## **REDICK Daniel**

From:	Bromann, Bill
Sent:	Monday, October 17, 2022 8:10 PM
То:	Joel Geier; Sam Imperati
Cc:	WYSE Nancy; MALONE Patrick; AUGEROT Xanthippe; Duvall, Kathryn; maryparmigian ewpiterate john deuel; christopher mcmorran; ryanm; louisa; Brian.FULLER@deq.oregon.gov; Marge Popp; N Whitcombe; Liz Irish; Knocke, Russ; Rough, Ginger; Edmonds, Shawn; REDICK Daniel; MCGUIRE Sean; BMay@co.marion.or.us; bmay; Benton County Talks Trash; Jackson, Julie; crgilbert; Paul Nietfeld; Catherine Biscoe; ssanderson@co.linn.or.us; Macnab, Ian; Mark Yeager; Condit, Jeffrey G.; KERBY Joseph; NICHOLS Darren; CRONEY Vance M; VERRET Greg J; WILLIAMS Inga; GROGAN Cory; Amelia Webb
Subject:	RE: Tomorrow's BCTT Update to Commissioners

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Just for the group, Bill Bromann is correct.

Thank you

**William Bromann P.E.** Area Environmental Manager Northwest

## 8343 154th Ave NE Ste 110

Redmond, WA 98052

e 425-646-2547 c 541-230-0721 w RepublicServices.com



## Sustainability in Action

From: Joel Geier			
Sent: Monday, October 17, 2	022 6:49 PM		
To: Sam Imperati <samimpe< td=""><td></td><td></td><td></td></samimpe<>			
Cc: nancy wyse <nancy.wyse< td=""><td>@Co.Benton.OR.US&gt;; pat r</td><td>malone <pat.malone@< td=""><td>Co.Benton.OR.US&gt;; xanthippe augerot</td></pat.malone@<></td></nancy.wyse<>	@Co.Benton.OR.US>; pat r	malone <pat.malone@< td=""><td>Co.Benton.OR.US&gt;; xanthippe augerot</td></pat.malone@<>	Co.Benton.OR.US>; xanthippe augerot
<xanthippe.augerot@co.be< td=""><td>nton.OR.US&gt;; Kathryn Duva</td><td>all <kathryn.duvall@co< td=""><td>orvallisoregon.gov&gt;; maryparmigian</td></kathryn.duvall@co<></td></xanthippe.augerot@co.be<>	nton.OR.US>; Kathryn Duva	all <kathryn.duvall@co< td=""><td>orvallisoregon.gov&gt;; maryparmigian</td></kathryn.duvall@co<>	orvallisoregon.gov>; maryparmigian
	ewpitera25	јо	hn deuel <john.deuel@oregonstate.edu>;</john.deuel@oregonstate.edu>
christopher mcmorran		ryanm <	louisa
Brian.FL	JLLER@deq.oregon.gov; Ma	arge Popp <	N Whitcombe
	Liz Irish	Knocke, Russ	Rough,
Ginger	Edmonds, Sha	awn	REDICK Daniel
<daniel.redick@co.benton.c< td=""><td>R.US&gt;; Sean.McGuire@co.</td><td>.benton.or.us; BMay@</td><td>co.marion.or.us; bmay</td></daniel.redick@co.benton.c<>	R.US>; Sean.McGuire@co.	.benton.or.us; BMay@	co.marion.or.us; bmay
change (Can Line on way Dant	an Cauntu TallyaTraah (Dant	an County TollysTreach	Co Douton OD LICS - Indunon Julia

<bmay@co.linn.or.us>; BentonCountyTalksTrash <BentonCountyTalksTrash@Co.Benton.OR.US>; Jackson, Julie

	crgilbert	Paul Nietf	feld	Catherine
Biscoe	ssanderson@co.	linn.or.us; Macnab, Ian		
Bromann, Bill	Ma	rk Yeager	Condit, Jeffrey G.	
	KERBY Joseph <joseph.i< td=""><td><pre>Kerby@Co.Benton.OR.US&gt;</pre></td><td>; Darren Nichols</td><td></td></joseph.i<>	<pre>Kerby@Co.Benton.OR.US&gt;</pre>	; Darren Nichols	
<pre><darren.nichols@co.benton.or< pre=""></darren.nichols@co.benton.or<></pre>	.US>; CRONEY <vance.n< td=""><td>I.CRONEY@Co.Benton.OR</td><td>.US&gt;; VERRET</td><td></td></vance.n<>	I.CRONEY@Co.Benton.OR	.US>; VERRET	
<greg.j.verret@co.benton.or.u< td=""><td>us&gt;; Inga Williams <inga< td=""><td>.Williams@Co.Benton.OR.</td><td>US&gt;; GROGAN Cory</td><td></td></inga<></td></greg.j.verret@co.benton.or.u<>	us>; Inga Williams <inga< td=""><td>.Williams@Co.Benton.OR.</td><td>US&gt;; GROGAN Cory</td><td></td></inga<>	.Williams@Co.Benton.OR.	US>; GROGAN Cory	
<cory.grogan@co.benton.or.u< td=""><td>S&gt;; Amelia Webb</td><td></td><td></td><td></td></cory.grogan@co.benton.or.u<>	S>; Amelia Webb			
Subject: Re: Tomorrow's BCTT U	Jpdate to Commissioner	S		

This Message Is From an External Sender

**Report Suspicious** 

This message came from outside your organization.

Hi Sam,

Thanks for sharing this communication with the "Trash Talk" work group.

Aiming for March 2023 rather than December 2022 to wrap this up seems like a much more reasonable timeline, considering the multitude of very complex issues that this group is trying to address.

One question, should "Bill Bromann" listed on your roster of subcommittee members perhaps be "Bill Brumund"? I have some acquaintance with the latter fellow, from early in my career as a consultant with Golder Associates Inc. Bill Brumond does have very relevant experience for landfills, as he was our main corporate contact with Waste Management Inc., working out of our Atlanta office.

Thanks, Joel

From: "Sam Imperati" <<u>samimperati@icmresolutions.com</u>> To: "nancy wyse" <<u>nancy.wyse@Co.Benton.OR.US</u>>, "pat malone" <<u>Pat.Malone@Co.Benton.OR.US</u>>, "xanthippe augerot" <<u>Xanthippe.Augerot@Co.Benton.OR.US</u>>

"KERBY Joseph" <<u>Joseph.Kerby@Co.Benton.OR.US</u>>, "Darren Nichols" <<u>darren.nichols@Co.Benton.OR.US</u>>, "CRONEY" <<u>Vance.M.CRONEY@Co.Benton.OR.US</u>>, "VERRET" <<u>Greg.J.VERRET@co.benton.or.us</u>>, "Inga Williams" <<u>Inga.Williams@Co.Benton.OR.US</u>>, "REDICK Daniel" <<u>daniel.redick@Co.Benton.OR.US</u>>, "GROGAN Cory" <<u>cory.grogan@Co.Benton.OR.US</u>>, "Amelia Webb" <<u>AmeliaWebb@icmresolutions.com</u>>

#### Sent: Monday, October 17, 2022 5:25:20 PM Subject: Tomorrow's BCTT Update to Commissioners

Commissioners,

Darren and I will introduce this draft document tomorrow during the BCTT update portion of your meeting.

It proposes an option for an updated workplan and timeline for moving forward.

Thanks, Sam



resolutions Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901

(P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

# Workgroup and Subcommittee Meeting Schedule

Subcommittee Meetings 10/19 through 10/25	10/27/22 Meeting Four Major Topics	Subcommittee Meetings 10/31 through 11/9	11/17/22 Meeting Five and Open House Major Topics	Subcommittee Meetings 11/21 through 12/7	12/15/22 Meeting Six Major Topics
Staff organizes existing documents by subcommittee One, 1.5-hour Subcommittee Kickoff Meeting Specific Dates Pending Doodle Poll Results	<ol> <li>Four Subcommittee Reports</li> <li>SMMP Goals: Vision 2040</li> <li>Local Jurisdictions Discuss Charge C. SMMP and Charge E. Public Education Campaign</li> </ol>		<ol> <li>Four Subcommittee Reports</li> <li>Introduce Charge D and Create Subcommittee:         <ul> <li>a) Scope tasks to Plan Hauling Reopener</li> <li>b) SWAC/DSAC Role Clarity and PC/BOC Criteria Use</li> <li>c) Code Change Timeline</li> </ul> </li> <li>Introduce Charge E and Create Subcommittee: Public-Facing Document and Community Education Campaign</li> <li>Open House – Process Status, Future SMMP, and Public Ed/Notification</li> </ol>		<ol> <li>Review Work, Authorize Draft, and Request Feedback</li> </ol>
Staff Draft Report 12/19 through 1/4	Subcommittee Meetings 1/5 through 11/11	1/19/22 Meeting Seven Major Topics	Final Report Subcommittee 1/23 through 2/7	2/23/23 Meeting Eight Major Topics	3/3/23 or 3/24/23
		<ol> <li>Last Call</li> <li>Review SWAC/DSAC and Planning Commission Feedback</li> <li>Edit Report and Poll</li> </ol>	Final Draft to Workgroup on 2/16	<ol> <li>Loose Ends</li> <li>Finalize Report and Official Poll</li> <li>Member Statements Due: 3/6/22 @ Noon</li> </ol>	Final BCTT Workgroup Report 3/3 if We Don't Do the High- Level Benefit-Cost Work and CUP Conditions From Other Jurisdictions 3/24 If We Do Them. (Need Extra Subcommittee Time and Workgroup Meeting)

# Subcommittee Tasks by Charge Element

Subcommittee	Charge A:	Charge B:	Charge C:	Subcommittee	Email	Relevant
Name	Common Understandings Tasks	Land Use Review Tasks	L-T SMMP tasks	Members	Addresses	Documents
A.1. Landfill	1) A chronological history of key			Paul Nietfeld	pnietfeld@gmail.com;	BCT Website
Size/Capacity/Longevity	Coffin Butte Landfill topics:			Chuck Gilbert	<pre>crgilbert@comcast.net;</pre>	Link:
	a) Size;			Brian May	BMay@co.marion.or.us;	DRAFT Report
	<ul><li>b) Specific locations;</li></ul>			Shane Sanderson	ssanderson@co.linn.or.us;	<u>Common</u>
	c) Assumptions (e.g. when will			Ian Macnab	IMacnab@republicservices.com;	Understandings:
	the landfill close;)			Bill Bromann	WBromann@republicservices.com;	Solid Waste
				Marge Popp	marge@jyo.com;	History (IV.A.1.A)
				Daniel Reddick	daniel.redick@Co.Benton.OR.US;	
						DRAFT Report
						<u>Common</u>
						Understandings:
						Landfill Size and
						Development
						History (IV.A.1.B)
						DRAFT Report
						<u>Common</u>
						Understandings:
						Specific Landfill
						Locations and
						Cell Size
						<u>(IV.A.1.C)</u>
						DRAFT Report
						Common
						Understandings:
						Assumptions
						<u>(IV.A.1.F)</u>
						Whitcombe -
						<u>9/12/22</u>
						<u>Nietfeld -</u>
						<u>9/14/22</u>
						<u>3/14/22</u>
						<u>Geier - 9/3/22 -</u>
						History
						HISTORY

 $\mathsf{Page}2$ 

					<u>Geier - 9/4/22 -</u> <u>Site Description</u> <u>Common</u> <u>Understandings</u> <u>Feedback -</u> <u>Republic 9-30-22</u> <u>Landfill Site Life -</u> <u>Republic</u> <u>Services 9-30-22</u>
A.2. Past CUP Conditions	<ol> <li>A chronological history of key Coffin Butte Landfill topics:         <ul> <li>d) Conditions of past land use approvals;</li> <li>e) Compliance with prior land use approvals and SWMP;</li> </ul> </li> </ol>		Nancy Whitcombe Catherine Bisco Mark Yeager Ed Pitera Jeff Condit Inga Williams	nwhitcombe@gmail.com; catherinerae17@yahoo.com; mayeager@gmail.com; ewpitera25@gmail.com Jeff.Condit@millernash.com; Inga.Williams@Co.Benton.OR.US;	BCT Website Link: Compilation of Compliance w/Past Land Use Approvals 9/30 Draft 2022 History of Coffin Butte Landfill Land Use Decisions Whitcombe - 9/12/22
A.3. Legal Issues and B.1. Land Use Review	<ul> <li>A Summary of the County's current rights and obligations to Republic Services, and vice versa, surrounding: <ul> <li>a) The hauling franchise;</li> <li>b) The landfill CUP; and</li> <li>c) What legally can and cannot be conditions of any land use approvals (e.g. past compliance, compliance with future laws, codes, and policies, DEQ compliance,</li> </ul></li></ul>	<ol> <li>Create a common understanding document outlining which Development Code criteria are applicable to the review of a conditional use application for landfill expansion by reviewing:         <ul> <li>a) 53.215 (Criteria)</li> <li>b) 77.305 (Conditional Uses)</li> <li>c) 77.310 (Review)</li> <li>d) 77.405 (DEQ)</li> </ul> </li> </ol>	Liz Irish Vance Croney Jeff Condit Gregg Verrett	<u>lizirish@ymail.com;</u> <u>Vance.M.CRONEY@Co.Benton.OR.</u> <u>US;</u> <u>Jeff.Condit@millernash.com;</u> <u>Greg.J.VERRET@co.benton.or.us;</u>	BCT Website Link: DRAFT Report Common Understandings: Republic Services and Benton County's Current Rights and Obligations (IV.A.2)

reopening, limitations on	2) Review Chapters 50 and 51 for		DRAFT Report
what can be brought into	context, and then prepare a		Common
the County from where,	conceptual list of any other		Understandings:
required facilities and	Development Code criteria the		Other Entity
practices,	WORKGROUP recommends be		Rights and
reporting/compliance/finan	applicable.		<u>Obligations</u>
cial monitoring			<u>(IV.A.3)</u>
requirements, etc.)	3) Developing recommended		
	guidelines for interpreting any		County Counsel
A Summary of the rights and	ambiguous provisions		Deference
obligations of other entities	<b>.</b> .		Memo
surrounding landfills, hauling, and	recognizing current statutes,		
sustainability initiatives, etc.:	regulations, case law, and County precedent, etc. In		<u>Staff Memo -</u> Charge B - Dev
a) Federal;	doing so, refer to		Code Provisions
b) Tribal;	Comprehensive Plan for policy		
c) State (e.g. Is DEQ	guidance regarding		DRAFT Report
prohibited from permitting	interpretation of any		Common
another landfill west of the			Understandings:
Cascades and what does	ambiguous Development Code provisions (see, BCC 50.015,)		Reporting
the "regional landfill"			requirements
designation mean?);	and Review the Planning Commission comments made		<u>(IV.A.1.E)</u>
d) Local Government; and	during its last review of		
e) Summary of the step-by-	Republic Services' CUP		Common
step process in ORS chapter			Understandings
459 and associated timing	application for context.		Feedback -
for the cross-jurisdictional	Evenenies for consideration		Republic 9-30-22
approvals of landfill	Examples for consideration		Common
applications, (e.g. DEQ)	include:		Understandings
including:	a) The phrase, "Other		Feedback
What topics are within	information as required		(Attachment A)
whose authority, and	by the Planning Official"		Republic
Whether, for example, the	77.310(e)		Services 9-30-22
County can or should	b) The terms found in		
consider the topics it does	Section 53.215, e.g.		
not have permitting	i. "seriously		
authority over when	interfere"		
assessing the criteria	ii. "character of the		
outlined in Code section	area"		
53.215?			

Time Permitting Tasks Or Add Extra Meeting Pushing Final Report Date From 3/3/23 to 3/24/23	<ol> <li>A chronological history of key Coffin Butte Landfill topics:         <ul> <li>Economics (i.e. Benefit – Cost, etc.;) and</li> <li>Examples from other jurisdictions hosting landfills, e.g.:                 <ul></ul></li></ul></li></ol>	<ul> <li>iii. "purpose of the zone"</li> <li>iv. "undue burden"</li> <li>v. "any additional criteria which may be required for the specific use by this code.</li> <li>c) Other:</li> <li>Develop protocols for the timely and broad distribution of CUP-related information to the public, other governmental entities, and internal committees, groups, and divisions.</li> </ul>	Consider the cost-benefits from the perspective of who gains benefits, and who does not, in light of Code section 23.010 [Solid Waste Management] Purpose, which states, "In order to protect the health, safety and welfare of the people of Benton County and to provide a solid waste management program, it is declared to be the public policy of Benton County to regulate solid waste management to [see actual language for list of potential topics.]" Section 23.100			
C.1. SMMP			<ol> <li>Contracting out;</li> <li>Subjects to be covered;</li> <li>(New) Add in Vision 2040         <ul> <li>and related County</li> <li>documents with similar</li> </ul> </li> </ol>	Brian May Sean McGuire John Deuel Joel Geier Marge Popp Daniel Reddick	BMay@co.marion.or.us; Sean.McGuire@co.benton.or.us john.deuel@oregonstate.edu; clearwater@peak.org; marge@jyo.com; daniel.redick@Co.Benton.OR.US;	BCT Website Link: SWMP Combine d Table of Contents from Various Oregon Jurisdictions

from other counties	
referenced	2040 Thriving
4) Who needs to be at the	Communities
table beyond those in the	<u>Initiative</u>
County;	
5) A workplan outline with a	Materials
timeline for completion;	Management in
6) Topics covered in recent	Oregon 2020
similar planning efforts	Framework for
across the state; and	Action (Oregon
7) What "lessons learned"	DEQ)
should be brought forward	Deschutze
	Deschutes
in this process.	County Solid
	<u>Waste</u>
Includes necessary foundational	Management
"common understandings" and	<u>Plan (2019</u> )
protocols needed before	Long
beginning the actual planning	Lane County Collid
process.	<u>County Solid</u> Waste
NOTE: This charge does not	Management
include completing the plan. It	Plan (2019)
only includes a discussion of the	<u> </u>
preliminary scoping to start that	Lincoln County
planning process.	Integrated Solid
	Waste
Possible Amendment for BOC	Management
Consideration: If there is	<u>Plan (2004)</u>
sufficient time to complete the	
original Charge <u>and</u> the	Marion County,
following activities,	Oregon Solid
subcommittee to provide recs.	<u>Waste</u>
on:	Management
a) the most important	<u>Plan</u>
topics/subjects from the	<u>Update (2009</u> )
draft of the SWMP Table of	
Contents;	Marion County
b) the brainstormed options	Solid Waste
for those topics/subjects;	<u>System</u>
and	

 $\mathsf{Page}6$ 

Proposed BCTT	<b>Meeting and Subcon</b>	nmittee Workplan	10-17-22 Draft

			1	
		<li>c) the reasoning, both pro</li>		Assessment
		and con, for their		Report (2016)
		selection.		
				Marion County,
				Oregon Solid
				Waste and
				Energy Final
				<u>Report (2017</u> )
				<u>Metro 2030</u>
				<b>Regional Waste</b>
				Plan (2019)
				/
				Waste
				Prevention &
				Environmental
				Services
				Regional Waste
				Plan Progress
				Report (January
				2022)
				Tillamook
				County
				Comprehensive
				Materials and
				Solid Waste
				Management
				<u>Plan (2012)</u>
D.1. Additional				
Assessment Issues				
Deferred Until 11/17				
E.1. Community				
Education				
Deferred Until 11/17				
			1	

#### **REDICK Daniel**

From: Sent:	Joel Geier Wednesday, October 5, 2022 10:51 AM
To:	Sam Imperati
Cc:	
	EDICK Daniel; MCGUIRE Sean; Benton County Talks Trash; Julie Jackson; crgilbert; Paul Nietfeld; WYSE Nancy; MALONE Patrick; AUGEROT Xanthippe; KERBY Joseph; NICHOLS Darren; CRONEY Vance M; WILLIAMS Inga; KWIATKOWSKI Maura; MAKEPEACE Amanda; MILO Erika; GROGAN Cory; RAY Linda; Adam Meyer; Amelia Webb
Subject:	Re: Benton County Talks Trash Subcommittees and ETA on 10/6 Meeting Agenda/Materials

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

#### Dear Sam and All:

This is to give notice that I am withdrawing from the CUP Conditions subcommittee.

Three subcommittee meetings between now and October 26th is much more time than I have available to offer to this process, as an unpaid volunteer, on top of what have already ballooned into very substantial expectations for "homework" beyond the plan for bimonthly, 4-hour meetings.

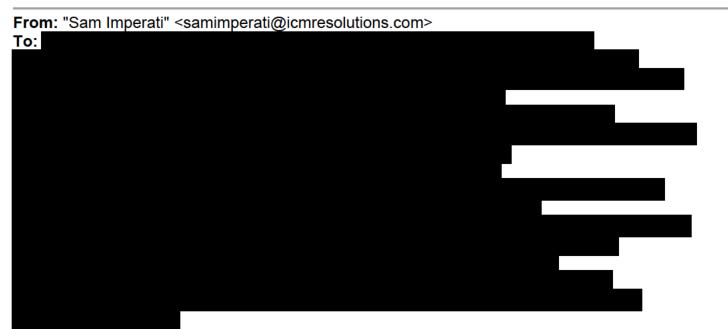
I also feel that our "triage" of the CUP compliance topics by the full work group (thank you to everyone who contributed to that effort!) shows that there are many topics for which the group is very far from a consensus. In many cases, the differences appear to be irreconcilable. The comments provided by work group members already do a good job of documenting where there are differences of opinion or interpretation that are unlikely to be bridged, at least by "lay" members of the public not versed in the intricacies of land-use planning. I don't see how it would be a productive use of my time to participate any further in what looks like it is destined to be a fruitless endeavor.

