) Expected weekday p.m. peak hour trip generation.
b) Whether or not the expected weekday p.m. peak hour generation is equal to or less than the trip allocation for each parcel documented (Volume 1 Appendix "C" of the I-84 Chenoweth IAMP).
c) The STSDC calculation for the proposed development.
d) The SDC Discount Level being requested and documents what actions/activities will be included to achieve such discount.
e) If applicable, recalculates the weekday p.m. peak hour trip generation and STSDC based on the requested SDC Discount Option.
f) Off-site improvements that will be constructed as part of the development and which improvements are STSDC creditable.
g) Proposed site-access driveways and streets to ensure compliance with the IAMP Access Management Plan and that adequate intersection sight distance and traffic control will be provided.
h) An on-site parking and circulation plan to ensure safe and efficient travel for all modes of travel, including turn movement templates (AutoTurn analysis) for anticipated trucks and emergency service vehicles.

B. Traffic Impact Analysis

For all development applications located with the CIOD that exceed the trip allocation threshold by 25 percent, or increase the number of allocated trips by 25 weekday p.m. peak hour trips or more, the applicant shall prepare and submit to the City a Traffic Impact Analysis (TIA) that demonstrates the level of impact of the proposed development on the surrounding street system and the I-84/Chenoweth interchange.

For all applications for a zone change and/or comprehensive plan amendment located with the CIOD that result in an increase in trips as compared to the Trip Allocation Budget, the applicant shall prepare and submit to the City a Traffic Impact Analysis (TIA) that demonstrates the level of impact of the proposed change on the surrounding street system and the I-84/Chenoweth interchange.

The determination of impact or effect, and the scope of the TIA, shall be coordinated with the provider of the affected transportation facility. The developer or applicant shall be required to mitigate impacts attributable to the project, including any impacts that may occur outside of the CIOD.

C. Agency Coordination

1. The City shall not deem the land use application complete unless it includes a Transportation Assessment Report or, if required by Section 5.130.070.B, a Traffic Impact Study prepared in accordance with the requirements of this Chapter.

2. The City shall provide written notification to ODOT when the application is deemed complete. This notice shall include an invitation to ODOT and Wasco County to participate in the City's site team review meeting, pursuant to 3.010.035 Pre-Application Requirements.

3. ODOT shall have at least 20 days, measured from the date completion notice was mailed, to provide written comments to the City. If ODOT does not provide written comments during this 20-day period, the City staff report will be issued without consideration of ODOT comments.

D. Monitoring Responsibilities

The details of City monitoring responsibilities will be found in the Chenoweth Area Supplemental Transportation SDC (STSDC) Ordinance (City Ordinance No. XX) and the approved I-84 Chenoweth IAMP City of The Dalles – Oregon Department of Transportation Inter-Governmental Agreement (IGA).

1. The City shall be responsible for maintaining a current ledger documenting the cumulative peak hour trip generation impact from development approved under Section 5.130, compared to the adopted Trip Allocation of each parcel in the district and the trip allocation total for the entire district.

2. The City may adjust the ledger based on actual development and employment data during an IAMP review and update, which shall occur according to Subsection 5.130.090.

3. The City will develop an Annual IAMP Report that certifies the balance of trips (used and unused) in the IAMP area, recommends index adjustments to the STSDC rates for the coming year, and reviews program management issues. The City will provide the Annual IAMP Report to ODOT and Wasco County to allow for coordination of management issues, such as updating the monitoring process and the timing for the next IAMP update.

5.130.080 Comprehensive Plan and Zoning Map and Text Amendments

This section applies to all Comprehensive Plan Map and Zoning Map amendments for parcels wholly or partially within the CIOD and code amendments that affect development within the CIOD.

A. Transportation Planning Rule Requirements. Applications for Comprehensive Plan amendments, Zoning Map amendments, or development regulation amendments shall determine whether the proposed change will significantly affect a collector or arterial transportation facility and must meet the requirements of Oregon Administrative Rule (OAR) 660-012-0060.

B. Limitations on Comprehensive Plan and Zoning Map and Text Amendments. To ensure that the capacity of the I-84/ Chenoweth Interchange is reserved for industrial employment opportunities, consistent with the principal function of the facility, this section imposes prohibitions on Comprehensive Plan Land Use Plan Map and Zoning Map amendments within the IAMP Overlay

District and on code amendments that affect development within the CIOD. The following actions are prohibited unless such actions are part of a legislative update of the IAMP, pursuant to the provisions of the IAMP and Subsections 5.130.090:

1. Comprehensive Plan Land Use Plan Map amendments that will increase the amount commercial zoning within the CIOD.
2. Comprehensive Plan Land Use Plan Map amendments that allow land uses that will generate traffic in excess of the adopted trip generation total for the district as adopted in the IAMP.