I'm providing you with this notice now so that you'll have time before Thursday's meeting to look into finding a replacement, if you still see this avenue as worth pursuing. If so, I'd suggest that it could be good to find someone with more appropriate technical background, such as a former county planner or a past member of the Planning Commission, who could weigh in on what might be considered as objective, reasonable interpretation of concepts such as "screening" and "operating hours."

Yours sincerely,

Joel Geier

SWAC representative to the work group.



**Cc:** "nancy wyse" <nancy.wyse@Co.Benton.OR.US>, "pat malone"

<Pat.Malone@Co.Benton.OR.US>, "xanthippe augerot" <Xanthippe.Augerot@Co.Benton.OR.US>, "KERBY Joseph" <Joseph.Kerby@Co.Benton.OR.US>, "Darren Nichols"

<darren.nichols@Co.Benton.OR.US>, "CRONEY" <Vance.M.CRONEY@Co.Benton.OR.US>, "Inga Williams" <Inga.Williams@Co.Benton.OR.US>, "REDICK Daniel"

<daniel.redick@Co.Benton.OR.US>, "KWIATKOWSKI Maura"

<maura.kwiatkowski@Co.Benton.OR.US>, "MAKEPEACE Amanda"

<amanda.makepeace@Co.Benton.OR.US>, "MILO Erika" <Erika.Milo@Co.Benton.OR.US>,

"GROGAN Cory" <cory.grogan@Co.Benton.OR.US>, "Linda Ray" <Linda.Ray@Co.Benton.OR.US>, "Adam Meyer" <adam.k.meyer@gmail.com>, "Amelia Webb" Sent: Friday, September 30, 2022 7:09:16 PM

Subject: Benton County Talks Trash Subcommittees and ETA on 10/6 Meeting Agenda/Materials

Greetings:

#### Subcommittees

At our last meeting, we formed two subcommittees to further our Common Understandings work. They are:

- 1. Landfill Size/Capacity/Longevity Subcommittee; and
- 2. CUP Conditions Subcommittee.

Each is designed to review the workgroup's suggestions (homework,) vet the draft document further, see what common understandings can be reached, and present the subcommittees' thoughts to the full Workgroup for formal polling. Darren and I asked the Board to allow select members of the public to participate, which they approved unanimously.

For the Landfill subcommittee, Paul Nietfeld has volunteered. Who else would like to be part of that group? Please reply by Noon on Wednesday. For context, I've attached the documents received to date. Additional material is welcome.

As to the CUP Conditions Subcommittee, Nancy and Joel have already volunteered. Who else would like to be part of that group? Please reply by Noon on Wednesday. For context, I have attached the current evolving draft. Additional material is welcome.

I anticipate each subcommittee will meet two to three times over Zoom, for about 1.5 hours, between now and our 10/26/22 meeting.

## ETA on 10/6 Agenda/Materials

I plan to send a Working Agenda and the related materials to you on Sunday. I will attach the relevant files to the transmittal email. Those documents will be uploaded to the project website on Monday. You will receive an updated Working Agenda with the usual links soon thereafter.

Happy to chat.

Thanks, Sam

# CM Sam Imperati, JD | Executive Director



11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

#### **REDICK Daniel**

From:	Joel Geier
Sent:	Thursday, October 6, 2022 8:54 AM
То:	Sam Imperati; Benton County Talks Trash
Subject:	Fwd: How to Recycle a 14-Story Office Tower - The New York Times

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sam,

Today I received this article from a member of the public who lives in Corvallis and has been following the work group process.

The article discusses one example of the type of innovative, forward-looking policies that Benton County could consider as part of a Sustainable Materials Management Plan, consistent with the County's expressed Goals and Core values including:

- Vibrant, Livable Communities
- High Quality Environment and Access
- Diverse Economy that Fits
- Community Resilience
- Health in All Actions

Please share this with the work group as input for **Charge C. Scope the necessary tasks to start a** Long-Term Sustainable Materials Management Plan process

Thanks, Joel

Subject: How to Recycle a 14-Story Office Tower - The New York Times

https://www.nytimes.com/2022/10/06/headway/office-tower-carbon-emissionsamsterdam.html

#### How to Recycle a 14-Story Office Tower

Buildings are responsible for nearly 40 percent of the world's carbon emissions. In Amsterdam, they are trying to create a blueprint to do something about it An emerging group of architects believe in designing not just for the life of a building, but for its afterlife, too.Max Pinckers for The New York Times

#### By Jessica Camille Aguirre

When the Dutch National Bank moved into its Amsterdam headquarters in 1968, the new buildings were epic and stylish. A sprawling Modernist landmark that took up an entire city block off the banks of the Amstel Canal, it was distinguished by a towering high-rise of polished ochre tile. Surrounding the tower were low-slung offices raised on columns, giving the impression that the whole complex was hovering, monumental and airy, just above the ground. In 1991, when more office space was needed, a second tower was built. This one, cylindrical and swathed in bluish glass, earned the nickname "the cigarette lighter" for the slanted roof that looked as if it could be flicked on.

People either loved or hated working in the cigarette lighter, with its blue-tinted offices, carpeted in gray, that splayed out from a curving central hallway like slices of pie. Eventually, though, opinions didn't matter. A few decades into the new millennium, the entire complex began to show signs of wear. Tiles fell off the facade. Pipes began to leak. And, perhaps most troubling in a country that prized itself on environmental innovation, its overextended heating systems burned too much fuel. In 2020, an architecture firm completed a design plan that would update the original structures and transform the inner courtyard into a public garden. The plan did not include the cigarette lighter. Twenty years after it had been tacked on, it had exhausted its function. It would have to go.

Typically, the fate of a building that has outlasted its usefulness is demolition, leaving behind a huge pile of waste.

The Netherlands and other European countries have tried to reduce that waste with regulations. Buildings there are often smashed to pieces and repurposed for asphalt. When the cigarette lighter's time came, a Dutch environmental engineer named Michel Baars thought he could do better than turn it into material for a road. Mr. Baars considers himself an urban miner, someone who extracts raw materials from discarded infrastructure and finds a market for them. The cigarette lighter, he thought, could live on as itself, rebuilt.

Lean and no-nonsense, Mr. Baars belongs to an emerging group of architects, engineers, contractors and designers who are determined to find a new way to build. This group shares a philosophy rooted in a set of ideas sometimes called the circular or regenerative economy, the cradle-to-cradle approach, or the doughnut economy. There are two main tenets to their thinking: First, on a planet with limited resources and a rapidly warming climate, it's crazy to throw stuff away; second, products should be designed with reuse in mind. The first idea is a recognizable part of our everyday lives: Recycling has retrieved value from household trash for a long time. More recently, the approach has started to gain a toehold in industries like fashion, with secondhand retailers and clothing rental services, and in food production, with compostable packaging. The second takes more forethought and would require companies to rethink their businesses in the most basic ways.

Translating either concept to the infrastructure of human settlements requires considering reuse in much longer time scales.

Edifices are supposed to embody progress. Each generation — in stone, steel, glass or concrete — makes its mark on the future. And the need for houses and other buildings is obvious as the world's population continues to grow. For the next four decades, built space on the order of the square footage of another New York City will be added to the planet every month. But buildings use a prodigious amount of raw materials and are responsible for nearly 40 percent of the world's climate emissions, half of which is generated by their construction. The production of <u>cement</u> is alone responsible for eight percent of global emissions.

In recent years, concern about waste and the climate has led cities like Portland, Ore., and Milwaukee to pass ordinances requiring certain houses to be deconstructed rather than demolished. Private companies in Japan have spearheaded new ways of taking high-rises down from the inside, floor by floor. China promised to repurpose 60 percent of construction waste in its recent five-year plan. But perhaps no country has committed itself as deeply to circular policies as the Netherlands. In 2016, the national government announced that it would have a waste-free economy by 2050. At the same time, the country held the rotating Council of the European Union presidency, and it made circularity one of the main concepts driving the industrial sector across the bloc. Amsterdam's city government has set its own goals, announcing plans to start building a fifth of new housing with wood or bio-based material by 2025 and halve the use of raw materials by 2030. Cities like Brussels, Copenhagen and Barcelona, Spain, have followed suit. Even in the Netherlands, though, creating a truly circular economy is challenging. Nearly half of all waste in the country comes from construction and demolition, according to national statistics, and a stunning 97 percent of that waste was classified as "recovered" in 2018. But most of the recovered waste is downcycled — that is, crushed into roads or incinerated to produce energy. A 2020 report by the European Environment Agency pointed out that only 3 to 4 percent of material in new Dutch construction was reused in its original form, which means that trees are still being cut for lumber and limestone still mined for cement.

"We're very good at recycling, but we don't consider that the best" circular solution, Salome Galjaard, a sustainability strategist for the municipality of Amsterdam, told me. The ideal process for an old building would be to disassemble it and reuse its parts, much as Mr. Baars was doing with the cigarette lighter. Mr. Baars, who runs a circular demolition company called New Horizon, sent a crew of around 15 people to take down the office partitions. They packed off interior glass and plasterboard to companies that could make use of the materials. Then, starting at the top of the 86,000-square-foot tower, they began removing the glass facade. A crane lifted pieces to a quay, where they were loaded onto

3

barges in the Amstel Canal for the seven-mile trip upriver to Mr. Baars's warehouse. Once the crew hit the building's concrete and steel skeleton, it used high-pressure water and diamond saws to slice through columns, floors and a thick inner pillar that ran through the spine of the building. The pillar gave way like soft cheese.

Mr. Baars's effort to carefully deconstruct and rebuild a high-rise remains a rare example of fully circular thinking materializing in the real world. He was aided by serendipity. The cigarette lighter was raised in such a tight space that it had to be prefabricated and brought to the site in sections. "That's why we could turn the process around and get the elements out the same way," Mr. Baars told me. "It's like Legos."

That accident of history is now a goal of a number of architects in Amsterdam, a hive of planning and activity around circularity. Last fall, I traveled to the city to see how wonky ideas get translated into practice — and how they can get hung up. In recent years, I have started to think about trash as a personal failure — every plastic bag squashed into the wastebasket or random coil of unused cable seems like a heedless contribution to a ruined future. On my trip to Amsterdam, I was especially conscious of this; I rued the umbrella I bought one rainy morning and lost before I went to bed. But after spending a few days in the company of the activists, architects and designers trying to create a new built environment, I began to consider that lost umbrellas and other detritus, instead of being purely a function of my own limited virtue, might also be a consequence of unimaginative manufacture. Circularity emphasizes the composition of things, rather than their use, suggesting that anything made thoughtfully enough can endure infinitely or proffer its molecules for breakdown and reorganization. Waste need not exist, and creating a new kind of material bounty, its proponents suggest, is a matter of design.

#### A World Where Everything Is on Loan

The roots of circular economy thinking go back to at least the 1960s, when researchers at M.I.T. developed a computer model called World3. The effort was intended to simulate the long-term consequences of things like population growth, industrialization and the use of natural resources. In their 1972 book, "The Limits to Growth," the researchers warned that unless humankind changed the way it used and consumed material goods on a global scale, civilization would likely collapse before 2070. That, along with the first images of Earth from space and Rachel Carson's iconic 1962 book, "Silent Spring," inspired an environmental ethos based on understanding the planet as one big system.

Around the time that "The Limits to Growth" came out, a young undergraduate at Dartmouth named William McDonough began pursuing architecture. Later, while designing a day care center, he observed the way children put everything in their mouths and began to consider the materials they were exposed to. He connected with a German chemist named Michael Braungart. The two collaborated for years, and in 2002, they published their ideas in a book called "Cradle to Cradle: Remaking the Way We Make Things," in which they argued that biological materials, which can be composted, should be kept separate from minerals and metals, which could be reused. The book became a touchstone for a certain kind of forward-thinking architect.

In part, they were responding to the increasingly complex nature of materials. In the early 20th century, the oil and gas industry began to use the chemical byproducts of their refining processes to develop things like plastic polymers. Insulation, varnishes, sealants, piping, pigments, fireproofing material — all contain such compounds; nearly 20 percent of plastic goes to the building industry. Jessica Varner, a historian at the University of Southern California's Society of Fellows in the Humanities, has studied how petrochemicals have infiltrated construction in the United States. She found that the industry lobbied to shape local building codes and encourage architects and engineers to incorporate new composite materials into their designs. "How do you separate when everything is embedded with the fibers, coatings and pigments from essentially oil and gas derivatives?" Ms. Varner said.

The nature of modern building materials is one of the trickiest parts of implementing circular ideas. In many cases, refurbishing things is so expensive, demanding time and expertise, that it is cheaper to simply buy new. "Part of the problem is that so many of the materials that get used in conventional construction in the U.S. in particular are laminated, they're multiple assemblies," Paul Lewis, a principal at LTL Architects in New York, said. "Insulation is a foil-backed polyurethane foam, right? So those become their own inhibitors to take it apart and reuse productively in another life." So far, much of material reuse in construction is limited to boutique, aesthetically driven choices like selling weathered wood from old barns to use as interior cladding in hip coffee shops. And there are the additional expenses of finding somewhere to store stuff while it awaits its next life and upgrading old components to meet new demands and requirements.

As a result, in many quarters, the emphasis has shifted to designing structures whose components can be disassembled and developing new, bio-based materials that can eventually be composted. "We should design man-made objects and products in such a way that we're not destroying the resources, but that we're basically borrowing them for a certain amount of time," Dirk Hebel, a professor of sustainable construction at the Karlsruhe Institute of Technology in Germany, said. "And that we can take them out in their pure form and put them back into the system."

Circularity advocates also say it's not just about materials, but about how the overall economy is structured. A British economist and Oxford University professor named Kate Raworth, who took aim at traditional economic growth models in her 2017 book, "Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist," has argued that it is impossible to achieve structural change without also rearranging basic assumptions of how production and consumption are incentivized. She is now working with Amsterdam officials on the city's circular plan.

These views might have remained at the fringes of environmentalism if not for the efforts of a British yachtswoman named Ellen MacArthur. In the late aughts, Ms. MacArthur, who broke the record for a solo circumnavigation of the globe by sailboat, started a foundation to promote the lessons she had derived on her trip, including the need to plan for resource reuse. In 2012, she presented a study,conducted with McKinsey & Company, at the World Economic Forum at Davos, Switzerland, arguing that circular design could save E.U. manufacturers \$630 billion per year. Directed to company executives, the report concluded that reusing materials could be profitably incorporated into a capitalistic economic system. Companies, the report suggested, were missing out on a big opportunity to develop new kinds of products. But the world won't be saved by bamboo straws alone, and the foundation has also argued for creating new business models that lead to better design. What if, for example, manufacturers could make more money by leasing, rather than selling, their products?

Thomas Rau, an architect in Amsterdam, is a leading proponent of this idea. In 2015, he appeared in a Dutch documentary called "<u>The End of Ownership</u>," in which he didn't argue for abolishing ownership so much as for shifting it from individuals to manufacturers. If manufacturers retain ownership of their products, he argued, they will want to make products that last longer and need fewer repairs. Just as significant, they will want to design stuff that can be easily taken apart and used again. Theoretically, this could help consumers, too. No one wants to own a computer or television or washing machine, Mr. Rau claimed; they just want the services those products offer: computing ability, visual entertainment, textile cleaning. If you see your car or your iPhone as a mark of your taste or part of your identity, this might sound like a terrible idea. But think about the speed with which subscription music-streaming services replaced ownership of CDs. In a sharing economy era, it's an idea that has an intuitive, minimalist appeal; after all, I didn't want the umbrella I bought in Amsterdam. I just wanted to stay dry in the rain.

#### The Architect of Ownership

One windblown morning in Amsterdam, I met Mr. Rau at his office and we drove in his BMW to visit one of the buildings he designed. Mr. Rau grew up in Germany, but he moved to Amsterdam as a young architect and has spent the last three decades trying to change how materials are used in construction and building structures that can be dismantled and reused. This focus on disassembly has become a leitmotif of Mr. Rau's work, including in the building we were about to visit, which housed a subsidiary of the Dutch national energy grid operator Alliander.

When we arrived at the Alliander building, which he renovated in 2015, we parked under a bank of solar panels and walked toward what had been a cluster of low-slung buildings. Mr. Rau had kept them intact but altered their appearance. He took discarded industrial cable spools and used their weathered wood to reclad the exteriors. He transformed former parking lots, wedged between the buildings, into one large, light-filled atrium where meeting spaces were interspersed with trees and coffee stands. In creating an enormous roof for the atrium, Mr. Rau wanted something that could be disassembled. He thought about who might have the skills to design structures that were lightweight and easy to disassemble, but sturdy enough to provide a yawning overhang. He approached a roller-coaster designer, who was skeptical at first but came up with an undulating steel frame that Mr. Rau fitted with stretched white cotton and large skylights. On the day we visited, the atrium was bathed in sunlight.

Mr. Rau is fond of creating word scrambles — he calls products intended for disposal "organized problems," for instance. The tendency can come across as twee or overwrought, but his purpose is to confound so that he can rearrange basic assumptions. In addition to running his architecture office, he created a consulting company with his wife, Sabine Oberhuber, to encourage corporate circular efforts, as well as a foundation called Madaster devoted to keeping track of the materials in buildings. He also gives a lot of speeches. Tall and white-haired, though youthfully jocular, he is considered by many young architects to be part of a vanguard that helped establish circular ideas in Amsterdam.

One of Mr. Rau's first publicly lauded projects was the renovation of a terminal of the Schiphol airport in Amsterdam. His creation had a sleek, utilitarian aesthetic, but as with many of his projects, what was unique about it couldn't be seen with the naked eye. At the start of the job, he learned about the Centennial Bulb — a light bulb that has been burning in Livermore, Calif., for more than 120 years — and it prompted him to consider how manufacturing might change if there were no incentive for obsolescence. He thought about all the bulbs needed for the airport terminal and how the airport would toss them in the trash when they wore out.

He approached Philips, the technology and lighting conglomerate, with an unusual proposal. Rather than supply physical light bulbs, Philips would provide light as a service.

Over 15 years, the airport would pay Philips a regular fee for a certain amount of light. Philips would own the equipment, including the light bulbs, and obtain and pay for the electricity. In Mr. Rau's view, this would make it in Philips's interest to manufacture something that was of high quality (so it wouldn't have to be replaced), that would use as little energy as possible (so the electricity bill was lower), and whose constituent elements could be reused once the product reached its end of life. The lighting contract ended up saving 50 percent in energy consumption, and Philips, which now markets similar service contracts under the name Signify, says its circular bulbs last 75 percent longer than traditional ones do.

The experiment led Mr. Rau to push against the consumer ownership model in other industries. In 2012, his and Ms. Oberhuber's consulting company began working with a Dutch affordable housing provider called Eigen Haard. They negotiated a seven-year project in which Bosch, the appliance maker, would provide washing and cooling as a service to residents. The company installed 63 appliances, including washing machines, dryers and refrigerators, in individual apartments; Eigen Haard managed the monthly billing and directed maintenance requests to Bosch. Although the pilot was a mixed bag — a few machines went missing because people thought they owned them — Bosch went on to start BlueMovement, which offers service contracts to households in Europe at a monthly fee for nearly any of its appliances. Miele, another appliance manufacturer, followed suit with its own subscription service. The service is still new, but "it's interesting enough to put significant effort in to find out how big it can be," Stefan Verhoeven, the chief executive of Miele Netherlands, said.

"This generation of 20-, 25-year-olds, they see things totally different," he said. "They need clean garments, so access to a washing machine, and they don't care who owns it. That doesn't go for the entire market, but it's a significantly bigger part of the market than it used to be."

But those experiments with service contracts have not led to a redesign of products in the way Mr. Rau had hoped. For a company like Miele, which relies on a reputation for quality, anything that revisits its engineering is subject to intense scrutiny. Dealing with global supply chains and ensuring timely product delivery make incorporating recycled elements complicated.

Mr. Rau, however, remains confident that the case for reuse will grow stronger. When I was in Amsterdam, Ms. Oberhuber and Mr. Rau met with Miele engineers at Road2Work, an electronics waste recycling plant, to brainstorm how to reuse components of discarded machines. At first, the engineers wanted to know what kinds of materials could be harvested from old appliances — basic ingredients that comprise the machines' shells and

8

adhesives, like polypropylene — but they soon realized that it would make more sense to focus on assembled parts that are expensive to manufacture and easier to isolate, like circuit boards. They didn't come to any conclusions, but as they talked with the recycling center managers, the engineers responsible for the creation of an object began to talk about what happened at its end.

## Scrappy Idealists With Salvaged Countertops

Before traveling to Amsterdam, I read about a community there called Schoonschip, created by a group of 144 scrappy idealists who built 46 floating houses on an urban canal. Unlike a corporate construction project, Schoonschip was an explicitly grass-roots effort to create a utopian vision of circular design. I wrote to a generic email address inquiring about a visit, and someone named Pepijn Duijvestein answered a few days later inviting me over to his house.

When I arrived, the morning's rain was ebbing and a frothy sunlight was brightening the sky. From the sidewalk, the houses seemed almost like an exhibit, the pieces arranged on the canal at a standoffish distance from each other. A gangway speckled with potted plants and overhung with festive lights meandered through the houses, which rose up against the dark waters underneath.

Schoonschip was started in 2008 by a woman named Marjan de Blok, who approached the municipality to get permission to build a neighborhood on one of the canals of Amsterdam's former industrial northern zone. Officials looking for creative ways to expand affordable housing options welcomed Ms. de Blok's overtures. She began recruiting likeminded people, and after around 10 families had signed on to the project, the group wrote up a manifesto. They spent years figuring out the building and permit process, as well as finding contractors willing to work with their unusual requests and banks open to financing unconventional ownership arrangements. The future residents formed working groups and came up with lists of recommended materials, although each household ultimately had the freedom to choose what it would use. Most built houses with timber frames and used materials like burlap or straw for insulation. "It's a totally community-driven project, and that's the success of the project," said Sascha Glasl, one of the architects who helped design the neighborhood and who now lives there.

It wasn't until 2020 that the neighborhood was finally finished. Today, hundreds of solar panels produce energy that is stored in large batteries in every house and managed locally by a private smart grid. Heat pumps use thermal energy from the canal water to regulate temperatures. Green roofs collect rainwater and help keep buildings cool. The

people who live in the community take part in a car-sharing program, and group chats are alive with offers: People post their dinner leftovers, and the leftovers are picked up. I rang the doorbell at the address Mr. Duijvestein gave me, and he ushered me into an understated living room whose length was fitted with a floor-to-ceiling glass door that opened onto the dockyards. We climbed a set of stairs and sat at a table in his kitchen, where we drank espresso from tiny ceramic cups. Mr. Duijvestein, who is now 37, was 26 when he got involved in the community and didn't have the same financial resources as some others, but his house was nonetheless stylish. He chose clay for many of the walls. Some of the beams came from wood harvested from tree branches that had fallen in Amsterdam parks during heavy storms.

There had been many complications. Finding the right stuff used rather than buying new is an annoyingly bespoke process, Mr. Duijvestein told me. He had to redesign his kitchen after the secondhand countertops he ordered arrived with different dimensions than had been advertised. But countertop design was an easy problem compared with resistance from lenders and contractors. When he chose clay for his interior walls and ceiling, contractors said they could not guarantee their work with such a strange material. Now, the clay roof is leaking, and he has no one to call. "If they experiment, they don't want to give a guarantee; they don't want to take a risk," Mr. Duijvestein said. "For the whole transition to a circular economy, it would be great if the banks or finance people would say, 'OK, let's take the risk together.' Now, I'm the one who has to pay for fixing the roof because I'm a crazy, sustainable experiment bunny."

Taking a cue from Mr. Rau, some members of the Schoonschip community tried to implement a service model for their heat pumps. ("I don't want a heat pump!" Mr. Duijvestein said. "I want heat. I want comfort.") But the banks couldn't quite get on board with extending a mortgage for a house in which some of the essential components didn't belong to the owner. Even in the Netherlands, whose government has committed to supporting a circular economy, figuring out the regulatory process for new forms of material salvage and ownership is a challenge. Banks can be reluctant to extend financing for projects that rely on service contracts, with their unusual liabilities and time frames. Contractors shy from guaranteeing the performance of materials they are unfamiliar with. Potential customers can balk at the additional cost of certain parts of going circular, or at the prospect of not achieving ownership.

Mr. Duijvestein estimates that he invested between 375,000 and 450,000 euros in his floating house, having done much of the work himself, but he doesn't care much for ownership; he sees himself as a steward of his home's constituent materials for a certain moment in time, recognizing the fact that they will outlast him. On the terrace outside his kitchen, a riot of flowers and plants leaned against the bamboo balustrade. They had been

cultivated by a woman with a rooftop garden; when she was near death, she sought someone who would care for them. Mr. Duijvestein brought them to his house. When the woman died, he arranged a bouquet for her coffin. He calls them his secondhand flowers, even though "if you look at it in a philosophical way, all flowers are secondhand," he said. "It's one big system."

#### The Cigarette Lighter's Rebirth

Mr. Baars' company is on a quay off the North Sea Canal, the city's main waterway, and it has the distinctly industrial rumble of a working factory. Tractors amble in and out of warehouses. Clouds of dust billow off piles of debris. A big part of Mr. Baars's business is recycling old concrete, and conveyor belts bearing demolition waste stream through the looming halls to towering, clunking machines. Inside, giant metal plates rub the chunks of concrete together to produce a mixture that can be separated into active cement dust, sand or gravel. This process avoids most of the carbon emissions associated with new cement production. He powers his machines with solar energy and reuses the other elements of old concrete — the sand and gravel — and markets his product as a climate neutral; he is working on a 300-million-euro project with the city of Amsterdam to supply concrete for repairing canal walls.

When Mr. Baars started his company in 2015, he wasn't really sure what he was doing. He started soliciting demolition projects with the guarantee that his work would not cost more than competitors' and with a vague promise to do something circular with the stuff. Slowly, policies aimed at curbing carbon emissions began to work in his favor. When regulations drove up the costs for gas-fired brick making, a prominent facade and roofing manufacturer reached out to Mr. Baars to obtain ceramics reclaimed from old buildings. When the Dutch government announced that it would phase out coal-fired power plants, Mr. Baars realized that gypsum manufacturers, which use the sulfur byproduct of coal production, would run into sourcing problems. Gypsum is found in most plaster, so he started collecting salvaged plaster material from demolition sites. It took three years to get approval from the Dutch government to sell what it considered waste, he told me. But now he is selling the gypsum. "I don't think it's waste," he said. "It's just material."

Recasting waste as material as a matter of policy, though, is complicated. In February, the <u>city released some data</u> about its circularity plan. The tone was self-critical. The city found it was using more raw materials than had previously been assumed. It also pointed out that the city could be doing a much better job reusing materials from demolition projects in new construction. "There is potential to be harnessed by using this waste to meet the city's considerable need for construction material," the report stated. City officials have run into the bottlenecks that circularity advocates face

everywhere — how to develop and pay for the specialized labor needed to deconstruct and refurbish old materials; where to store the materials as they are being updated for their next iteration; how to gather enough data about existing buildings and their demolition schedules to be a useful resource for designers. "There is a lot of piloting going on," Ms. Galjaard, the city's sustainability strategist, told me. "What we are now facing is a big step in the transition from piloting and researching and testing to largescale implementation, and that comes with a lot of new challenges that you don't really experience when you're piloting."

In the circular dream, nothing gets lost or discarded, waste gathers in specialized workshops to be remade and designed in the future, building materials fade into the environments they were derived from and the concept of ownership gives way to best use. The obstacles to that dream — standardized building components made with composite materials, rigid supply chains, laws and contracts — are a long way from vanishing. In reality, every project that can be called circular, in its broadest sense, is still mostly an act of passion — the Dutch designer Hester van Dijk's pavilion strapped together out of unchanged components; the Ghanaian-British architect David Adjaye's forays into compressed earth buildings; the American architect V. Mitch McEwen's experiments with felt building envelopes and hemp-based concrete. "The folks who are trying to design for 50 years from now are really trying to think toward, How can we build in a way that can respond to the crises that are already here?" Ms. McEwen told me, pointing to how materials like felt are more resilient to environmental disasters like flooding than traditional building elements are. "And how can we build in a way that won't produce more crises?"

Mr. Baars's contribution to that effort currently rests in a hangar. He led me along the quay as tractors trundled by, walking from the concrete reprocessing factory to an enormous, adjacent warehouse. Inside were the remnants of the cigarette lighter, shorn concrete panels neatly stacked to form aisles. "We're creating a new building from it," Mr. Baars told me. Together with a project development company called REBORN, Mr. Baars is providing the material for an elder-care center for a large health care company. Later, he showed me the mock-ups: the building's original cylinder would be reconstructed as three shorter, uneven buildings with greenery and walkways linking the spaces between them. The pie slices, with their soaring windows, would become apartments for people in nursing care. Mr. Baars expects to begin reconstructing the pieces this autumn. In its new iteration, the cigarette lighter wouldn't tower over the city, but rather create a homey cluster of spaces. This is what Mr. Baars sees when he looks out into the city: Within the decaying buildings and aging infrastructure are the raw materials for another life.

Jessica Camille Aguirre is a freelance writer whose work focuses on climate and the environment.

#### **REDICK Daniel**

From:	Joel Geier
Sent:	Thursday, October 6, 2022 6:51 PM
To:	Sam Imperati; Benton County Talks Trash; Amelia Webb
Subject:	Re: 10/6/22 Workgroup Meeting Agenda and Materials

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks, I received this after I got back home.

It takes me just about exactly half an hour to get from where I live by the landfill, to the site where the county has chosen to hold these meetings. So I was already getting on the road when this came through.

Glad to hear that Amelia has already taken these into account.

Joel

From: "Sam Imperati" <samimperati@icmresolutions.com>
To: "clearwater"

"nancy wyse@Co.Benton.OR.US>, "pat malone" <Pat.Malone@Co.Benton.OR.US>, "xanthippe
augerot" <Xanthippe Augerot@Co.Benton.OR.US>, "xanthippe

augerot" <Xanthippe.Augerot@Co.Benton.OR.US>, "KERBY Joseph" <Joseph.Kerby@Co.Benton.OR.US>, "Darren Nichols" <darren.nichols@Co.Benton.OR.US>, "CRONEY" <Vance.M.CRONEY@Co.Benton.OR.US>, "VERRET" <Greg.J.VERRET@co.benton.or.us>, "Inga Williams" <Inga.Williams@Co.Benton.OR.US>, "GROGAN Cory" <cory.grogan@Co.Benton.OR.US>, "Amelia Webb"

**Sent:** Thursday, October 6, 2022 2:20:00 PM **Subject:** Re: 10/6/22 Workgroup Meeting Agenda and Materials

They will be included after the meeting... sorry and thanks!

From: Joel Geier <clearwater@peak.org> Sent: Thursday, October 6, 2022 1:39:06 PM To: Sam Imperati <samimperati@icmresolutions.com>



wyse <nancy.wyse@Co.Benton.OR.US>; pat malone <Pat.Malone@Co.Benton.OR.US>; xanthippe augerot <Xanthippe.Augerot@Co.Benton.OR.US>; KERBY Joseph <Joseph.Kerby@Co.Benton.OR.US>; Darren Nichols <darren.nichols@Co.Benton.OR.US>; CRONEY <Vance.M.CRONEY@Co.Benton.OR.US>; VERRET <Greg.J.VERRET@co.benton.or.us>; Inga Williams <Inga.Williams@Co.Benton.OR.US>; GROGAN Cory <cory.grogan@Co.Benton.OR.US>; Amelia Webb Subject: Re: 10/6/22 Workgroup Meeting Agenda and Materials

Sam,

I notice that my corrections to the minutes of the neighborhood tour (sent to you on Monday morning) didn't get taken into account in the amended document. Here are those corrections so those can be included in the record ahead of today's meeting.

Thanks, Joel

## BCTT Neighborhood Tour Draft Minutes 10-2-22.pdf

Generally good minutes, thanks to Adam for keeping these. My comments here are aimed at completeness:

The bus driver's full name is William Allison.

The full name of the school in Adair Village is Santiam Christian School.

The relocated historical church building is the North Palestine Baptist Church.

Bit by Bit serves both kids and adults with disabliities.

Kevin Higgins served as a **volunteer firefighter with the Adair Rural Fire Department**, and also worked for the Sheriff's office. The main focus of his talk was on the **unique aspects and difficulties posed by landfill fires**, (which does result in part from types of items in the landfills, but the latter wasn't his main focus).

Couple of spelling corrections: The owner of Raising Joy Farm who spoke in the video clip was Priya **Thakkar**, and then Elizabeth **Patte** spoke afterwards.



.Benton.OR.US>, "pat malone"

<Pat.Malone@Co.Benton.OR.US>, "xanthippe augerot" <Xanthippe.Augerot@Co.Benton.OR.US>, "KERBY Joseph" <Joseph.Kerby@Co.Benton.OR.US>, "Darren Nichols" <darren.nichols@Co.Benton.OR.US>, "CRONEY" <Vance.M.CRONEY@Co.Benton.OR.US>, "VERRET" <Greg.J.VERRET@co.benton.or.us>, "Inga Williams" <Inga.Williams@Co.Benton.OR.US>, "REDICK Daniel" <daniel.redick@Co.Benton.OR.US>, "GROGAN Cory" <cory.grogan@Co.Benton.OR.US>, "Amelia Webb"

Sent: Wednesday, October 5, 2022 9:15:06 PM Subject: RE: 10/6/22 Workgroup Meeting Agenda and Materials

Greetings:

Here are some new/updated documents, which will be framed up during tomorrow's meeting. It is <u>not</u> expected that you read them (<u>skimming is more than sufficient if and only if you have the time.</u>) The major points will be explained and are being used to tee-up the subcommittees. They will vet the drafts further and report out at a subsequent WG meeting for formal Voting Member polling.

- 1. Updated Agenda: Corrects date and makes some tweaks in green.
- 2. Neighborhood Tour Questions,
- 3. Comments, (www.co.benton.or.us/sites/default/files/fileattachments/community\_development/page/8208/comments1.pdf; www.co.benton.or.us/sites/default/files/fileattachments/community\_development/page/8208/comments2.pdf; and www.co.benton.or.us/sites/default/files/fileattachments/community\_development/page/8208/comments3.pdf;)
- 4. Charge B; and

- 5. Staff memo on Charge B. (Pages 1 through 9 contain the crux of the staff memo. The rest of the document contains the relevant Code provisions and Planning Commission findings from the last CUP process.)
- 6. Updated M2 Minutes with some Member-suggested corrections
- 7. Updated M2 Evaluation that added a missing name (comments were already included)
- 8. Amended Neighborhood Tour Draft Minutes with some Member-suggested corrections

These documents will be uploaded to the website before the meeting.

There has been robust activity in-between meetings. However, 1,030 pages of comments is impossible for me to manage and for you to digest. Staff did the best they could to roll them up and make them available to you. Nonetheless, the important topics are coming to you late, and are diluted by ministerial matters. While things will improve upon Daniel's return on Monday, the remaining process question is, "Does the Workgroup want substantive emails to be copied directly to them, as well as to the process email/me, or wait to get them the day before the meeting?" The result will be receiving the important stuff in real time, but more work for you between meetings.

Chair Wyse will be at tomorrow's meeting to give a presentation on the Board's direction and will take questions. The link to yesterday's Board BCTT discussion can be found here: https://www.facebook.com/BentonCoGov/videos/2292714984239540. The public comment period is between 7:08 through 19:13. The BTCC discussion is between 33:25 through 1:50:00.

Happy to discuss on my below-listed cell phone from Noon to 2:00 PM tomorrow.

Thanks, Sam



CM Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

### **BCTT Neighborhood Tour: Member (& Public) Questions**

#### NOTE: Responses from neighborhood tour leaders are given in green.

This document includes all the questions BCTT Work group members and the public sent in from the Neighborhood Tour, October 1st , 2022.

The questions have been roughly grouped into four sections: Community Resources, Disaster Preparedness, Landfill Input & Management, and Safety & the Environment. Within each section, the questions are presented in alphabetical order based on the first letter of the first word in each question. Community Resources:

1. Can Republic Services show that they have fairly compensated landowners for property purchased next to quarry?

This is question is posed for Republic, but could be answered objectively by the Benton County Assessor's office, which has access to records of sale and past appraisals both for the vicinity of the landfill and for less-impacted areas of Benton County which are otherwise comparable.

To determine what would be "fair value" for a property not already degraded by proximity to landfill operations, we suggest that the assessment should compare sale prices of properties elsewhere in Benton county that, at the time of sale, were similar in size, zoning, and scenic rural character, but at least 3 miles from the landfill. This could include, for example, Logsden Ridge, Vineyard Mountain, Springhill, and rural-residential areas south of Philomath.

2. Has Republic Services ever donated to the volunteer fire fighters for Adair Village or any other?

This is question is posed for Republic, but could be also be posed to Adair Rural Fire & Rescue (http://adairrural-fire.com/site/), regarding the timing and amount of any donations. ARF&R might also be able to supply information on costs of past responses to landfill fires.

#### **Disaster Preparedness:**

1. Given the increasing forecast of earthquake magnitude, how would a 9.0 magnitude earthquake (same as the design criteria for the recent CPU) impact the existing landfill?

This is a good question that could be addressed at least in part by a seismic hazard analysis of the existing landfill, based on current understanding of the risks of a 9.0 (or larger, possibly as high as 9.5) magnitude earthquake on the Cascadia Subduction Zone.

Research by Dr. Chris Goldfinger at OSU (see https://www.nature.com/articles/news.2010.270) indicates that there have been 41 earthquakes of magnitude 9.0+ on this zone in the past 10,000 years -- about 1 per 240 years on average (though it's important to note that the intervals between mega quakes can vary considerably from the average).

To our knowledge, this type of analysis has not been done for the older landfill cells. The risk of a M 9.0+ earthquake on the Cascadia Subduction Zone was not recognized before research published by Brian Atwater in 1987 (https://www.science.org/doi/10.1126/science.236.4804.942). Even after this evidence was accepted by the scientific community, it took a couple of decades for the implications to make it into state and local regulatory requirements for new construction.

For the most recently planned cells, filings by Republic's geotechnical consultants use a method called "probabilistic seismic hazard analysis." This is a scientifically credible approach, in general terms, but the results depend on numerous assumptions that go into the analysis, in what is a rapidly developing "art." See for example:

https://www.usgs.gov/publications/probabilistic-seismic-hazard-analysis-regional-and-national-scale-state-artand-future

For a landfill, this analysis is further complicated by the uncertainty and variability in the properties of garbage as a material (as evident from the wide range of "density" estimates quoted in Republic's annual reports for Coffin Butte). Taking a careful, independent look at the earthquake modeling in the 2021 Site Development Plan might be a good project for seismic risk assessment and structural engineering experts at OSU.

The results presented by Republic's consultants thus far have been stated in terms of predicted probabilities of displacements of different magnitude for soil cover etc. To our knowledge, these geotechnical model predictions have not been propagated to assess the risks of, e.g. shearing of wells and piping in the methane capture system, ruptures of the liner system, or the resulting risks to public health and safety following a magnitude 9.0+ earthquake.

For comparison, the city of Christchurch, New Zealand has spent more than a decade repairing municipal water and sewer pipes following the M 7.1 earthquake that struck the city in September of 2010. So it's reasonable to expect that a more severe earthquake, shaking a small mountain of old garbage that contains

everything from diapers to bedframes and old kitchen sinks, might cause problems for the many miles of pipes and acres of tarps in the methane capture system.

One thing about earthquakes is that, like unhappy families each earthquake is unhappy in its own way. Most major earthquakes result in a re-evaluation of the building codes that were insufficient to prevent loss of life because the earthquake ended up being longer, or "joltier," or more harmonic, than it was expected to be. That's why the best earthquake research on buildings and other complex structures is conducted on "shake tables." Here's a link to a cool example:

#### https://www.youtube.com/watch?v=Y7kKcIsBKDo

So far as we know, no one has put a scale model of a landfill on a "shake table" and tried out different scenarios that would be comparable to a M 9.0+ earthquake. So much is going on in this landfill: plastic liners with welded seams, perforated pipes, horizontal gas pipes, vertical gas pipes, and layers of waste of highly variable composition and compaction. The properties of the garbage layers are also changing constantly, as chemical reactions transform solids into gases and leachate. It's a very complex system, with much to go wrong.

2. Is there a robust Emergency Management Plan that addresses the needed responses of RSI and County resources? Are personnel appropriately aware and trained for situations that arise with landfills? Is there a consensus among RSI and first responders on how to fight a landfill fire? Are responsibilities clearly identified? Is the effort adequately funded?

These are good questions for the Benton County Emergency Management coordinator. Perhaps he could be asked to speak to the Work Group.

Recently when the County was preparing its Wildfire Protection Plan, county development staff were asked whether the landfill was going to be included in the Plan as a locale of concern, which is either the site in North Benton County where the most fires have originated, or is at least one of the top sites in the County for fire origination.

Staff's reply was that they couldn't include the landfill in the WPP, since staff had no expertise in, or understanding of, the ramifications of fires either originating in a landfill and starting a larger wildfire on neighboring lands, or starting on neighboring lands and spreading to the landfill.

3. The Bit-by-Bit facility said there has been no forest plan for forest fire prevention on landfill land bordering her property. Can republic services speak to their wildfire prevention plan?

There was some misunderstanding here as to what Bit-by-Bit's representative stated. There just has been no communication by Republic Services with neighbors about this issue, at least since Brian May's tenure as landfill manager for VLI (around 2005). Meanwhile the Douglas-fir plantation has become very dense, with many dead branches low down in the trees which could serve as "fire ladders" for a ground fire to move into the canopy and grow explosively.