5.130.090 Interchange Area Management Plan Review and Update

A. IAMP Review Triggers. In order to ensure that the interchange function and capacity is preserved and that the Supplemental Transportation System Development Charge (STSDC) program is generating sufficient revenue to finance necessary improvements the City, in coordination with ODOT and Wasco County, shall undertake a formal IAMP review when the following occurs:

1. Five years has elapsed since the date of IAMP adoption or since the last update occurred.
2. The City has approved development proposals that have resulted in a cumulative addition of 250,000 sq. ft. of floor area within IAMP Overlay District since the date of IAMP adoption or since the last update occurred.
3. Land use applications approved within the CIOD result in cumulative trip generation estimates that, taken together, exceed by more than 200 trips the trip generation total for the subject parcels.
4. Comprehensive Land Use Plan Map or Zoning Map amendments that have a "significant affect" per the Transportation Planning Rule and are proposed for land within the IAMP Overlay District or significantly affect the I-84/Chenoweth interchange.
5. Mobility measures at the River Road/I-84 Ramp Terminal intersections or River Road/West 6th Street/US 30 intersection exceed the forecasted mobility measures presented in Section 7 of the IAMP.

B. IAMP Updates.

1. If the findings and conclusions from an IAMP review demonstrate the need for an update to the plan, review participants will initiate an IAMP update process pursuant to the provisions of the IAMP.
2. An updated IAMP that results from a City-initiated review process pursuant to Section 5.130.090, or from a Comprehensive Plan Land Use Plan Map amendment pursuant to Section 5.130.080, shall be legislatively adopted, requiring a City Council public hearing, as an amendment to the City of The Dalles Transportation System Plan and will be adopted by the OTC as an update to the Oregon Highway Plan.

TABLE 7-1 IAMP TRANSPORTATION IMPROVEMENTS

Reference	Improvement Type	Description
E1	New Collector Roadway	Extend River Trail Way from River Road to the Hostetler Street Extension
E2B	UP Railroad At-Grade Crossing and Signal (Short-term)	Provides Hostetler Street connection to River Road and intersection control to accommodate traffic at Hostetler Street and 2nd Street (requires approval by ODOT Rail and UPRR)
E3	New Collector Roadway	Extends Hostetler Street from West 2nd Street to River Road
E4	New Local Roadway (Long-term)	Provides local business access
E4B	New Local Roadway (Short-term)	Provides temporary local business access until environmental concerns can be mitigated and project E4 can be constructed.
E5	New Local Roadway	Provides local business access
E6	New Local Roadway	Provides local business access. Alignment is variable depending on parcel access and circulation.
E9	Intersection Improvement (Roundabout)	Intersection control to accommodate future traffic at Hostetler Street/River Trail Way Extension
E10	Intersection Improvement (Roundabout)	Intersection control to accommodate future traffic at reconstructed River Trail Way/River Road
E11	Intersection Improvement (Signals)	Intersection control to accommodate future traffic at River Road/Crates Way (North)/Columbia Road
E12	Intersection Improvement (Roundabout or Signal)	Intersection control to accommodate traffic at future connection of River Road and Hostetler Street
E13	Intersection Improvement (Signal)	Intersection control to accommodate future traffic at River Road/Klindt Drive
I1	Restripe Bridge Lanes (Short-term)	Restripe lanes on bridge to accommodate four lanes (two in each direction, including side-by-side left-turn lanes)
I2	Signalize Intersection	Accommodate weekday a.m. and p.m. peak hour travel demand at Westbound I-84 Ramp Terminal
I3	Signalize Intersection	Accommodate weekday a.m. and p.m. peak hour travel demand at Eastbound I-84 Ramp Terminal
I4	Widen Bridge to 6 Lanes (Long-term)	Accommodate weekday peak hour travel demand beyond the 85-percent development threshold (NOT PART OF 20-YEAR PLAN)
N1	New Local Roadways	Provide a network of local streets
N2	ROW Preservation	Preserve ROW for a potential future overpass of I-84
N3	ROW Preservation	Preserve ROW for a potential future overpass of I-84
W2	Intersection Improvement (Roundabout or Signal)	Intersection control at West 6th Street (US 30)/River Road to accommodate future traffic and provide for u-turns created by the median
W3	Intersection Improvement (Roundabout or Signal)	Intersection control at West 6th Street/Chenoweth Loop to accommodate future traffic and provide for u-turns created by the median
W4	Intersection Improvement (Signal)	Intersection control at West 6th Street/Hostetler Street to accommodate future traffic
W5	Widen West 6th Street to 5 Lanes	Widen West 6th Street from River Road to south of Hostetler Street to accommodate weekday a.m. and p.m. peak hour travel demand
W6	Relocate Driveway/ New Local Roadway	Relocate driveway further from interchange and River Road/West 6th Street intersection to meet access spacing standards
W7	New Local Roadway	Provides local connection between Division Street and Irvine Street