Potential sources of wildfire risk could include accidents along the highway. During the 2017 tanker spill we were lucky that power lines near the crash site were not damaged enough to arc to ground, and CPI was notified quickly by first responders so that they could shut off power. We might not be so lucky next time. In addition, there many people of limited resources travel on foot, bicycle, or even skateboard along Hwy 99W.

Occasionally neighbors have seen indications of people camping in the dense Douglas-fir plantation (bicycles left by the side of the road or people with backpacks coming out of the forest in the morning). So there may also be a risk of wildfire from campfires or improvised camp stoves.

#### Landfill Input & Management:

1. Bit by Bit facility said there has been banging in the forest next to their facility at 8pm at night. Can Republic Services address what that may be?

This question is also directed to Republic. As neighbors, we can say that the last time we heard similar banging noises in the forest was during the summer of 2021. It emerged later that Republic was digging test pits and boring holes as part of geotechnical site characterization activities prior to submitting a CUP for landfill expansion. The public was not notified of plans for that activity on these Forest Conservation zoned parcels.

This does illustrate how an expansion of regular landfill operations in this direction would increase impacts of equipment-generated noise on adjacent landowners and their ability to use their properties.

2. Did one of the Benton County Commissioners tell Nancy that in fact the County can negotiate with the Landfill to only accept trash from certain places?

The 1981 Franchise Agreement between the County and VLI limited the service area from which waste could be trucked to a very small number of regions (this is memorialized in the 1974 CUP). Until the franchise agreement was re-negotiated in 2000, adding additional regions for waste collection was collaboratively decided upon by the County and the landfill operator. After the landfill was sold to Allied Waste in 2000, the franchise agreement

was negotiated to remove the County's control over which regions could deposit waste into the landfill. This is memorialized in the 2001 "Baseline Study" prepared by the County:

In return for an increased franchise fee and the institution of a per ton host surcharge, Benton County no longer has rate setting authority for the landfill and will no longer be consulted in regards to the origin or volume of solid waste disposed at the landfill.

Source: Baseline Study, Introduction, page 4 of 322

3. How is it decided how high the landfill can be build? When do you stop adding garbage?

The first part of this question seems to be for the Planning Department (conditions on past permits). The second part of the question seems like a good question for the work group to consider in making recommendations.

4. I am in SWAC but still want clarification on ownership of Coffin Butte Landfill. Who owns the landfill and the PRC? Both Republic? Either the county?

This is a good question for the Planning Department or County Assessor. If you look on the Assessor's website, some parcels around the landfill are listed as being owned by "Republic Services Property Tax" while some are owned by "Valley Landfills Inc." or other entities. It is confusing.

The PRC is located mainly on tax lots 104170000300 & 301 (Valley Landfills Inc.) but with recent expansions of this facility, some operations appear to extend onto tax lots 104170000400 & 302 and 104080000300 & 400 (City of Adair Village) as well as parts of 104170000200 (owner listed as USA, apparently federal government -- the US Forest Service, Siuslaw National Forest maintains some jurisdiction over parts of this lot but other parts such as the former BOMARC missile site might still be under Department of Defense).

5. It was said that the fuel spilled on 99 by the dump was taken to the landfill. Can we talk about how that soil was managed and if it was by DEQ standards?

The first part of this question seems to be mainly for Republic to explain. In connection with other fuel spills, gasoline- or diesel-contaminated soil has sometimes been used as "daily cover" which means that the soil would be spread out, allowing volatile organic compounds in the soil to evaporate into the air.

The second part of this question is a good question for DEQ, as they had a trailer on site for approximately a month for DEQ staff who were supposed to be monitoring the response (the actual work was carried out mainly by a private contractor based in Philomath).

6. The front facing cells seem to be "closed". Can we confirm? When will they be covered with soil and planted over?

These seem to be questions for Republic to answer. From information in the 2021 Site Development Plan, it appears that no cell has been "closed" since 2011. Planning Division staff might be able to speak to conditions of past CUPs.

7. There was a claim that the county was to terrace the landfill and now it appears that the cells that have been covered are in fact not terraced. Can we have Republic Services address that?

Planning Division staff have been asked for documents referenced in the Findings of Fact for the 1983 Zoning Amendment that would describe the referenced "terracing" (they would probably be in the form of drawings). The best clues as to what might be contained in these documents lie in contemporaneous newspaper articles where County representatives and lawmakers discuss how, after the landfill closes, it will be returned to productive use and look better than it did before, for example, the following quote from the Gazette Times in an article from 11/21/1973,

"Jeanette Simerville, chairman of the Benton County Board of Commissioners, said Tuesday 'the site would be used in increments and as each increment was filled it would be in better condition for productive use than it is now."

8. There was a claim that the Quarries created by the government during Camp Adair's time were filled with waste. Can we confirm this?

The tour guide handout included a photograph from an OSU MAIS thesis by historian Bob Zybach which shows the extent of the quarrying during the early Camp Adair period (photos originally taken by Wilma Rohner). More documentation is available from a series of oral history monographs. Copies of several of these are available for inspection at the Soap Creek historic schoolhouse, or can be downloaded from: http://nwmapsco.com/ZybachB/Oral Histories/Soap Creek Valley/index.html Several small quarries were created on the lower slopes of Coffin Butte by the US Army and government contractors during the Camp Adair period. These were the source of crushed rock that was used mainly as "fill" to elevate roadbeds through "Swamp Adair" as it was called, although the Army found that this rock was of too poor quality to use for the actual road surfaces or for concrete structures in the camp. For those purposes, better-quality gravel was mined from river-gravel quarries several miles to the east. Two of the main river-gravel quarries from this period have recently been restored as western pond-turtle habitat, as part of Luckiamute State Natural Area in the northeast corner of Benton County,

Many of the oral histories produced by Dr. Zybach reference the old crushed-rock quarries on Coffin Butte as "scars". The quote from the 1973 CUP is as follows:

The scars that erode the face of Coffin Butte should be filled and compacted to a condition permitting reseeding and eventual visual reclamation of the area.

The "scars" are thought to refer to the pits and bare-rock slopes left by the Army.

Some of those quarries (mainly on the west side of the topographic saddle) were later filled with garbage (sometimes referred to as "the burn dump" in Republic's annual reports) or covered by later landfill cells. This is documented by DEQ (see answer to next question, below).

A couple of quarries on the east end of the butte were used occasionally by ODOT, before those lands were transferred to ODFW (around the year 2000). Those quarries have not been filled with garbage. They are now accessible to the public via the Coffin Butte Trail (part of E.E. Wilson Wildlife Area), and still provide good exposures of the basalt rock that forms much of Coffin Butte. During the tour we noted that these quarries are small in relation to more recent scarring of the butte, by recent expansions of Republic's landfill and the quarry operated by Knife River.

9. There was the assertion that Wah Chang has used the landfill in the past or present and that Magnesium and other metals were dumped there. Can the landfill confirm? If so, can they tell us who regulates how they handle those kinds of materials? Were those rules followed? There were expressed fears of an exothermic reaction underground. Can Republic address?

These facts have been documented by DEQ. Here is the relevant text excerpted from the DEQ document titled "Environmental Cleanup Site Information (ECSI) Database Site Summary Full Report - Details for Site ID 832, Coffin Butte Regional Landfill" (as downloaded from DEQ's of November 14, 2021 at 12:41:30 PM). Site History: Landfilling at Coffin Butte first began in the 1940s by the Army as a part of waste disposal for the former Camp Adair. (See ECSI #1044 for more information on Camp Adair). In 1975, Valley Landfills, Inc. (VLI) purchased the site and currently operates it as a municipal solid waste facility. **Contamination information:** (1/23/95 ACV/SAS) Valley Landfills, a subsidiary of Waste Control Systems, purchased the landfill in 1975 for use as a municipal landfill. In addition to municipal wastes, the landfill received low level radioactive wastes and industrial debris from Teledyne Wah Chang. For the first few years after 1975, zirconium nodule fines from Teledyne were mixed in with the municipal wastes are now segregated from the municipal wastes in clay cells. (See ECSI #315 for more information on Teledyne Wah Chang).

*Manner and Time of release:* Landfilling of wastes; leachate generation. 1940s to present. *Hazardous Substances/Waste Types:* municipal and industrial wastes, radium, <u>magnesium</u>, zirconium, asbestos, VOCs [volatile organic compounds].

Note that the term "pyrophoric" as used in the context of hazardous materials refers to substances that ignite instantly upon exposure to oxygen. They can also be water-reactive, where heat and hydrogen, a flammable gas, are produced (see https://www.purdue.edu/ehps/rem/laboratory/HazMat/Chemical%20Materials/pyro.html).

#### Safety & the Environment:

1. How far from the landfill has groundwater contamination been found? How has the groundwater contamination plume been contained? Prevented from reaching surface waters?

Groundwater contamination has been found at least as far from the landfill as the well for the the Helms home site which we visited (near where Wiles Road crosses Soap Creek).

The contamination plume was not "contained" but there have been efforts to diminish the strength of the source (e.g. first by capping the old "burn dump" to limit infiltration by rainwater, and later by moving this material to a lined cell). The contaminants that already entered the groundwater prior to completion of these actions will presumably continue to move as a plume, though the concentrations (based on general principles of hydrogeology) can be expected to become more dilute with time and distance, as the plume disperses over a wider area or seeps into surface waters such as Soap Creek.

Further information on Republic's efforts to monitor the plume are detailed in their annual monitoring reports submitted to DEQ (Tuppan Consultants). Those reports also show the extent of their monitoring network.

2. Risk assessments for the Landfill (human health, transportation spills, fire, etc.) should consider including schools being potentially impacted by air borne releases from landfill fires (approx. 2 miles away) or transportation accidents (99W about 1400 ft away).

Yes, we believe that a proper assessment of risks related to the landfill and any expansion should include an assessment of risk to the entire population of the area around the landfill, including school children and families in Adair Village.

In addition to the existing K-12 Santiam Christian School (with enrollment of 650), there is a proposal to build a new elementary school as part of the Corvallis 509-J School district (per testimony at a recent Planning Commission meeting by the Adair city administrator, Patrick Hare). This could bring even more children into the landfill-impacted zone 5 days a week, 9 months per year.

Adair Village is also home to many young families, particularly in the older parts of the town which has many multi-family residences (mainly duplexes) that provide affordable housing for families of moderate or lower income. As of the 2010 Census, 36.7% of residents were under the age of 18 (per Wikipedia).

3. The roads were not built to handle "this kind of traffic". "The road was not built for this kind of traffic." Can the roads department address that please? We were sitting on the corner of Camp Adair and Independence. Benton County identifies the route in question as a "High Crash Rate Segment" of roadway (Benton County Transportation Plan, page 24 of 112). Highway 20 was just this year blocked when a Republic garbage truck overturned closing both lanes of traffic (Albany Democrat-Herald, April 11, 2022, "Highway 20 closed near Albany due to garbage truck rollover"). In 2020, a Republic Services garbage truck went off the road and tipped over not far from the intersection where the tour stopped (at Independence Highway and Palestine Rd.).

We are not aware of any county-funded studies of landfill- or quarry-related truck traffic on Camp Adair Road. However the degree of wear and tear on the road is evident to residents, in the form of road damage and deep roadside potholes where trucks go off the pavement, particularly on the sharp curves just east of Highway 99W (by the archery range where we stopped). It could be useful to see a record of the frequency of repairs to this road, in comparison with other roads of the same class.

Springhill Drive (just north of where we turned west off of Independence Hwy) can be mentioned as another nearby road that carries some of the heavy traffic from these sources, and is also chronically in very poor condition. 4. The statement that Garbage trucks are the most dangerous truck on the road. I would like to request data to show what the most dangerous trucks on the road are.

If the statement was that garbage trucks are "the most dangerous", that was a misstatement. Certainly the intent was to say that dump trucks and garbage trucks are among the most dangerous large trucks. According to "Large Truck and Bus Crash Facts" put out by the Federal Motor Carrier Safety Administration, dump trucks come in fourth (at 8 percent) of all large trucks involved in fatal traffic accidents; and dump trucks come in fourth (at 10 percent) of all injury-causing accidents. Garbage trucks represented between 2.2 and 2.5 percent of all large trucks in fatal traffic accidents.

Dump trucks and garbage trucks are very large and as result have long blind spots, and their weight causes them to have long stopping distances and for accidents involving them to be inherently more dangerous. They also are associated with flying debris. During the landfill tour, one of the Republic employees described how garbage loads can catch on fire while in the truck, causing the driver to have to quickly find a place to pull off the road so that they can dump their load to extinguish the fire.

Further Information of an anecdotal nature is fairly easy to find in Google search, e.g.:

https://www.motorbiscuit.com/garbage-trucks-dangerous-surprising-number-accidents/

https://www.trucknews.com/transportation/fatalities-surge-around-truckings-most-dangerous-job-driving-agarbage-truck/1003130722/

The following OSHA database and search string could be useful if county staff or the facilitation team would like to devote time to researching this issue more quantitatively:

https://www.osha.gov/pls/imis/accidentsearch.search?

sic=&sicgroup=&naics=&acc\_description=&acc\_abstract=&acc\_keyword=%22Garbage%20Truck %22&inspnr=&fatal=&officetype=&office=&startmonth=&startday=&startyear=&endmonth=&endday=&endyear= &keyword\_list=on&p\_start=&p\_finish=20&p\_sort=&p\_desc=DESC&p\_direction=Next&p\_show=20

5. There is a concern as laid out in many articles about air quality and those living close to landfills. There are also concerns about ground water contamination. What has the county decided is a safe distance for residents to be living and their wells in relation to the landfill? I would request that we recommend that the county determine that distance. There is evidence to suggest that air quality is a concern for allergies and cancer. Has the county looked into these claims as a way to make its decision?

Here's a very thorough article from the EPA about the health effects of living near hazardous-waste landfill sites <a href="https://www.epa.gov/sites/default/files/2014-03/documents/">https://www.epa.gov/sites/default/files/2014-03/documents/</a>

#### health effects of residence near hazardous waste landfill sites 3v.pdf

While Coffin Butte is not currently designated as a hazardous-waste landfill, it has received hazardous waste in the past (see DEQ report cited above), and it still receives contaminated soils from fuel spills, asbestos, fire debris, and incinerator ash. There is no regular program to audit the contents of garbage trucked in from remote counties. A community-member comment submitted to the Work Group ahead of our October 6th meeting described how even the Corvallis schools have apparently sent items classed as hazardous waste to the landfill.

Potential health effects of living near landfills seem to include respiratory diseases including asthma, lung cancer, and risk of congenital malformation in newborns (Science Daily, May 24, 2016 "Living near a landfill could damage your health").

We are not aware of any local studies or guidelines issued by the County. Formerly the Disposal Site Advisory Committee (DSAC) was under the direction of the County Health Department which might have paid more attention to these types of concerns, but in recent years responsibility has been shifted to the Development Division, which does not have the same level of expertise on public health issues.

From:	Joel Geier		
Sent:	Tuesday, October 11, 2022 5:44 AM		
То:	Duvall, Kathryn; maryparmigiani534; ewpitera25; john deuel; christopher mcmorran; ryanm; louisa;		
	Brian.FULLER@deq.oregon.gov; <u>Marge Popp; N Whitcombe; Liz Iri</u> sh;		
	GRough@republicservices.com; REDICK Daniel; MCGUIRE Sean;		
	BMay@co.marion.or.us; bmay; catherinerae; Benton County Talks Trash; Julie Jackson; crgilbert; Paul		
	Nietfeld; WYSE Nancy; MALONE Patrick; AUGEROT Xanthippe; KERBY Joseph; NICHOLS Darren;		
	WILLIAMS Inga; KWIATKOWSKI Maura; MAKEPEACE Amanda; MILO Erika; GROGAN Cory; RAY Lind		
	Adam Meyer; Amelia Webb		
Cc:	Sam Imperati; Benton County Talks Trash; Deborah Gile		
Subject:	Fwd: Preliminary neighbor responses to questions arising from neighborhood tour		
Attachments:	NeighborhoodTourQuestions-Replies.pdf		

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

From: "clearwater"

**To:** "Sam Imperati" <samimperati@icmresolutions.com>, "BentonCountyTalksTrash" <BentonCountyTalksTrash@Co.Benton.OR.US> **Sent:** Saturday, October 8, 2022 9:32:35 AM **Subject:** Preliminary neighbor responses to guestions arising from neighborhood tour

The neighborhood tour gave rise to many good questions.

Some of these questions appear to be directed at Republic Services, or DEQ, or various County agencies.

But here we've attempted to give answers and supplementary information in response to the questions, from a neighborhood perspective.

Many of these could be good topics for further discussion in our upcoming Trash Work Group sessions.

From:	Joel Geier
Sent:	Wednesday, October 12, 2022 1:49 PM
To:	Sam Imperati
Cc:	WYSE Nancy; MALONE Patrick; AUGEROT Xanthippe; Benton County Talks Trash; KERBY Joseph; NICHOLS Darren; Ken Eklund; vneqs; Marge Popp; mayorandcouncil@corvallisoregon.gov; Doug Pollock; RAY Linda
Subject:	Re: Input for DSAC & SWAC re: Coffin Butte Landfill Operations in 2022

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sam, that message was mainly intended for Darren in relation to the functioning of DSAC / SWAC, and the apparent insufficiency of the "Trash Group" to cover all SWAC/DSAC functions.

I cc:d the work group which I assume means that you would also receive it. The work group address was set up by you and goes to you, does it not?

If you're going to react this way to a perceived slight so minor, and bring in stray, unattributed comments about alleged "threats to your manhood" (where on earth did that come from?), I really don't see how we're going to make progress on the tough issues before the group.

Good grief ... Joel

From: "Sam Imperati" <samimperati@icmresolutions.com></samimperati@icmresolutions.com>
To: "nancy wyse" <nancy.wyse@co.benton.or.us>, "pat malone"</nancy.wyse@co.benton.or.us>
<pat.malone@co.benton.or.us>, "xanthippe augerot" <xanthippe.augerot@co.benton.or.us></xanthippe.augerot@co.benton.or.us></pat.malone@co.benton.or.us>
Cc: "clearwater" "BentonCountyTalksTrash"
<bentoncountytalkstrash@co.benton.or.us>, "KERBY Joseph"</bentoncountytalkstrash@co.benton.or.us>
<pre><joseph.kerby@co.benton.or.us>, "Darren Nichols" <darren.nichols@co.benton.or.us>, "Ken</darren.nichols@co.benton.or.us></joseph.kerby@co.benton.or.us></pre>
Eklund", "vneqs", "Marge Popp"
, mayorandcouncil@corvallisoregon.gov, "Doug Pollock"
, "Linda Ray" <linda.ray@co.benton.or.us></linda.ray@co.benton.or.us>
Sent: Wednesday, October 12, 2022 1:33:44 PM

Subject: FW: Input for DSAC & SWAC re: Coffin Butte Landfill Operations in 2022

Commissioners,

Joel Geier sent an email early Friday evening to the Workgroup email and others wherein he refers to the "Benton County Talks Trash" Workgroup as the "Trash Group." It forwards an email from Doug Pollock.

Joel's email focuses on the Board's "one table" concept. It was sent one day after the last Workgroup meeting, where Chair Wyse presented the Board's direction in clear terms. He states, "I'm urging you [Darren] to re-think this plan and either (a) find a way to ensure that the Trash Group can find "bandwidth" to deal with the concerns of community members, or (b) ask the Commissioners to reconsider their decision to prevent SWAC/DSAC from fulfilling our normal responsibilities, while this group looks at some of the longer-term issues."

Mr. Geier did not copy me as he has done in the past, which is unfortunate because it involves the Workgroup, and he quotes me. Regardless, I am copying him and the others who appear in this chain.

Joel begins his email by saying, "I noticed that this message, originally sent for DSAC/SWAC consideration, was also sent to the Trash Work Group for consideration ahead of yesterday's meeting, but it did not make it onto the agenda or even receive any mention during the meeting, not even a passing mention during the "public comments" part of the meeting." On the surface, it seems innocuous. However, I believe it is misleading. Such statements take little time to make and a meaningful amount of time to unpack for others who are not as familiar with the nuances. One strategy is to ignore such emails, but that leaves a misleading narrative in the community for others to latch on to and perpetuate.

Here is why I think Joel's above statement is misleading.

- 1. Mr. Pollock's Wednesday 3:20 PM email, on its face, was not copied to the Workgroup email or me, but that does not concern me.
- 2. Thursday's meeting agenda was sent to the Workgroup the Sunday before, so it could not have possibly been added to it.
- 3. Even if it had arrived beforehand, it would not have been on the agenda because the established practice has been that emails from the public go into a Comments document that everyone receives before the meeting.
- 4. The time consuming, but necessary compilation of the Comments was already in progress when Mr. Pollock's email was sent to Linda Ray not to the Workgroup email or me.
- 5. Mr. Geier or others could have mentioned them during Thursday's meeting.
- 6. Mr. Pollock's email will be included in the next batch of Comments.
- 7. So, this is a "no harm no foul" situation, at worst, because Mr. Pollock's points will be available for subcommittee/workgroup consideration.

I want to be clear that these points are <u>not</u> directed at Mr. Pollock. His email, and the way he sent it, were appropriate. My comments are directed at how Joel chose to characterize its handling in order to argue that SWAC/DSAC should continue despite your specific direction.

Here are two additional points.

 Joel states, "If this ad hoc "Trash" work group is supposed to serve as a replacement for DSAC and SWAC under the "one table" idea, then I think we need to make sure that it serves the people of Benton County who bring up these issues, expecting that DSAC/SWAC will deal with them expeditiously."

Partial Response: Clearly, the BCTT workgroup is not a "replacement" for DSAC/SWAC, and the County is implementing a process for Joel and Marge to liaise with SWAC/DSAC between Workgroup meetings. This was clearly explained by the Chair, Daren, and me at the meeting.

2. He also states, "Last night I heard our facilitator say that he was "out of bandwidth" just in trying to address the Charge given to him by the Board of Commissioners. That raises a reasonable question, as

to whether this Trash Group is actually able to fulfill the normal, legally mandated functions of DSAC and SWAC, while those two bodies are being prevented from meeting."

Partial Response: While I have stated from the start that our workplan is tight, my "bandwidth" and related comments were intended primarily to describe the time spent having to manage the voluminous and tonally problematic process and personal criticism. (I have wondered for some time whether that was tactical because, prior to our last meeting, a staff member told me a Workgroup member noted two other members had "drawn first blood" and my replies were motivated by my desire to "defend my manhood.") Regardless of the motivation, the offline dynamics have negatively impacted our ability to best serve the vast majority of Workgroup members who want to complete the Board's Charge, as written.

I apologize for having to bring this to your attention again, but I need your direction on how to proceed. It saddens me that some consider this tried-and-true process design for consensus as a threat, and not as a fair and transparent opportunity to create common understandings as noted in the Charge. The irony is continuous process debate can make it unnecessarily difficult to focus on everyone's views, be they pro and con. The best chance we have to benefit the entire community is through a factual exploration of the merits.

I am happy to discuss this at any time that works best for you.

Sorry and Thanks, Sam



resolutions

11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: NICHOLS Darren <darren.nichols@Co.Benton.OR.US>
Sent: Sunday, October 9, 2022 8:36 PM
To: Sam Imperati <samimperati@icmresolutions.com>
Subject: Fw: Input for DSAC & SWAC re: Coffin Butte Landfill Operations in 2022

FYI. It looks like this was copied to the Workgroup email but not to you. Let's touch base tomorrow once Daniel is settled in. Let me know your availability for a late morning or afternoon project check in.

Hope you had a good weekend. Thanks, Darren

From: Joel Geier
Sent: Friday, October 7, 2022 5:31:37 PM
To: NICHOLS Darren
Cc: Ken Eklund; Benton County Talks Trash; Doug Pollock; Marge Popp
Subject: Fwd: Input for DSAC & SWAC re: Coffin Butte Landfill Operations in 2022

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Darren (and Trash Group members):

I noticed that this message, originally sent for DSAC/SWAC consideration, was also sent to the Trash Work Group for consideration ahead of yesterday's meeting, but it did not make it onto the agenda or even receive any mention during the meeting, not even a passing mention during the "public comments" part of the meeting.

This is another example of an issue falling under the charge of DSAC and SWAC, based on Oregon state law and Benton County code:

- DSAC per ORS 459.325 (https://oregon.public.law/statutes/ors 459.325)

- SWAC per BCC Chapter 23 (Benton County Solid Waste Management Ordinance)

If this ad hoc "Trash" work group is supposed to serve as a replacement for DSAC and SWAC under the "one table" idea, then I think we need to make sure that it serves the people of Benton County who bring up these issues, expecting that DSAC/SWAC will deal with them expeditiously.

Last night I heard our facilitator say that he was "out of bandwidth" just in trying to address the Charge given to him by the Board of Commissioners. That raises a reasonable question, as to whether this Trash Group is actually able to fulfill the normal, legally mandated functions of DSAC and SWAC, while those two bodies are being prevented from meeting.

I also heard Commissioner Wyse tell SWAC's representatives to the Work Group quite directly that the Board of Commissioners might "remove" us if we're perceived as uncooperative -- not just from this Work Group, but also from SWAC.

This really puts SWAC's representatives in an impossible position. We are not able to fulfill our roles to respond to members of the public as members of SWAC and DSAC, and we also see that this Trash Group doesn't have the "bandwidth" to deal, in a reasonable timely manner, with what seem to be very significant issues raised by members of the Benton County public. Quite bluntly, we're falling down on the job, and the County is not being responsive to residents.

I'm urging you to re-think this plan and either (a) find a way to ensure that the Trash Group can find "bandwidth" to deal with the concerns of community members, or (b) ask the Commissioners to reconsider their decision to prevent SWAC/DSAC from fulfilling our normal responsibilities, while this group looks at some of the longer-term issues.

Thanks, Joel

Forwarded message	
From: Doug Pollock	
Date: Wed, Oct 5, 2022 at 3:02 PM	
Subject: Input for DSAC & SWAC re: Coffin But	te Landfill Operations in 2022
To: RAY Linda <linda.ray@co.benton.or.us></linda.ray@co.benton.or.us>	
Cc: Ken Eklund , vneqs	, REDICK Daniel
<pre><daniel.redick@co.benton.or.us>, AUGEROT X</daniel.redick@co.benton.or.us></pre>	anthippe < <u>xanthippe.augerot@co.benton.or.us</u> >,
WYSE Nancy < <u>nancy.wyse@co.benton.or.us</u> >,	MALONE Patrick < <u>pat.malone@co.benton.or.us</u> >,
<mayorandcouncil@corvallisoregon.gov></mayorandcouncil@corvallisoregon.gov>	

Hi Linda,

Would you please share this input with both DSAC and SWAC, as well as Benton Co. staff who deal with solid waste issues?

Thanks!

Doug Pollock

Dear DSAC and SWAC members,

I have been actively monitoring dumpsters throughout Corvallis for a couple of decades, with a particular focus on those used by the Corvallis School District (CSD). I have done this because of a personal interest in sustainability, and as a member of the Corvallis Eco-School Network (a group of parents who worked on sustainability issues in our schools). I also worked on environmental issues in my previous career at Hewlett-Packard, where I served as their product steward for inkjet manufacturing. I would like to share some details of my work and the implications for managing solid waste at the Coffin Butte regional landfill. With my decades of hands-on experience, I have a better view than most people when it comes to what's actually going into the landfill.

When I first began my position at HP, they were dumping enormous quantities of defective inkjet cartridges in the landfill. HP was permitted to do this because their site environmental folks argued the plastic cartridge bodies *contained* the ink, thus preventing the chemicals from leaking into the landfill/leachate. I was determined to put a stop to this practice and started developing a recycling process for the scrap cartridges. One of my first steps was to visit the landfill and watch what actually happened to the cartridges. I took a video of a giant dozer crushing huge boxes of them (with ink spraying everywhere) to raise awareness and build support for my recycling process. Soon after word got out about my video, the landfill operators stopped accepting all of HP's waste cartridges. This helped provide the incentive to develop my recycling process (which was eventually expanded worldwide). But for a period of well over a decade, HP dumped substantial quantities of inkjet cartridges in the Coffin Butte landfill. This is part of the landfill's toxic legacy that people should know about.

Over the past ~15 years, I've also documented a large number of violations concerning waste in Corvallis school dumpsters. This includes numerous violations of Oregon's electronic waste law (e.g. a large television in a dumpster at Crescent Valley High School), and various hazardous waste violations (e.g. 5-gallon buckets of paint, refrigerators, fluorescent light tubes, etc.). In many cases, I provided pictures and sent emails to school district staff (including the facilities manager, principals, superintendent and school board members). My offers to meet with the previous superintendent and her staff to help them improve their recycling and waste disposal processes were consistently ignored. Surprisingly, many of the worst waste violations occurred in the dumpster located at the school district facilities office. In my initial discussion with the CSD custodial manager, I was appalled to discover that he wasn't even aware of Oregon's electronic waste law. He also admitted that the Corvallis School District had never developed process documentation governing the disposal of hazardous waste. Ignorance of the law is no defense, especially when you work for a public institution!

Almost without exception, the responses I've received from school district leaders over the years have been exceptionally poor. Their first response is almost always denial: "*That couldn't have come from our school!*". In nearly every case, further investigation showed that, indeed, the material in question did come from the school. Their second response is usually defensive in nature: "*What were you* 

doing looking in our dumpster?!". The former principal at Mountain View Elementary warned me, "We just can't have parents looking in dumpsters!" and implied she could take away my volunteer role managing the school garden. Eventually, the CSD responded to my dumpster complaints by installing locks on all of the dumpsters. They "solved" their waste disposal violations by simply hiding them from the general public.

Earlier this year, I discovered fluorescent light tubes in a large, open dumpster at Crescent Valley High School. The superintendent largely dismissed my email, speculating the bulbs came from a contractor working at the school. I explained this latest incident was part of a pattern of violations I'd documented over the past ~15 years, but neither the superintendent nor school board seemed to care. Over the following weeks, I documented repeated violations (including more fluorescent tubes in a large glass terrarium that presumably came from a science class). In each case, I filed an official complaint with DEQ about the incidents. Despite asking for a follow-up to my complaints, no one from DEQ contacted me until I called a manager and complained. Despite my substantial followup efforts (both with school district leaders and DEQ managers), my complaints were predictably dismissed. The DEQ staff person deferred to the CSD facilities manager who provided the usual excuses and knee-jerk responses. The DEQ person noted, "The school district is going to reinforce locking of dumpsters at their properties to avoid further illegal dumping...This is the extent of DEQ's evaluation of your complaint. Thank you again for your concern. I will close complaint #22-0653 in DEQ's records." I was particularly frustrated by DEQ's dismissive response because I had provided the case manager (Cathy Brown) with a lot of background information (about the CSD's history of waste violations). She was clearly unwilling to ask hard questions and hold the CSD manager accountable for the violations I had documented.

I've also frequently found waste violations in dumpsters on the OSU campus and at a Philomath school. This includes significant quantities of hazardous chemicals (e.g. epoxies, paints and solvents), a refrigerator, and electronic devices. I'd be remiss if I didn't also mention the enormous quantities of perfectly functional items that I've observed in dumpsters at our local schools: chalkboards, paper cutters, file cabinets, furniture, scores of bulletin boards, tables, projectors, books, large volumes of clothing (including brand new school T-shirts), science equipment, video cameras, copper wire, new electrical conduit and receptacles, motors, and hundreds of similar items. All of these items could have been easily diverted to Habitat for Humanity's ReStore or OSU's used equipment auction. The CSD's former sustainability coordinator also reported that an entire container load of chairs from Lincoln Elementary was sent to the landfill earlier this year. He had found an organization that was able to reuse them, but the CSD's facilities manager overruled him and had them crushed and sent to the landfill. Sadly, this is how the CSD has operated for decades.

I wanted to share these stories with you because they help to illustrate a number of very important points:

- There are enormous opportunities to reduce solid waste, but our community leaders and public institutions seem to lack the political resolve to anything about it. In many cases, 70-80% of the waste in dumpsters consists of items and materials that could be easily diverted for recycling or reuse.
- As my dumpster finds and the history of HP's inkjet cartridge disposal show, we must assume there's a considerable amount of hazardous waste going into the landfill on a regular basis. This hidden, hazardous waste stream has been going on for many decades, without acknowledgement by either the landfill operators, county staff, or DEQ (as far as I'm aware).
- I believe the waste violations I've documented constitute a breach of the landfill's operating permit with DEQ. In the most recent case involving the dumpster at CV, the dumpsters were apparently still hauled to the landfill even though I reported they contained fluorescent light tubes (which had not been removed). Without regular audits to ensure

compliance, Republic Services has no idea whether or not they are violating their DEQ operating permit.

• There are considerable procedural and bureaucratic hurdles to reporting violations to DEQ concerning the landfill and waste disposal. I spent a lot of time making phone calls and filling out DEQ complaints - and yet they were largely unresponsive and unwilling to take corrective action. This bureaucratic indifference discourages people from submitting complaints.

Though I've focused this message on violations of our laws governing waste disposal, the landfill operation has impacted my life in numerous, adverse ways. This includes offensive odors (on hundreds of occasions through the years), substantial quantities of litter on the roadway and along the roads leading to the landfill, dangerous loads being hauled to the landfill (a neighbor's wife was killed when she was hit by a trailer that came loose from someone returning from the landfill), increased traffic volumes and wear on our roads, and the substantial, irreversible changes to the character of our surrounding community due to the growing size of the landfill operation.

Thanks for considering my input,

Doug Pollock

Corvallis

From:	Joel Geier
Sent:	Monday, October 17, 2022 8:54 PM
To:	louisa
Cc:	Sam Imperati; Benton County Talks Trash; Duvall, Kathryn; maryparmigiani534; ewpitera25; john deuel; christopher mcmorran; ryanm; Brian.FULLER@deq.oregon.gov; Marge Popp; N Whitcombe; Liz Irish Qeco.marion.or.us; bmay; Julie Jackson; crgilbert; Paul Nietfeld; Catherine Biscoe; ssanderson; Ian Macnab; WBromann; Mark Yeager; Jeffrey G. Condit; WYSE Nancy; MALONE Patrick; AUGEROT Xanthippe; KERBY Joseph; NICHOLS Darren; CRONEY Vance M; VERRET Greg J; WILLIAMS Inga; GROGAN Cory
Subject:	Re: BCTT Update and Subcommittees

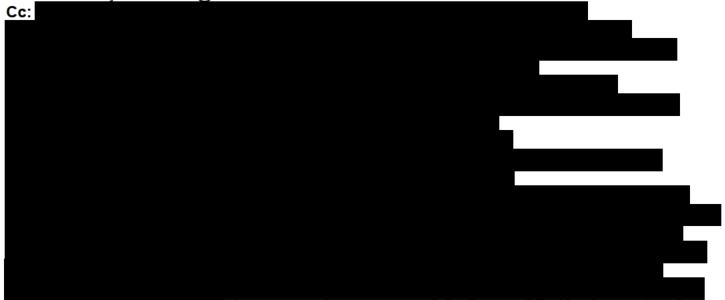
**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for sharing this, Louisa! I wish I could have joined this event.

Joel

From: "louisa"

**To:** "Sam Imperati" <samimperati@icmresolutions.com>, "BentonCountyTalksTrash" <BentonCountyTalksTrash@co.benton.or.us>



"nancy wyse" <nancy.wyse@Co.Benton.OR.US>, "pat malone" <Pat.Malone@Co.Benton.OR.US>, "xanthippe augerot" <Xanthippe.Augerot@Co.Benton.OR.US>, "KERBY Joseph" <Joseph.Kerby@Co.Benton.OR.US>, "Darren Nichols" <darren.nichols@Co.Benton.OR.US>, "CRONEY" <Vance.M.CRONEY@Co.Benton.OR.US>, "VERRET" <Greg.J.VERRET@co.benton.or.us>, "Inga Williams" <Inga.Williams@Co.Benton.OR.US>, "GROGAN Cory" <cory.grogan@Co.Benton.OR.US> Sent: Monday, October 17, 2022 8:34:12 PM Subject: Re: BCTT Update and Subcommittees Hi all,

Hi all,

This article, Vr1/2 dwhu/dqg"I hh-Hwkqrerwdq | "q"Vrds Fuhm was written by Sara Roberts, the Communications & Community Engagement Coordinator fro Benton Soil and Water Conservation District. Maybe some connections here for consultation now or in the future.

https://bentonswcd.org/soil-water-and-fire-ethnobotany-in-soap-creek/

Louisa



**Cc:** "WYSE Nancy" <nancy.wyse@Co.Benton.OR.US>, "MALONE Patrick" <Pat.Malone@Co.Benton.OR.US>, "AUGEROT Xanthippe"

<Xanthippe.Augerot@Co.Benton.OR.US>, "KERBY Joseph" <Joseph.Kerby@Co.Benton.OR.US>, "Darren Nichols" <darren.nichols@Co.Benton.OR.US>, "CRONEY"

<Vance.M.CRONEY@Co.Benton.OR.US>, "VERRET Greg J" <Greg.J.VERRET@co.benton.or.us>, "WILLIAMS Inga" <Inga.Williams@Co.Benton.OR.US>, "daniel redick"

<daniel.redick@Co.Benton.OR.US>, "GROGAN Cory" <cory.grogan@Co.Benton.OR.US>, "Amelia Webb"

Sent: Monday, October 17, 2022 3:12:06 PM Subject: BCTT Update and Subcommittees

Greetings:

I hope your weekends were enjoyable.

There is no "homework" between now and our October 27<sup>th</sup> meeting. There is, however, subcommittee activity, for those interested.

I've attached "Subcommittee Tasks by Charge Element" for context. It stands up four subcommittees, notes the relevant Charge elements for each, and provides links to the relevant website documents. Daniel is creating a separate website section for each subcommittee, so everything is in one place. More information will be added.

Here is the current subcommittee membership.

A.1. Landfill Size/Capacity/Longe	Paul Nietfeld Chuck Gilbert Brian May Shane Sanderson Ian Macnat Bill Bromann Marge Pop Daniel Reddick	
A.2. Past CUP Conditions	Nancy Whitcombe Catherine Bisco Mark Yeager Jeff Condit Inga Williams	SCHEDULING POLL https://doodle.com/meeting/participate/id/dwmo5vga
A.3. Legal Issues and B.1. Land Use Review	Liz Irish Vance Croney Jeff Kleinman Jeff Condit Gregg Verrett	SCHEDULING POLL https://doodle.com/meeting/participate/id/dPZnG86a
C.1. SMMP	Brian May Sean McGuire John Deuel Joel Geier Marge Popp Daniel Reddick	SCHEDULING POLL https://doodle.com/meeting/participate/id/e32zvgpd

We would like to have one Kickoff meeting before the next Workgroup meeting. The Doodle Poll links for each subcommittee are above. Please take the poll by 11:59 PM on Wednesday, and we will send a video call invitation for the date/time that works best for most. Additional meetings will be scheduled at the end of the first subcommittee meeting.

Please email me if you would like to be added to a subcommittee and take the appropriate scheduling poll. Please email me if you would like to be removed from a subcommittee.

Happy to discuss.

Thanks, Sam



resolutions Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From:	Joel Geier
Sent:	Thursday, October 20, 2022 6:42 PM
То:	Sam Imperati
Cc:	NICHOLS Darren; *Benton Web PIO; Benton County Talks Trash; REDICK Daniel; VERRET Greg J; WILLIAMS Inga; Amelia Webb
Subject:	Re: BCTT Update and Subcommittees

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

#### Great!

Looking forward to the public announcement of these meetings.

Joel

From: "Sam Imperati" <samimperati@icmresolutions.com>

To: "clearwater"

Cc: "Darren Nichols" <Darren.Nichols@co.Benton.OR.US>, "pioinfo" <pioinfo@co.benton.or.us>, "BentonCountyTalksTrash" <BentonCountyTalksTrash@Co.Benton.OR.US>, "REDICK Daniel" <daniel.redick@Co.Benton.OR.US>, "VERRET" <Greg.J.VERRET@co.benton.or.us>, "Inga Williams" <Inga.Williams@Co.Benton.OR.US>, "Amelia Webb" Sent: Thursday, October 20, 2022 6:28:52 PM Subject: RE: BCTT Update and Subcommittees

Joel,

The short answer is, yes!

The long answer is:

- 1. Folks can listen in;
- 2. Folks can submit information to the project email for transmittal to the subcommittee;
- 3. There will not be a public comment period because there is an opportunity for that during the formal Workgroup meetings;
- 4. Observers can use the Chat function, but there will not be time for subcommittee dialogue surrounding those comments; and
- 5. The Chat transcript will be part of the minimal subcommittee minutes, which will be posted on the project website.

Our work will be strictly focused on vetting the documents that have been in circulation and presenting a package to the Workgroup for their formal consideration.

Thanks, Sam



CM Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: Joel Geier Sent: Thursday, October 20, 2022 4:34 PM To: Sam Imperati <samimperati@icmresolutions.com>; BentonCountyTalksTrash <BentonCountyTalksTrash@Co.Benton.OR.US> Cc: Darren Nichols <Darren.Nichols@co.Benton.OR.US>; pioinfo <pioinfo@co.benton.or.us> Subject: Re: BCTT Update and Subcommittees

Thanks Sam,

Quick question: Will these subcommittee meetings be "public" in the sense that interested members of the public can listen in (even if not participate)?

If so, perhaps it would be good for the Public Information Office to let interested members of the public know how to access these meetings. I think that would be a good thing, in the interests of transparency. And who knows, this might help to bring other members of the public with unique skill sets into the loop.