Reference	Improvement Type	Description
W8	New Local Roadway	Provides paved local connection between 6th Street and 7th Street
W9	Cul-de-sac	Supports consolidation of accesses on West 6th Street.

The proposed intersection configurations and roadway cross-sections in this IAMP were developed to serve a maximum amount of new development without requiring a greater cross-section on River Road over I-84 (at the Chenoweth Interchange) or on Hostetler Street under I-84 (at the preferred east-west crossing).

Although still a part of the IAMP, several projects were identified for special consideration at the time that the first IAMP review is triggered. These projects are listed in Table 7-2 and noted in Figure 7-1. Each of these projects are long-term needs and although each project provides benefits to the study area as a whole, they have the potential to negatively impact adjacent property and business owners and therefore, should be reconsidered based on updated forecasts during the first IAMP review.

TABLE 7-2 IAMP TRANSPORTATION IMPROVEMENT PROJECTS TO BE REVIEWED AT FIRST IAMP REVIEW TRIGGER

Reference	Improvement Type	Description
E2	UP Railroad Under-Crossing and Signal (Long-term)	Provides grade-separated Hostetler Street connection to River Road under the UPRR and intersection control to accommodate future traffic at Hostetler Street and 2nd Street
W1	Install median	Install median on 6th Street from River Road to Hostetler Street that limits all turning movements, except northbound left turns to Division Street and Irvine Street.

As shown in Table 7-2, two projects were selected to be reconsidered for implementation within the IAMP study area. These projects may be implemented if operational or safety conditions warrant further measures.

The following sections provide details on the major improvements identified in the Transportation Improvement Plan.

Hostetler Crossing Improvements

Short-term and long-term improvements have been evaluated for providing a crossing of the UPRR at Hostetler Street. The short-term improvement includes an at-grade crossing of the UPRR and the long-term improvement includes a grade-separated crossing. Each improvement is outlined below. The Hostetler Crossing (either grade-separated or at-grade) is expected to be needed in Phase 3, but ultimately will depends on concurrency of local development within the IMSA.

At-Grade Crossing Alternative

The existing UPRR mainline track maintains a private at-grade crossing at the 2nd Street/Hostetler Street intersection that serves the now vacant 67-acre Northwest Aluminum property. Technical Advisory Committee (TAC) and Steering Committee (SC) members provided direction at the

	City	ODOT	Private	SDC
Total Proportion from Funding Source	**12%**	**12%**	**36%**	**38%**
			SDC/Trip	$3,254