Thanks Joel



Cc: "nancy wyse" <nancy.wyse@Co.Benton.OR.US>, "pat malone" <Pat.Malone@Co.Benton.OR.US>, "xanthippe augerot" <Xanthippe.Augerot@Co.Benton.OR.US>, "KERBY Joseph" < Joseph.Kerby@Co.Benton.OR.US>, "Darren Nichols"

<<u>darren.nichols@Co.Benton.OR.US</u>>, "CRONEY" <<u>Vance.M.CRONEY@Co.Benton.OR.US</u>>, "VERRET" <<u>Greg.J.VERRET@co.benton.or.us</u>>, "Inga Williams" <<u>Inga.Williams@Co.Benton.OR.US</u>>, "REDICK Daniel" <<u>daniel.redick@Co.Benton.OR.US</u>>, "GROGAN Cory" <<u>cory.grogan@Co.Benton.OR.US</u>>, "Amelia Webb"

**Sent:** Thursday, October 20, 2022 12:56:45 PM **Subject:** RE: BCTT Update and Subcommittees

Good Afternoon:

The Agenda and Materials for our 10/27/22 meeting are scheduled to go out on Monday evening. The major activities between now and then are the subcommittee meetings.

We appreciate the prompt replies from the subcommittee members. These Zoom kickoff meetings will be recorded, and the dates/times follow. (We did our best to accommodate everyone's schedule but were not 100% successful... sorry!)

Topic: C.1. Subcommittee Meeting: SMMP Oct 24, 2022 01:00 – 2:30 PM Pacific Time Join Zoom Meeting <u>https://uoregon.zoom.us/j/97129338944</u> Meeting ID: 971 2933 8944

Topic: A.3. Subcommittee Meeting: Past CUP Conditions Oct 24, 2022 03:30 – 5:00 PM Pacific Time Join Zoom Meeting <u>https://uoregon.zoom.us/j/96343643745</u> Meeting ID: 963 4364 3745

Topic: A.1. Subcommittee Meeting: Landfill Size/Capacity/Longevity Oct 25, 2022 10:30 – 12:00 PM Pacific Time

Join Zoom Meeting <u>https://uoregon.zoom.us/j/91563455436</u> Meeting ID: 915 6345 5436

Topic: A.3. Subcommittee Meeting: Legal Issues & B.1. Land Use Review Oct 25, 2022 03:00 – 4:30 PM Pacific Time

Join Zoom Meeting <u>https://uoregon.zoom.us/j/95617560955</u> Meeting ID: 956 1756 0955

I have attached the updated Workplan. Please note the Board has not formally adopted the new schedule, but the subcommittee tasks for next week are valid. Daniel is creating a web location for each subcommittee where all the relevant documents will be posted for ease of review and updating.

Here is the Working Agenda for each kickoff meeting.

- 1. Welcome and Introductions (5 minutes)
- 2. Review Subcommittee Tasks (5 minutes)
- 3. Process Protocols and Goals (5 minutes)
- 4. Overview of Documents(s) (10 minutes)
- 5. Discussion (40 minutes)
- 6. BCTT 10/27/22 Meeting Reports (20 minutes)
- 7. Schedule 2 to 3 Additional Meetings (and Logistics) in November (5 minutes)

8. Adjourn

Thanks, Sam

resolutions Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From:	Joel Geier
Sent:	Wednesday, October 12, 2022 2:22 PM
To:	WYSE Nancy; AUGEROT Xanthippe; MALONE Patrick
Cc:	NICHOLS Darren; Ken Eklund; tweet37; REDICK Daniel; Marge Popp; Sam Imperati; Doug Pollock
Subject:	Fwd: Forwarding question about lack of transfer stations and recycling/returnable options in rural
	Benton County in connection with new Oregon legislation

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Commissioners:

I'm forwarding this communication for context. I sent this to the "trash" work group, with copies to others for whom it seemed relevant.

Please note, this comment was sent for SWAC/DSAC's consideration on September 11th. So the comment sent by Doug Pollock on October 5th was the second instance that I was reacting to on Friday evening.

Yes, I was frustrated -- and I still am -- that we haven't yet dealt with either of these comments in a way that's responsive to the community members who expressed them.

I'll be happy to discuss these communication problems further with you, at your next convenience (though not today or Thursday, as I'll be traveling to Seattle, returning home on Friday).

Yours sincerely, Joel Geier

From: "clearwater"	
To: "BentonCountyTalksTrash" < BentonCountyTalksTrash@Co	o.Benton.OR.US>
Cc: "Darren Nichols" <darren.nichols@co.benton.or.us>, "Ke</darren.nichols@co.benton.or.us>	en Eklund"
	'REDICK Daniel"
<daniel.redick@co.benton.or.us>, "Marge Popp"</daniel.redick@co.benton.or.us>	, "Sam Imperati"
<samimperati@icmresolutions.com></samimperati@icmresolutions.com>	
Sent: Friday, October 7, 2022 4:18:44 PM	
<b>Subject:</b> Forwarding question about lack of transfer stations ar Benton County in connection with new Oregon legislation	nd recycling/returnable options in rural

Dear Work Group members:

I received a series of thoughtful questions (see below) from Rana Foster, a longtime Benton County resident. As you can see, Ms. Foster originally sent these questions to Daniel Redick nearly a month ago, requesting that they be brought to the attention of SWAC at the scheduled September meeting.

That meeting (originally scheduled for September 28th) was canceled on short notice by the Development Department, then reinstated and re-scheduled for October 5th, only to be canceled again by the Board of Commissioners on October 4th.

I'm forwarding this as a community-member comment for consideration and response on the agenda of our next Work Group meeting. This kind of request from community members would normally be handled by SWAC. I hope that the "common table" of the Work Group is able to accommodate and respond to such requests in an expedient manner that serves the rights and interests of Benton County residents.

Ms. Foster's questions (with minor reformatting and edits for clarity) are given below.

Thanks, Joel Sept 11, 2022

Dear Mr. Redick, For SWAC agenda item for the next Sept. 2022 meeting regarding Recycling and Rural Transfer stations.

Can SWAC have an update if they have not done this this year, on the new Oregon state legislation on the status of point-source manufacturer being required to work to reclaim and reuse product packaging materials -- what type of plastics or other packaging materials are involved in this legislation?

What types of plastic is Rep Service saying they can not recycle due to lack of market for plastic? Are any of the materials in State of Oregon legislation unable to be reclaimed by Republic Services due to loss of transfer stations in rural unincorporated areas of Benton County?

Does the container re-use state legislation mandate, or does the Benton County Franchise Hauling Agreement mandate, that Republic Service should work to collect the types of plastic and other packaging materials designated in this state container re-use law, to go back to a recycling business for designated re-use, or to the packaging's original manufacturers?

If Republic Service is hired under the updated 2022 Benton County hauling franchise agreement to pick up trash and state-legislated reclaimable items in rural unincorporated areas, and many rural trash and recycling transfer stations are closed, will the County work to reopen these transfer stations, to remain in compliance with the new state legislation?

City of Eugene and Lane County are able to recover, by recycling at trash pick-up stations, more types of plastic and other packaging materials then Corvallis and possibly Benton County.

In the Republic Service service area for franchise-agreement pick up and hauling from unincorporated areas, pick up points have been reduced, or no longer exist.

Can SWAC please ask the county to reestablish the closed rural and unincorporated waste transfer sites under the renewed Franchise Hauling agreement for rural trash pick up?

The Franchise Hauling agreement in rural areas may be a large part of Republic Services' business in Benton County, and it is currently not working to reduce the flow of recyclable materials into the Coffin Butte landfill. If residents are unable to recycle and just toss everything into the landfill from rural unincorporated areas with no waste

transfer stations, they should be able to recycle under new oregon container reuse/retreival legislation.

Rep. Services is offering a Master Recycling Class. Can this class be used to restablish/reopen the closed rural waste transfer stations in Benton County and its outlying, unincorporated trash pick up routes, in order to collect recyclables and materials covered under the State of Oregon container and packaging, recovery and reuse law?

Thanks, Rana

Joel Geier SWAC representative to the Work Group

From:	
Sent:	Sunday, October 9, 2022 2:25 PM
То:	Benton County Talks Trash; 'Sam Imperati'
Cc:	REDICK Daniel; NICHOLS Darren
Subject:	BCTT Sub-Committee-2 Coffin Butte - Size Capacity Longevity - Memo Non-consensus
Attachments:	DRAFT Landfill Service Life Size Capacity Longevity Sustainability - Coffin Butte Landfill Sub-
	Committee 10-9-2022.docx

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi all,

Thank you again for allowing me to participate in the BCTT SubCommitte-2 deliberations

Please find attached memo with hopefully reasonable information for the committee's further discussion on a consensus for Coffin Butte's size, capacity, and longevity.

Since I do not currently have the full list of the other members of the committee, I trust that you will forward the attached memo to them at the appropriate time.

Thank you for your assistance.

Chuck

### DRAFT

#### 10/9/2022

Memo

BCTT Sub-Committee 2 Benton County Talks Trash Workgroup Coffin Butte Landfill Service Life Size, Capacity, Longevity Chuck Gilbert - Member

This memo functions as biased in the sense it does not represent the consensus of the Sub-Committee-2 but serves as reasonable information on the subject matter under consideration by the sub-committee.

"Sustainability" is simply defined as using, developing, and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environmental, economic, and community objectives. (ORS 184.421)

Where Sustainability thrives, so does Longevity. Sustainability is the key to not only community longevity, but also community success and flourishment.

"Resource" is something that is available for use or that can be used for support or help

#### A. Common Resources – Synchronization – Cell Reservation - Coffin Butte Landfill

An inquiry and understanding by the Sub-Committee2 of the multiple resources that are interwoven with the rate of solid waste going into Coffin Butte's landfill cells is needed.

In other words, there is a synchronization process of three resources that needs to be resolved in order to advert the comparable results with the prior Benton County's land application LU-21-047 permit decision by the Planning Commission.

The first resource is the landfill with enumerated solid waste cells designed and allowed for solid waste disposal north of Coffin Butte Road. The cells are finite in number, space, and volume for solid waste disposal and are operationally divided into closed, active, and future active cells.

The enumeration of cells, statuses, and capacities is documented in a report by Geo-Logic Associates, professional engineers, of Bend, Oregon for the site development plan of Coffin Butte Landfill, updated December 2021 for Valley Landfills.

This report is in the materials management document library at Benton County's web address: <u>https://www.co.benton.or.us/cd/page/materials-management-document-library</u>

Excerpts from the report are listed below in this memo for convenience and illustrates the numbers for the active and future cells and their lifespans based on the design space and volume of each cell. (*Reference 1*)

The intent here for the first resource is not to weigh the solid waste going into the landfill cells into tons, pounds, and ounces. But hopefully the Sub-Committee instead may work on an agreeable cell life expectancy with the design volume capacities that are referenced in the aforementioned report.

Nonetheless, it is to also recognize any imbalances in the resources that may be resolved equitably and sustainability within the solid waste management of Benton County, which also includes the regional waste streams going into Coffin Butte landfill from neighboring counties and municipalities.

The second resource is the parcel of lands reserved for the landfill but not yet allowed for solid waste disposal that is geographically south of Coffin Butte Road which is also in part reflected in the aforementioned site plan for Coffin Butte but is limited in design and focus.

Customarily, expansion of a land fill is triggered when solid waste input exceeds reservation ability of disposal cells.

In other words, there are no rooms at the inn.

With no vacancies or limited vacancies of cells, it evokes expansion, which in part is the discourse of the workgroup and the sub-committee-2 to seek collective understanding of the processes of solid waste management by incorporating the overarching goals and tenets of sustainability for expansion or other practical options possible as an alternative to expansion of a landfill but realizing also that the landfill is a viable resource in both Benton County and neighboring counties and municipalities.

The third resource is the rock and gravel aggregates being quarried in Coffin Butte.

It is not the intent to value one resource over another, but instead seek a balance that assures equity and sustainability of all resources where equilibrium is possible.

Knife River supplies stone, sand, and gravel which are the aggregates of the foundation of Benton County's and Oregon's infrastructure for highways, bridges, railways, airport runways, or even sand for the sandbox at home. Within this context, Knife River is a major resource of aggregate in the community.

Conversely, Knife River appears as the minor resource when compared to Coffin Butte's major resource of municipal solid waste within the perimeters of the landfill.

Although a resource hierarchy comparison may assign one resource to be minor while another resource is major, the interdependency of each other makes the overall homeostasis functionable.

In other words, by design Knife River quarries the rock for the landfill cells to the required subgrade elevation for Coffin Butte use.

Coffin Butte landfill then builds upon the sub-grade with geotextile fabric, bentonite, and courses of drain rock before placement of solid waste into the cell until filled, then finishing with soil and fabric top layers to the design elevation for closure of cells.

Equilibrium is kept as long as Knife River has adequate time to quarry the rock thereby keeping ahead of the landfill cells disposal operations.

However, an alleged disparity exists in the site development plan for Coffin Butte referenced below that the current use of Cells 5D/5E for placement of solid waste has a 4-year cell life reaching capacity in Year 2025.

Likewise, future compartmental Cells 6A -6I slated into the primary Cell 6 being also the Knife River quarry excavation site that needs a reported 8-year more excavation time, even though the site development plan reflects a start date of Year 2026.

Also, Cell 1a was the original garbage site that was used by the former US Army training center at Camp Adair working from 1942 through 1944.

Republic Services advised SWAC, if my memory is correct, that Cell 1a this year will move the last part of the unlined refuse to a lined cell at Coffin Butte.

Hopefully, Cell 1a can be lined and used as additional space for inbound solid waste disposal.

Cell 1a is approximately 2 acres which would be approximately 1, 500,000 yards of capacity, extrapolated from similar acreage listed in the report.

B. Timeline – Service Life – Work Interruptions – Size Capacity (volume) – Longevity – Sustainability

Recapitulating by years, the current Cells 5D/5E service life would be from:	Years 2022 -2025	<mark>4 Years</mark>
Cell 1a, which needs verification may have a service life for solid waste.	Years 2025-2026	1 year
Knife River quarrying of Cell 6 needs an alleged 8 more years to finish	Years 2022- 2029	<mark>8 years</mark>

Cells 6A-6I then would have a service life from

Work Interruptions at Coffin Butte	
for Years 2026-2029 - no cell vacancy	4 years

Summarizing, approximately 1 million tons a year of solid waste starting in Year 2026 through Year 2029 would need to be reduced at Coffin Butte to synchronize with Cells 6A – 6I activation for solid waste in Year 2029 thereby giving 13 more years of service life north of Coffin Butte Road, if the sub-committee-2 determination agrees.

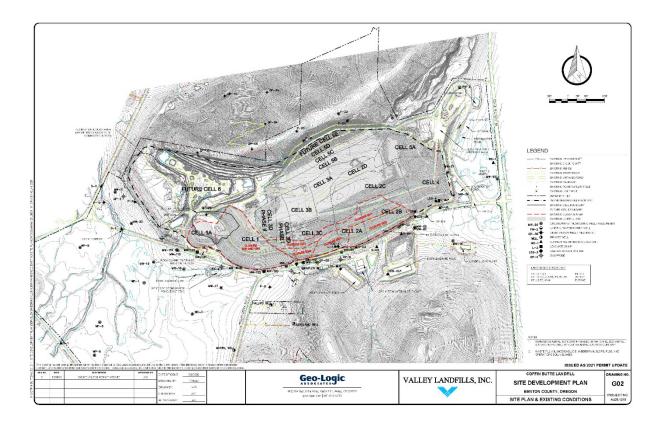
The common resources mentioned above work in unison, because their unique attributes form the geographic design and operations for solid waste disposal in the landfill north of Coffin Butte Road.

The common resources referenced above are not superior nor was it the intent to diminish or exclude natural resources, aquatic-life resources, atmospheric resources, farmland resources, timber land resources, wildlife resources, or fresh-water resources, but instead first examine the cause-effect relationship between specific resources and their attributes to determine a common understanding of the processes of solid waste management collectively within sustainable goals and tenets.

In closing, sub-committee-2 may need to dwell deeper into alternatives that can sustain Coffin Butte resources for the Years 2026-2029 for a temporary alternative disposal solution that may be necessary, if the sub-committee-2 affirms Knife River needs an additional 8 more years to finish the cell 6 excavation work.

References:

Reference 1. Site Development Plan – Coffin Butte





Site Development Plan Coffin Butte Landfill

phasing details of Cell 6. This SDP update incorporates a phased design that reduces the lined landfill slopes to 1:1 (horizontal: vertical) in the existing quarry/Cell 6 area.

Organization of this SDP follows the latest version of ODEQ's *Solid Waste Landfill Guidance* document (https://www.oregon.gov/deq).

# 2. Facility Operations

#### 2.1 Facility Operations

General facility operations have been previously described in the Operations Plan (GLA, 2020a) and the Operations and Maintenance Manual (GLA, 2020b). These documents were recently updated as part of the permit renewal associated with this SDP update. This section provides an overview of the information previously published, updated as appropriate.

The VLI land ownership around the CBL encompassing facility operations and waste placement areas can be seen in Drawing G02 in Appendix A. General facility operations consist of solid waste disposal operations, monitoring, maintenance, and management of leachate collection and removal systems, landfill gas collection systems, and stormwater management infrastructure, ancillary operations, and environmental monitoring operations.

#### 2.2 Capacity and Projected Life

Site life calculations were performed for the CBL to estimate the overall life span of the landfill and the general schedule required for construction of the major individual phases. The site life calculations were based on (1) the volumetric capacities of the phases as shown on the SDP drawings in Appendix A, (2) an operational density of 1,600 lbs/cy, (3) a soil to waste ratio of 15% (for daily cover), and (4) an incoming tonnage of 2,959 tons per day (projected average daily tonnage). The capacity of each phase was volumetrically calculated from the top of waste design grades to the design liner grade using AutoCAD Civil 3D software. The volume of soil for the operations layer was subtracted from the gross air space. Supporting documentation for the site life calculations is presented in Appendix B.

The net available airspace volume available for disposal in Cell 5D/5E and Cells 6A – 6I, as of the March 30, 2021 topographical map, totals approximately 18,645,000 cy. For the purposes of this report, airspace is defined as the volume available for waste, daily cover, and interim cover. Soil

December 2021

Project #AU20.1210.00 | CBL\_Site Development Plan\_Report\_Final.docx

# Geo-Logic

for daily and intermediate cover is estimated to consume approximately 2,797,000 cy of this volume, with an assumed soil to waste ratio of 15% by volume. Using the above stated parameters, the current fill area was calculated to reach final grades during the middle of the year 2039. Table 1 summarizes the site life projections for the landfill.

Site Life Projection					
	Plan View Footprint (Acres)	Capacity (CY)	Cumulative Capacity (CY)	Total Life of Cell (Years)	Year Capacity is Reached
Cell 5D/5E	6.1 <sup>1</sup>	4,834,330	4,834,330	4	2025
Cell 6A	19.8	1,482,260	6,316,590	1	2026
Cell 6B	11.3	1,029,430	7,346,020	1	2027
Cell 6C	4.3	1,742,130	9,088,150	2	2029
Cell 6D	11.0	1,859,820	10,947,970	2	2031
Cell 6E	3.9	1,078,420	12,026,390	1	2032
Cell 6F	5.1	1,686,070	13,712,460	2	2034
Cell 6G	2.4	2,015,260	15,727,720	2	2036
Cell 6H	1.1	1,295,450	17,023,170	1	2037
Cell 6l	1.2	1,622,130	18,645,300	2	2039

	Та	ble	1	I	
		-			

Notes: 1 – Cell 5 consists of Cells 5A through Cell 5E. Cell 5A through 5C are currently lined and accepting waste. Cell 5D (3.5 acres) was lined during 2021 and is awaiting approval for waste acceptance to begin in 2022. Cell 5E (2.6 acres) is planned to be lined in 2023. The plan view footprint presented in this table represents the areas of Cells 5D and 5E.

#### 2.3 Population and Industry Served

At present, the landfill serves primarily the counties shown in Table 2. In addition, some amounts of overflow waste come to the landfill from Lane and Marion Counties. Future sources of waste are susceptible to change. The major industries served by the landfill consist of forest products, mobile home manufacturers, and the electronics industry.

December 2021

Project #AU20.1210.00 | CBL\_Site Development Plan\_Report\_Final.docx

From:				
Sent:	Monday, October 24, 2022 9:05 PM			
То:	'Paul Nietfeld'; 'Marge'; REDICK Daniel; 'Sam Imperati'; BMay@co.marion.or.us;			
	ssanderson@co.linn.or.us;			
Subject:	RE: BCTT Subcommittee A.1: suggestions for work focus			
Attachments:	DRAFT Landfill Service Life Size Capacity Longevity Sustainability - Coffin Butte Landfill Sub-			
	Committee 10-9-2022.docx; Nietfeld_memo_to_SC_A1_24Oct2022.pdf			

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Paul,

Thank you for your e-mail.

I would also appreciate the other members time to review my memo that may serve as reasonable information for the subject matter under consideration by the sub-committee.

I do appreciate the other members memos that are footnoted in the proposed BCTT Meeting and Subcommittee Workplan dated 10-17-22.

Thank you.

**Chuck Gilbert** 

From: Paul Nietfeld	
Sent: Monday, October 24, 20	22 5:27 PM
To: Marge	REDICK Daniel <daniel.redick@co.benton.or.us>; Sam Imperati</daniel.redick@co.benton.or.us>
<samimperati@icmresolution< td=""><td>s.com&gt;</td></samimperati@icmresolution<>	s.com>

#### Subject: BCTT Subcommittee A.1: suggestions for work focus

Attached please see a memo outlining my suggestions for work focus that could serve as a discussion point in tomorrow's meeting.

Thank you, Paul Nietfeld

#### DRAFT

#### BCTT Sub-Committee 2

Chuck Gilbert – Public Community Member – BCTT Sub2

Memo

10/9/2022

Benton County Talks Trash Workgroup

Coffin Butte Landfill Service Life

Size, Capacity, Longevity, Sustainability

This memo functions as biased in the sense it does not represent the consensus of the Sub-Committee-2 but serves as reasonable information on the subject matter under consideration by the sub-committee.

"Sustainability" is simply defined as using, developing, and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environmental, economic, and community objectives. (ORS 184.421)

Where Sustainability thrives, so does Longevity. Sustainability is the key to not only community longevity, but also community success and flourishment.

"Resource" is something that is available for use or that can be used for support or help

#### A. Common Resources – Synchronization – Cell Reservation - Coffin Butte Landfill

An inquiry and understanding by the Sub-Committee2 of the multiple resources are needed that are interwoven with the rate of solid waste going into Coffin Butte's landfill cells.

In other words, there is a synchronization process of three resources that needs to be resolved in order to advert the comparable results with the prior Benton County's land application LU-21-047 permit decision by the Planning Commission.

The first resource is the landfill with enumerated solid waste cells designed and allowed for solid waste disposal north of Coffin Butte Road. The cells are finite in number, space, and volume for solid waste disposal and are operationally divided into closed, active, and future active cells.

The enumeration of cells, statuses, and capacities is documented in a report by Geo-Logic Associates, professional engineers, of Bend, Oregon for the site development plan of Coffin Butte Landfill, updated December 2021 for Valley Landfills.

This report is in the materials management document library at Benton County's web address: <u>https://www.co.benton.or.us/cd/page/materials-management-document-library</u>

Excerpts from the report are listed below in this memo for convenience and illustrates the numbers for the active and future cells and their lifespans based on the design space and volume of each cell. (*Reference 1*)

The intent here for the first resource is not to weigh the solid waste going into the landfill cells into tons, pounds, and ounces. But hopefully the Sub-Committee instead may work on an agreeable cell life expectancy with the design volume capacities that are referenced in the aforementioned report.

Nonetheless, it is to also to recognize any imbalances in the resources that may be resolved equitably and sustainability within the solid waste management of Benton County, which also includes the regional waste streams going into Coffin Butte landfill from neighboring counties and municipalities.

The second resource is the parcel of lands reserved for the landfill but not yet allowed for solid waste disposal that is geographically south of Coffin Butte Road which is also in part reflected in the aforementioned site plan for Coffin Butte but is limited in design and focus.

Customarily, expansion of a land fill is triggered when solid waste input exceeds reservation ability of disposal cells.

In other words, there are no rooms at the inn.

With no vacancies or limited vacancies of cells, it evokes expansion, which in part is the discourse of the workgroup and the sub-committee-2 to seek collective understanding of the processes of solid waste management by incorporating the overarching goals and tenets of sustainability for expansion or other practical options possible as an alternative to expansion of a landfill but realizing also that the landfill is a viable resource in both Benton County and neighboring counties and municipalities.

The third resource is the rock and gravel aggregates being quarried in Coffin Butte.

It is not the intent to value one resource over another, but instead seek a balance that assures equity and sustainability of all resources where equilibrium is possible.

Knife River supplies stone, sand, and gravel which are the aggregates of the foundation of Benton County's and Oregon's infrastructure for highways, bridges, railways, airport runways, or even sand for the sandbox at home. Within this context, Knife River is a major resource of aggregate in the community.

Conversely, Knife River appears as the minor resource when compared to Coffin Butte's major resource of municipal solid waste within the perimeters of the landfill.

Although a resource hierarchy comparison may assign one resource to be minor while another resource is major, the interdependency of each other makes the overall homeostasis functionable.

In other words, by design Knife River quarries the rock for the landfill cells to the required subgrade elevation for Coffin Butte use.

Coffin Butte landfill then builds upon the sub-grade with geotextile fabric, bentonite, and courses of drain rock before placement of solid waste into the cell until filled, then finishing with soil and fabric top layers to the design elevation for closure of cells.

Equilibrium is kept as long as Knife River has adequate time to quarry the rock thereby keeping ahead of the landfill cells disposal operations.

However, an alleged disparity exists in the site development plan for Coffin Butte referenced below that the current use of Cells 5D/5E for placement of solid waste has a 4-year cell life reaching capacity in Year 2025.

Likewise, future compartmental Cells 6A -6I slated into the primary Cell 6 being also the Knife River quarry excavation site that needs a reported 8-year more excavation time, even though the site development plan reflects a start date of Year 2026.

Also, Cell 1a was the original garbage site that was used by the former US Army training center at Camp Adair working from 1942 through 1944.

Republic Services advised SWAC, if my memory is correct, that Cell 1a this year will move the last part of the unlined refuse to a lined cell at Coffin Butte.

Hopefully, Cell 1a can be lined and used as additional space for inbound solid waste disposal.

Cell 1a is approximately 2 acres which would be approximately 1, 500,000 yards of capacity, extrapolated from similar acreage listed in the report.

B. Timeline – Service Life – Work Interruptions – Size Capacity (volume) – Longevity – Sustainability

Recapitulating by years, the current Cells 5D/5E service life would be from:	Years 2022 -2025	<mark>4 Years</mark>
Cell 1a, which needs verification may have a service life for solid waste.	Years 2025-2026	1 year
Knife River quarrying of Cell 6 needs an alleged 8 more years to finish	Years 2022- 2029	<mark>8 years</mark>

Cells 6A-6I then would have a service life from

Work Interruptions at Coffin Butte	
for Years 2026-2029 - no cell vacancy	4 years

Summarizing, approximately 1 million tons a year of solid waste starting in Year 2026 through Year 2029 would need to be reduced at Coffin Butte to synchronize with Cells 6A – 6I activation for solid waste in Year 2029 thereby giving 13 more years of service life north of Coffin Butte Road, if the sub-committee-2 determination agrees.

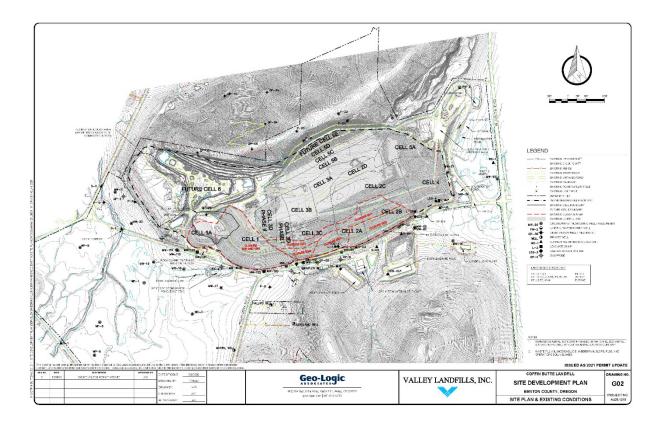
The common resources mentioned above work in unison, because their unique attributes form the geographic design and operations for solid waste disposal in the landfill north of Coffin Butte Road.

The common resources referenced above are not superior nor was it the intent to diminish or exclude natural resources, aquatic-life resources, atmospheric resources, farmland resources, timber land resources, wildlife resources, or fresh-water resources, but instead first examine the cause-effect relationship between specific resources and their attributes to determine a common understanding of the processes of solid waste management collectively within sustainable goals and tenets.

In closing, sub-committee-2 may need to dwell deeper into alternatives that can sustain Coffin Butte resources for the Years 2026-2029 for a temporary alternative disposal solution that may be necessary, if the sub-committee-2 affirms Knife River needs an additional 8 more years to finish the cell 6 excavation work.

References:

Reference 1. Site Development Plan – Coffin Butte





Site Development Plan Coffin Butte Landfill

phasing details of Cell 6. This SDP update incorporates a phased design that reduces the lined landfill slopes to 1:1 (horizontal: vertical) in the existing quarry/Cell 6 area.

Organization of this SDP follows the latest version of ODEQ's *Solid Waste Landfill Guidance* document (https://www.oregon.gov/deq).

#### 2. Facility Operations

#### 2.1 Facility Operations

General facility operations have been previously described in the Operations Plan (GLA, 2020a) and the Operations and Maintenance Manual (GLA, 2020b). These documents were recently updated as part of the permit renewal associated with this SDP update. This section provides an overview of the information previously published, updated as appropriate.

The VLI land ownership around the CBL encompassing facility operations and waste placement areas can be seen in Drawing G02 in Appendix A. General facility operations consist of solid waste disposal operations, monitoring, maintenance, and management of leachate collection and removal systems, landfill gas collection systems, and stormwater management infrastructure, ancillary operations, and environmental monitoring operations.

#### 2.2 Capacity and Projected Life

Site life calculations were performed for the CBL to estimate the overall life span of the landfill and the general schedule required for construction of the major individual phases. The site life calculations were based on (1) the volumetric capacities of the phases as shown on the SDP drawings in Appendix A, (2) an operational density of 1,600 lbs/cy, (3) a soil to waste ratio of 15% (for daily cover), and (4) an incoming tonnage of 2,959 tons per day (projected average daily tonnage). The capacity of each phase was volumetrically calculated from the top of waste design grades to the design liner grade using AutoCAD Civil 3D software. The volume of soil for the operations layer was subtracted from the gross air space. Supporting documentation for the site life calculations is presented in Appendix B.

The net available airspace volume available for disposal in Cell 5D/5E and Cells 6A – 6I, as of the March 30, 2021 topographical map, totals approximately 18,645,000 cy. For the purposes of this report, airspace is defined as the volume available for waste, daily cover, and interim cover. Soil

December 2021

Project #AU20.1210.00 | CBL\_Site Development Plan\_Report\_Final.docx

## Geo-Logic

for daily and intermediate cover is estimated to consume approximately 2,797,000 cy of this volume, with an assumed soil to waste ratio of 15% by volume. Using the above stated parameters, the current fill area was calculated to reach final grades during the middle of the year 2039. Table 1 summarizes the site life projections for the landfill.

Site Life Projection							
	Plan View Footprint (Acres)	Capacity (CY)	Cumulative Capacity (CY)	Total Life of Cell (Years)	Year Capacity is Reached		
Cell 5D/5E	6.1 <sup>1</sup>	4,834,330	4,834,330	4	2025		
Cell 6A	19.8	1,482,260	6,316,590	1	2026		
Cell 6B	11.3	1,029,430	7,346,020	1	2027		
Cell 6C	4.3	1,742,130	9,088,150	2	2029		
Cell 6D	11.0	1,859,820	10,947,970	2	2031		
Cell 6E	3.9	1,078,420	12,026,390	1	2032		
Cell 6F	5.1	1,686,070	13,712,460	2	2034		
Cell 6G	2.4	2,015,260	15,727,720	2	2036		
Cell 6H	1.1	1,295,450	17,023,170	1	2037		
Cell 6l	1.2	1,622,130	18,645,300	2	2039		

	Та	ble	1	I	
		-			

Notes: 1 – Cell 5 consists of Cells 5A through Cell 5E. Cell 5A through 5C are currently lined and accepting waste. Cell 5D (3.5 acres) was lined during 2021 and is awaiting approval for waste acceptance to begin in 2022. Cell 5E (2.6 acres) is planned to be lined in 2023. The plan view footprint presented in this table represents the areas of Cells 5D and 5E.

#### 2.3 Population and Industry Served

At present, the landfill serves primarily the counties shown in Table 2. In addition, some amounts of overflow waste come to the landfill from Lane and Marion Counties. Future sources of waste are susceptible to change. The major industries served by the landfill consist of forest products, mobile home manufacturers, and the electronics industry.

December 2021

Project #AU20.1210.00 | CBL\_Site Development Plan\_Report\_Final.docx

#### **REDICK Daniel**

From: Sent: To:	Sam Imperati <samimperati@icmresolutions.com> Thursday, October 20, 2022 12:57 PM</samimperati@icmresolutions.com>
Cc: Subject: Attachments:	WYSE Nancy; MALONE Patrick; AUGEROT Xanthippe; KERBY Joseph; NICHOLS Darren; CRONEY Vance M; VERRET Greg J; WILLIAMS Inga; REDICK Daniel; GROGAN Cory; Amelia Webb RE: BCTT Update and Subcommittees Proposed BCTT Meeting and Subcommittee Workplan Updated 10-20-22.docx

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

#### Good Afternoon:

The Agenda and Materials for our 10/27/22 meeting are scheduled to go out on Monday evening. The major activities between now and then are the subcommittee meetings.

We appreciate the prompt replies from the subcommittee members. These Zoom kickoff meetings will be recorded, and the dates/times follow. (We did our best to accommodate everyone's schedule but were not 100% successful... sorry!)

Topic: C.1. Subcommittee Meeting: SMMP Oct 24, 2022 01:00 – 2:30 PM Pacific Time

Join Zoom Meeting https://uoregon.zoom.us/j/97129338944 Meeting ID: 971 2933 8944

Topic: A.3. Subcommittee Meeting: Past CUP Conditions Oct 24, 2022 03:30 – 5:00 PM Pacific Time Join Zoom Meeting https://uoregon.zoom.us/j/96343643745 Meeting ID: 963 4364 3745

Topic: A.1. Subcommittee Meeting: Landfill Size/Capacity/Longevity Oct 25, 2022 10:30 – 12:00 PM Pacific Time

Join Zoom Meeting https://uoregon.zoom.us/j/91563455436 Meeting ID: 915 6345 5436

Topic: A.3. Subcommittee Meeting: Legal Issues & B.1. Land Use Review Oct 25, 2022 03:00 – 4:30 PM Pacific Time

Join Zoom Meeting https://uoregon.zoom.us/j/95617560955 Meeting ID: 956 1756 0955 I have attached the updated Workplan. Please note the Board has not formally adopted the new schedule, but the subcommittee tasks for next week are valid. Daniel is creating a web location for each subcommittee where all the relevant documents will be posted for ease of review and updating.

Here is the Working Agenda for each kickoff meeting.

- 1) Welcome and Introductions (5 minutes)
- 2) Review Subcommittee Tasks (5 minutes)
- 3) Process Protocols and Goals (5 minutes)
- 4) Overview of Documents(s) (10 minutes)
- 5) Discussion (40 minutes)
- 6) BCTT 10/27/22 Meeting Reports (20 minutes)
- 7) Schedule 2 to 3 Additional Meetings (and Logistics) in November (5 minutes)
- 8) Adjourn

#### Thanks, Sam

#### ICM Sam Imperati, JD | Executive Director



11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

## Workgroup and Subcommittee Meeting Schedule Updated 10-20-22

Subcommittee Meetings 10/19 through 10/25	10/27/22 Meeting Four Major Topics	Subcommittee Meetings 10/31 through 11/9	11/17/22 Meeting Five Major Topics and Public Open House	Subcommittee Meetings 11/21 through 12/7	12/15/22 Meeting Six Major Topics
Staff organizes existing documents by subcommittee One, 1.5-hour Subcommittee Kickoff Meeting Specific Dates Pending Doodle Poll Results	<ol> <li>Four Subcommittee Reports</li> <li>SMMP Goals: Vision 2040</li> <li>Local Jurisdictions Discuss Charge C. SMMP and Charge E. Public Education Campaign</li> </ol>		<ol> <li>Four Subcommittee Reports</li> <li>Introduce Charge D and Create Subcommittee:         <ul> <li>a) Scope tasks to Plan Hauling Reopener</li> <li>b) SWAC/DSAC Role Clarity and PC/BOC Criteria Use</li> <li>c) Code Change Timeline</li> </ul> </li> <li>Introduce Charge E and Create Subcommittee: Public-Facing Document and Community Education Campaign</li> <li>Open House – Process Status, Future SMMP, and Public Ed/Notification</li> </ol>		1) Review Work, Authorize Draft, and Request Feedback
Staff Draft Report 12/19 through 1/4	Subcommittee Meetings 1/5 through 11/11	1/19/22 Meeting Seven Major Topics	Final Report Subcommittee 1/23 through 2/7	2/23/23 Meeting Eight Major Topics	<mark>3/3/23</mark>
		<ol> <li>Last Call</li> <li>Review SWAC/DSAC and Planning Commission Feedback</li> <li>Edit Report and Poll</li> </ol>	Final Draft to Workgroup on 2/16	<ol> <li>Loose Ends</li> <li>Finalize Report and Official Poll</li> <li>Member Statements Due: 3/6/22 @ Noon</li> </ol>	Final BCTT WG Report Assumes: 1) Benefit-Cost Topics are only Outlined as part of SMMP Scoping 2) Landfill CUP Conditions From Other Jurisdictions is reserved for other process. 3) WG Focus is on substance – not process.

### Subcommittee Tasks by Charge Element

Subcommittee	Charge A:	Charge B:	Charge C:	Subcommittee	Email	Relevant
Name	Common Understandings Tasks	Land Use Review Tasks	L-T SMMP tasks	Members	Addresses	Documents
A.1. Landfill	1) A chronological history of key			Paul Nietfeld		BCT Website
Size/Capacity/Longevity	Coffin Butte Landfill topics:			Chuck Gilbert		Link:
	a) Size;			Brian May		DRAFT Report
	b) Specific locations;			Shane Sanderson		Common
	c) Assumptions (e.g. when will			Ian Macnab		Understandings
	the landfill close;)			Bill Bromann		Solid Waste
				Marge Popp	1	History (IV.A.1.A
				Mark Yeager	the second s	and the second second
				Daniel Reddick	daniel.redick@Co.Benton.OR.US;	DRAFT Report
					contraction of the second s	Common
						Understandings
						Landfill Size and
						<b>Development</b>
						History (IV.A.1.E
						Section 1
						DRAFT Report
						Common
						Understandings
						Specific Landfill
						Locations and
						Cell Size
					-	(IV.A.1.C)
						DRAFT Report
						Common
						Understandings
						Assumptions
						(IV.A.1.F)
						Whitcombe -
						9/12/22
						Nietfeld -
						9/14/22
						C : 0/0/00
						<u>Geier - 9/3/22 -</u>
	1 m					History

					<u>Geier - 9/4/22 -</u> <u>Site Description</u> <u>Common</u> <u>Understandings</u> <u>Feedback -</u> <u>Republic 9-30-22</u> <u>Landfill Site Life -</u> <u>Republic</u> Services 9-30-22
A.2. Past CUP Conditions	<ol> <li>A chronological history of key Coffin Butte Landfill topics:         <ul> <li>Conditions of past land use approvals;</li> <li>Compliance with prior land use approvals and SWMP;</li> </ul> </li> </ol>		Nancy Whitcombe Catherine Bisco Mark Yeager Ed Pitera Jeff Condit Inga Williams	Inga.Williams@Co.Benton.OR.US;	BCT Website Link: Compilation of Compliance w/Past Land Use Approvals 9/30 Draft 2022 History of Coffin Butte Landfill Land Use Decisions Whitcombe-
A.3. Legal Issues and B.1. Land Use Review	A Summary of the County's current rights and obligations to Republic Services, and vice versa, surrounding: a) The hauling franchise; b) The landfill CUP; and c) What legally can and cannot be conditions of any land use approvals (e.g. past compliance, compliance with future laws, codes, and policies, DEQ compliance, reopening, limitations on	<ul> <li>1) Create a common understanding document outlining which Development Code criteria are applicable to the review of a conditional use application for landfill expansion by reviewing: <ul> <li>a) 53.215 (Criteria)</li> <li>b) 77.305 (Conditional Uses)</li> <li>c) 77.310 (Review)</li> <li>d) 77.405 (DEQ)</li> </ul> </li> </ul>	Liz Irish Vance Croney Jeff Condit Gregg Verrett	Vance.M.CRONEY@Co.Benton.OR. US; Greg.J.VERRET@co.benton.or.us;	9/12/22 BCT Website Link: DRAFT Report Common Understandings: Republic Services and Benton County's Current Rights and Obligations (IV.A.2) DRAFT Report Common