ID	Improvement Type	Description	Proportional Share	%	ROW Included	ROW Cost	Total Funding Responsibility (including ROW, if applicable) City	ODOT	Private	SDC	Grand Total
E1	New Collector Roadway	Extend River Trail Way from 2nd Street to the Hostetler Street Extension	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	100%	No	$4,216,800			$5,064,611		$5,064,611
			SDC	0%						$0	$0
E2	UP Railroad Under-Crossing	Provides Hostetler Street connection to River Road	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	100%	Yes	$154,000				$11,738,335	$11,738,335
E3A	New Collector Roadway	Extends Hostetler Street from 2nd Street to River Road	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	100%	No	$1,363,600			$1,804,723		$1,804,723
			SDC	0%						$0	$0
E3B	New Collector Roadway ROW	Obtain ROW for extension of Hostetler Street from 2nd Street to River Road	City	100%	Yes	$1,363,600	$1,363,600				$1,363,600
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	0%						$0	$0
E4	New Local Roadway (Long-term)	Provides local business access	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	100%	No	$1,307,600			$1,807,943		$1,807,943
			SDC	0%						$0	$0
E4B	New Local Roadway (Short-term)	Provides local business access until environmental concerns can be mitigated and project E4 can be constructed	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	100%	No	$1,084,000			$1,530,635		$1,530,635
			SDC	0%						$0	$0
E5	New Local Roadway	Provides local business access	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	100%	No	$1,143,800			$1,530,635		$1,530,635
			SDC	0%						$0	$0
E6	New Local Roadway	Provides local business access (variable alignment)	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	100%	No	$1,082,200			$1,530,635		$1,530,635
			SDC	0%						$0	$0
E9	Intersection Improvement (Roundabout)	Intersection control to accommodate future traffic at Hostetler Street/River Trail Way Extension	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	100%	No	$350,000				$676,500	$676,500
E10	Intersection Improvement (Roundabout)	Intersection control to accommodate future traffic at reconstructed River Trail Way/River Road	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	100%	No	$133,000				$1,230,000	$1,230,000
E11	Intersection Improvement (Signal)	Intersection control to accommodate future traffic at River Road/Crates Way (North)	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	100%	No	$0				$300,000	$300,000
E12	Intersection Improvement (Roundabout)	Intersection control to accommodate future traffic at future connection of River Road and Hostetler Street	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	100%	No	$70,000				$676,500	$676,500
E13	Intersection Improvement (Roundabout)	Intersection control to accommodate future traffic at River Road/Klindt Drive	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	100%	No	$70,000				$676,500	$676,500

ID	Improvement Type	Description	Proportional Share	%	ROW Included	ROW Cost	City	ODOT	Private	SDC	Grand Total
I2	Signalize Intersection	Accommodate weekday a.m. and p.m. peak hour travel demand at Westbound I-84 Ramp Terminal	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	100%	No	$0				$332,406	$332,406
I3	Signalize Intersection	Accommodate weekday a.m. and p.m. peak hour travel demand at Eastbound I-84 Ramp Terminal	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	100%	No	$0				$346,491	$346,491
W1	Construct Median on 6th Street	Widen 6th Street to 5 Lanes and Install Median (River Road to Chenoweth Loop)	City	0%			$0				$0
			ODOT	100%	Yes	$0		$300,000			$300,000
			Private	0%					$0		$0
			SDC	0%						$0	$0
W2	Intersection Improvement (Roundabout)	Intersection control at 6th Street (US 30)/River Road to accommodate future traffic and provide for u-turns created by the median	City	30%	Yes	$10,500	$287,250				$287,250
			ODOT	70%	Yes	$24,500		$670,250			$670,250
			Private	0%					$0		$0
			SDC	0%						$0	$0
W3	Intersection Improvement (Roundabout)	Intersection control at 6th Street/ Chenoweth Loop to accommodate future traffic and provide for u-turns created by the median	City	30%	Yes	$160,650	$402,960				$402,960
			ODOT	70%	Yes	$375,340		$1,150,240			$1,150,240
			Private	0%					$0		$0
			SDC	0%						$0	$0
W4	Intersection Improvement (Signal)	Intersection control at 6th Street/October Street to accommodate future traffic	City	100%	Yes	$0	$392,406				$392,406
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	0%						$0	$0
W5A	Widen West 6th Street to 5 Lanes (Segment 1)	Widen 6th Street to 5 Lanes from River Road through Chenoweth Loop	City	25%	Yes	$126,140	$971,164				$971,164
			ODOT	75%	Yes	$378,420		$2,913,491			$2,913,491
			Private	0%					$0		$0
			SDC	0%						$0	$0
W5B	Widen West 6th Street to 5 Lanes (Segment 2)	Widen 6th Street to 5 Lanes from Chenoweth Loop through Hostetler Street Intersection	City	100%	No	$0	$1,572,425				$1,572,425
			ODOT	0%				$0			$0
			Private	0%					$0		$0
			SDC	0%						$0	$0
W7	New Local Roadway	Provides local connection between Division Street and Irvine Street	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	100%	No	$1,050,000			$918,381		$918,381
			SDC	0%						$0	$0
W8	New Local Roadway	Provides paved local connection between 6th Street and 7th Street	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	100%	No	$0			$508,707		$508,707
			SDC	0%						$0	$0
W9	Cul-de-Sac	Closes and effectively consolidates access to 6th Street at Division Street or Irvine Street	City	0%			$0				$0
			ODOT	0%				$0			$0
			Private	100%	No	$0			$100,000		$100,000
			SDC	0%						$0	$0
Grand Total							$5,019,805	$5,033,981	$14,787,266	$15,076,732	$40,827,784