Page 3

wha	at can be brought into	2) Review Chapters 50 and 51 for		Understandings:
	County from where,	context, and then prepare a		Other Entity
	uired facilities and	conceptual list of any other		<b>Rights and</b>
	ctices,	Development Code criteria the		<b>Obligations</b>
-	orting/compliance/finan	WORKGROUP recommends be		<u>(IV.A.3)</u>
-	monitoring	applicable.		
	uirements, etc.)	applicable.		County Counsel
				<b>Deference</b>
	erence	3) Developing recommended		<u>Memo</u>
Dere	erence	guidelines for interpreting any		
A Cummon	af the vielate and	ambiguous provisions		Staff Memo -
	of the rights and	recognizing current statutes,		Charge B - Dev
-	of other entities landfills, hauling, and	regulations, case law, and		Code Provisions
	y initiatives, etc.:	County precedent, etc. In		
a) Fed		doing so, refer to		DRAFT Report
b) Trib		Comprehensive Plan for policy		Common
	te (e.g. Is DEQ	guidance regarding		Understandings
	hibited from permitting	interpretation of any		Reporting
-	other landfill west of the	ambiguous Development Code		requirements
		provisions (see, BCC 50.015,)		<u>(IV.A.1.E)</u>
	cades and what does	and Review the Planning		Common
	"regional landfill"	Commission comments made		Common Understandings
	ignation mean?);	during its last review of		Feedback -
	al Government; and	Republic Services' CUP		Republic 9-30-2
	nmary of the step-by-	application for context.		<u>Republic 5 50 2</u>
-	p process in ORS chapter			Common
	and associated timing	Examples for consideration		Understandings
	the cross-jurisdictional	include:		Feedback
	provals of landfill	a) The phrase, "Other		(Attachment A)
арр	olications, (e.g. DEQ)	information as required		Republic
incl	uding:	-		Services 9-30-2
Wh;	at topics are within	by the Planning Official"		
who	ose authority, and	77.310(e)		
Whe	ether, for example, the	b) The terms found in		
	unty can or should	Section 53.215, e.g.		
	sider the topics it does	i. "seriously		
	have permitting	interfere"		
	hority over when	ii. "character of the		
asse	essing the criteria	area"		

	outlined in Code section 53.215?	<ul> <li>iii. "purpose of the zone"</li> <li>iv. "undue burden"</li> <li>v. "any additional criteria which may be required for the specific use by this code.</li> <li>c) Other:</li> <li>Develop protocols for the timely and broad distribution of CUP-related information to the public, other governmental entities, and internal committees, groups, and divisions.</li> </ul>				
Time Pormitting Tasks Or Add Extra Meeting Pushing Final Report Date From 3/3/23 to 3/24/23	1) A chronological history of key         Coffin Butte Landfill topics:         Economics (i.e. Benefit         Cost, etc.;) Benefit Cost         Topics are only Outlined         and         Examples from other         jurisdictions hosting         landfills, e.g.:         O         Typical land use         conditions of         approval; and         O         Issue sequencing,         (e.g. in what order         are landfill versus         hauling approvals         done, etc.		Consider the cost benefits from the perspective of who gains benefits, and who does not, in light of Code section 23.010 [Solid Waste Management] Purpose, which states, "In order to protect the health, safety and welfare of the people of Benton County and to provide a solid waste management program, it is declared to be the public policy of Benton County to regulate solid waste management to [see actual language for list of potential topics.]" Section 23.100			
C.1. SMMP	uone, etc.		<ol> <li>Contracting out;</li> <li>Subjects to be covered;</li> <li>(Moved from Common Understandings) Benefit-</li> </ol>	Brian May Sean McGuire John Deuel Joel Geier Marge Popp	Sean.McGuire@co.benton.or.us	BCT Website Link: SWMP Combine d Table of Contents from

Page5

<u> </u>	niel Reddick		Various Oregon
Outlined	da	niel.redick@Co.Benton.OR.US;	Jurisdictions
4) (New) Add in Vision 2040			
and related County			2040 Thriving Communities
documents with similar			Initiative
from other counties			Intiative
referenced			Materials
5) Who needs to be at the			Management in
table beyond those in the			Oregon 2020
County;			Framework for
6) A workplan outline with a			Action (Oregon
timeline for completion;			DEQ)
7) Topics covered in recent			
similar planning efforts			<u>Deschutes</u>
across the state; and			County Solid
8) What "lessons learned"			Waste
should be brought forward			Management
in this process.			<u>Plan (2019</u> )
			Leves.
Includes necessary foundational			<u>Lane</u> County Solid
"common understandings" and			Waste
protocols needed before			Management
beginning the actual planning			Plan (2019)
process.			<u>1 Ian (2015</u> )
			Lincoln County
NOTE: This charge does not			Integrated Solid
include completing the plan. It			Waste
only includes a discussion of the			Management
preliminary scoping to start that			<u>Plan (2004)</u>
planning process.			
Possible Amendment for BOC			Marion County,
Consideration: If there is			Oregon Solid
sufficient time to complete the			<u>Waste</u>
original Charge <u>and</u> the			<u>Management</u>
following activities,			<u>Plan</u>
subcommittee to provide recs.			<u>Update (2009</u> )
on:			Manian Causta
a) the most important			Marion County
topics/subjects from the			Solid Waste

		draft of the SWMP Table of Contents; b) the brainstormed options for those topics/subjects; and c) the reasoning, both pro and con, for their selection.	SystemAssessmentReport (2016)Marion County, Oregon Solid Waste and Energy Final Report (2017)Metro 2030 Regional Waste Plan (2019)Waste Plan (2019)Waste Prevention & Environmental Services Regional Waste Plan Progress Report (January 2022)Tillamook County Comprehensive Materials and Solid Waste Management
			Plan (2012)
D.1. Additional	a) Scope tasks to Plan Hauling	Topics Deferred Until 11/17	
Assessment Issues	Reopener b) SWAC/DSAC Role Clarity and PC/BOC Criteria Use c) Code Change Timeline		
E.1. Community Education	Report EX/SUM, General History of Coffin Butte, FAQs, CUP 101, Educational Campaign, etc.	Nancy Whitcombe	

Page 7



To: Benton County Board of Commissioners From: Sam Imperati, ICMresolutions RE: Project Extension and Budget Request Memo Date: 10/20/22

#### Introduction

I presented an updated Workplan proposal at your October 18, 2022 meeting. An updated version is attached as Exhibit A. It proposes the Workgroup would submit its Final Report to you on March 3, 2023, versus December 15, 2022. If you approve it, it will mean a 19-week extension of time is needed to complete the five Charge elements:

- Section A: Common Understandings
- Section B: Existing Criteria & Info Requirements for Land Use Review Process of any Landfill Expansion
- Section C: Scope the Necessary Tasks to Start a L-T Sustainable Materials Management Plan Process
- Section D: Input on Additional Topics Assessment Report
- Section E: Public-facing Document and Community Education Campaign

#### Reasoning

The reasons for this time extension and the explanation for the increased budget follow.

- 1) The timeline was aggressive from the start.
- 2) The original budget was lean.
- 3) The project encountered meaningful process resistance despite the Assessment findings and recommendations.
- 4) The intensity and length of the "storming" phase required substantially more time than initially budgeted. Communications between meetings were voluminous, intense, and conflictual in nature.
- 5) ICM ended up doing more work than expected in light of staff's bandwidth.
- 6) Homework processing was more time-consuming than anticipated.
- 7) Twice a month BOC update meetings were added.
- 8) Two tours were added.
- 9) Approximately 15 subcommittee meetings are proposed to be added.
- 10) 19 project weeks are proposed to be added.
- Our collective efforts have been and will continue to be impacted by complexity of the topics and the lack of readily available historical material at the start of the project. Restated, we have had to catch up by way of this "bridge process" in hopes of moving forward collaboratively and effectively.

# **ICMRESOLUTIONS**

#### **Budget Request**

The required time through October 18<sup>th</sup> has cost approximately \$62,176, after \$4,312.50 in voluntary reductions, against the original \$63,250 budget. The project has been up for 11.5 weeks. The average weekly cost has been approximately \$5,400. If the project is extended for 19 weeks as proposed, the additional cost estimate is a function of how similar the work demands will be based upon the past and the additional work. For context, the following table provides three assumptions for your consideration.

Assuming Work as a	Additional	Total
Percentage of the	Budget	Project
Current Rate	Needed	Budget
100%	\$102,714	\$165,964
75%	\$77,036	\$140,286
50%	\$51 <i>,</i> 357	\$114,607

#### **Observations, Assumptions, and Options**

- 1) These projections are a function of several assumptions.
  - a. If the Workgroup dynamics stay the same, it will likely mean the 100% projection is more likely.
  - b. If we move to the "Performing" stage and stay there, the 75% projection would be more likely especially if the subcommittees require minimal ICM facilitation.
  - c. If approximately 1.50 dedicated FTE was made available on top of the 75% projection assumptions, a 62.5% projection, or an additional \$64,196 for a \$127,500 total, may be realistic.
  - d. I do not see a realistic scenario where the 50% projection is viable.
- 2) Unfortunately, I cannot give you a reliable prediction as to which assumption is more likely to be accurate. Between now and your Tuesday meeting, I will sharpen my analysis in hopes of providing more clarity.
- One option could include reducing the number of deliverables to the bare essentials. That would require a deeper analysis but, subject to your direction, it can be presented for your consideration at the following Board meeting.

#### Conclusion

I will be at your October 25<sup>th</sup> meeting to provide more information, brainstorm options, and answer your questions. I am available at (503) 314-1156 between now and your meeting, including afterhours and over the weekend.

Thank you for considering both the updated workplan and this budget request.

#### **REDICK Daniel**

From: Sent:	Sam Imperati <samimperati@icmresolutions.com> Friday, October 21, 2022 1:17 PM</samimperati@icmresolutions.com>
То:	
Cc:	WYSE Nancy; MALONE Patrick; AUGEROT Xanthippe; KERBY Joseph; NICHOLS Darren; CRONEY
	Vance M; VERRET Greg J; WILLIAMS Inga; REDICK Daniel; GROGAN Cory; Amelia Webb
Subject:	BCTT Update
Attachments:	Proposed BCTT Meeting and Subcommittee Workplan Updated 10-20-22.pdf; BCTT Project Extension and Budget Request Memo 10-20-22.pdf

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

#### Greetings:

1) Daniel set up the subcommittee pages on the project website and the links have been added below so you have everything in one place.... Thanks, Daniel!

Topic A.1. Subcommittee Meeting: Landfill Size/Capacity/Longevity Oct 25, 2022 10:30 – 12:00 PM Pacific Time

Join Zoom Meeting <u>https://uoregon.zoom.us/j/91563455436</u> Meeting ID: 915 6345 5436 Website: <u>A.1. Landfill Size/Capacity/Longevity</u>

Topic A.2. Subcommittee Meeting: Past CUP Conditions Oct 24, 2022 03:30 – 5:00 PM Pacific Time

Join Zoom Meeting <u>https://uoregon.zoom.us/j/96343643745</u> Meeting ID: 963 4364 3745 Website: <u>A.2. Past CUP Conditions</u>

Topic A.3. Subcommittee Meeting: Legal Issues and Topic B.1. Land Use Review Oct 25, 2022 03:00 – 4:30 PM Pacific Time Join Zoom Meeting <u>https://uoregon.zoom.us/j/95617560955</u>

Meeting ID: 956 1756 0955 Website: <u>A.3. Legal Issues and B.1. Land Use Review</u>

Topic C.1. Subcommittee Meeting: SMMP Oct 24, 2022 01:00 – 2:30 PM Pacific Time Join Zoom Meeting <u>https://uoregon.zoom.us/j/97129338944</u> Meeting ID: 971 2933 8944

#### Website: C.1. Sustainable Materials Management Plan (SMMP)

- 2) On Monday I notified you after I learned the Board was going to consider a Workplan Update. I acknowledge I did not provide an opportunity to get your feedback in advance, but there was simply no time, and frankly, no choice but to alert them ASAP about the need for an extension with a proposed (not final) concept... sorry. They provided *initial* input during their 10/21/22 meeting, <u>https://soundcloud.com/user-596501156/october-18-2022-board-of-commissioners-meeting</u>, and asked that it be brought back on 10/25/22 for further discussion with an accompanying budget proposal. www.co.benton.or.us/sites/default/files/fileattachments/board of commissioners office/meeting/8244/221025 tu agenda.pdf. I've attached the updated workplan for your convenience. I've also attached the accompanying extension/budget request.
- 3) I encourage you to attend Tuesday's meeting and share your points of view.
- 4) Have a great weekend!

Thanks, Sam



11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: Sam Imperati

Sent: Thursday, October 20, 2022 12:57 PM
To:

Cc: WYSE Nancy <nancy.wyse@Co.Benton.OR.US>; MALONE Patrick <Pat.Malone@Co.Benton.OR.US>; AUGEROT Xanthippe <Xanthippe.Augerot@Co.Benton.OR.US>; KERBY Joseph <Joseph.Kerby@Co.Benton.OR.US>; NICHOLS Darren <darren.nichols@Co.Benton.OR.US>; CRONEY Vance M <Vance.M.CRONEY@Co.Benton.OR.US>; VERRET Greg J <Greg.J.VERRET@co.benton.or.us>; WILLIAMS Inga <Inga.Williams@Co.Benton.OR.US>; REDICK Daniel <daniel.redick@Co.Benton.OR.US>; GROGAN Cory <cory.grogan@Co.Benton.OR.US>; Amelia Webb

Subject: RE: BCTT Update and Subcommittees

Good Afternoon:

The Agenda and Materials for our 10/27/22 meeting are scheduled to go out on Monday evening. The major activities between now and then are the subcommittee meetings.

We appreciate the prompt replies from the subcommittee members. These Zoom kickoff meetings will be recorded, and the dates/times follow. (We did our best to accommodate everyone's schedule but were not 100% successful... sorry!)

Topic: C.1. Subcommittee Meeting: SMMP Oct 24, 2022 01:00 – 2:30 PM Pacific Time Join Zoom Meeting <u>https://uoregon.zoom.us/j/97129338944</u> Meeting ID: 971 2933 8944

Topic: A.3. Subcommittee Meeting: Past CUP Conditions Oct 24, 2022 03:30 – 5:00 PM Pacific Time Join Zoom Meeting <u>https://uoregon.zoom.us/j/96343643745</u> Meeting ID: 963 4364 3745

Topic: A.1. Subcommittee Meeting: Landfill Size/Capacity/Longevity Oct 25, 2022 10:30 – 12:00 PM Pacific Time

Join Zoom Meeting <u>https://uoregon.zoom.us/j/91563455436</u> Meeting ID: 915 6345 5436

Topic: A.3. Subcommittee Meeting: Legal Issues & B.1. Land Use Review Oct 25, 2022 03:00 – 4:30 PM Pacific Time

Join Zoom Meeting <u>https://uoregon.zoom.us/j/95617560955</u> Meeting ID: 956 1756 0955

I have attached the updated Workplan. Please note the Board has not formally adopted the new schedule, but the subcommittee tasks for next week are valid. Daniel is creating a web location for each subcommittee where all the relevant documents will be posted for ease of review and updating.

Here is the Working Agenda for each kickoff meeting.

- 1) Welcome and Introductions (5 minutes)
- 2) Review Subcommittee Tasks (5 minutes)
- 3) Process Protocols and Goals (5 minutes)
- 4) Overview of Documents(s) (10 minutes)
- 5) Discussion (40 minutes)
- 6) BCTT 10/27/22 Meeting Reports (20 minutes)
- 7) Schedule 2 to 3 Additional Meetings (and Logistics) in November (5 minutes)
- 8) Adjourn

Thanks, Sam

#### CM Sam Imperati, JD | Executive Director

11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 <u>SamImperati@ICMresolutions.com</u> ICMresolutions.com

#### **REDICK Daniel**

From:	Sam Imperati <samimperati@icmresolutions.com></samimperati@icmresolutions.com>
Sent:	Monday, October 24, 2022 9:15 PM
То:	Mark Yeager; Knocke, William; Rough, Ginger; Benton County Talks Trash
Cc:	'Paul Nietfeld'; 'Marge'; REDICK Daniel; Sam Imperati;
	BMay@co.marion.or.us; ssanderson@co.linn.or.us;
	WBromann@republicservices.com
Subject:	FW: BCTT Subcommittee A.1: suggestions for work focus
Attachments:	DRAFT Landfill Service Life Size Capacity Longevity Sustainability - Coffin Butte Landfill Sub-
	Committee 10-9-2022.docx; Nietfeld_memo_to_SC_A1_24Oct2022.pdf

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

This just in... Thanks!

#### CM Sam Imperati, JD | Executive Director



11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: crgilbert@comcast.net <crgilbert@comcast.net>

Sent: Monday, October 24, 2022 9:05 PM

 To: 'Paul Nietfeld'
 >; 'Marge'
 'REDICK Daniel'

 <daniel.redick@co.benton.or.us>; Sam Imperati <samimperati@icmresolutions.com>; BMay@co.marion.or.us;

 ssanderson@co.linn.or.us;

 Subject: RE: BCTT Subcommittee A.1: suggestions for work focus

Hi Paul,

Thank you for your e-mail.

I would also appreciate the other members time to review my memo that may serve as reasonable information for the subject matter under consideration by the sub-committee.

I do appreciate the other members memos that are footnoted in the proposed BCTT Meeting and Subcommittee Workplan dated 10-17-22.

Thank you.

**Chuck Gilbert** 

 From: Paul Nietfeld 

 Sent: Monday, October 24, 2022 5:27 PM

 To: Marge 
 REDICK Daniel <<u>daniel.redick@co.benton.or.us</u>>; Sam Imperati

 <samimperati@icmresolutions.com>;
 BMay@co.marion.or.us; ssanderson@co.linn.or.us;

Subject: BCTT Subcommittee A.1: suggestions for work focus

Attached please see a memo outlining my suggestions for work focus that could serve as a discussion point in tomorrow's meeting.

Thank you, Paul Nietfeld

#### **REDICK Daniel**

From:	Sam Imperati <samimperati@icmresolutions.com></samimperati@icmresolutions.com>
Sent:	Thursday, October 20, 2022 12:12 PM
То:	N Whitcombe
Cc:	REDICK Daniel; Benton County Talks Trash
Subject:	RE: Waiting on Daniel for accuracy check on history dicunent

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

#### Nancy,

Your meeting handout will be added to the meeting minutes, so the record is complete. I will attach your updated version, as well, if you get it to me by Noon on Monday.

#### Thanks, Sam



#### CM Sam Imperati, JD | Executive Director

11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: N Whitcombe
Sent: Tuesday, October 18, 2022 12:33 PM
To: Sam Imperati <samimperati@icmresolutions.com>
Cc: REDICK Daniel <daniel.redick@co.benton.or.us>; Benton County Talks Trash
<BentonCountyTalksTrash@co.benton.or.us>
Subject: Re: Waiting on Daniel for accuracy check on history dicunent

That is my work product and I do not authorize scanning it and re-releasing it to the workgroup until it can be checked it for accuracy. Thank you.

On Tue, Oct 18, 2022 at 11:53 AM Sam Imperati <<u>samimperati@icmresolutions.com</u>> wrote:

Nancy,

I have discussed this with the County, and your original handout is considered a public record.

Thanks, Sam

## resolutions 1152 (P) 5

Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

 From: N Whitcombe

 Sent: Monday, October 17, 2022 11:34 AM

 To: Sam Imperati <samimperati@icmresolutions.com</td>

 Cc: REDICK Daniel <daniel.redick@co.benton.or.us</td>

 SentonCountyTalksTrash@co.benton.or.us

 Subject: Re: Waiting on Daniel for accuracy check on history dicunent

That is my work product and I do not authorize scanning it and re-releasing it to the workgroup until it can be checked it for accuracy. Thank you.

On Mon, Oct 17, 2022 at 11:09 AM Sam Imperati <<u>samimperati@icmresolutions.com</u>> wrote:

Nancy,

1. You handed it out to members at the last Workgroup meeting, so it's already part of the public record.

2.Staff does not have the bandwidth, nor is it their role, to do an "accuracy check" for member and public submittals outside of the subcommittee vetting process noted below.

3. The subcommittee charges and evolving list of relevant documents for review will be going out tomorrow, so we will add your new version when it arrives.

Thanks, Sam



Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: N Whitcombe Sent: Monday, October 17, 2022 10:39 AM To: Sam Imperati <<u>samimperati@icmresolutions.com</u>> Cc: REDICK Daniel <<u>daniel.redick@co.benton.or.us</u>>; Benton County Talks Trash <<u>BentonCountyTalksTrash@co.benton.or.us</u>> Subject: Re: Waiting on Daniel for accuracy check on history dicunent

I think this is my work product and I do not authorize release until I have an opportunity to make corrections. Sam for some reason is unwilling to let me work with you to do this, Daniel, so I have offered to do it myself, but have not been able to get to it yet because of other obligations.

On Mon, Oct 17, 2022 at 10:34 AM N Whitcombe

wrote:

I would like the opportunity to make corrections to my draft before it is released.

On Mon, Oct 17, 2022 at 10:26 AM Sam Imperati <<u>samimperati@icmresolutions.com</u>> wrote:

Daniel,

Here is the rest of the chain. For now, please scan, post, and reference Nancy's handout from the last meeting.

Thanks, Sam



From: N Whitcombe

Sent: Sunday, October 16, 2022 3:32 PM To: Sam Imperati <<u>samimperati@icmresolutions.com</u>> Subject: Re: Waiting on Daniel for accuracy check on history dicunent

Oh, OK, I'll just check it for accuracy myself

On Sun, Oct 16, 2022 at 2:46 PM Sam Imperati <<u>samimperati@icmresolutions.com</u>> wrote:

Nancy,

Is this email following up on my email to you asking for a copy of your meeting handout?

If yes, Daniel will not be doing an accuracy check on it. What he will do is combine the various histories that we have received with the one he drafted. The omnibus version will go to a subcommittee for vetting before it's brough back to the full Workgroup for formal polling.

If this is not a follow-up, please advise so I can respond.

Thanks, Sam

Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: N Whitcombe
Sent: Sunday, October 16, 2022 2:37 PM
To: Sam Imperati <<u>samimperati@icmresolutions.com</u>>
Subject: Waiting on Daniel for accuracy check on history dicunent

Hope to connect with him monday
-N J Whitcombe
-N J Whitcombe
-N J Whitcombe
-N J Whitcombe

--N J Whitcombe

--N J Whitcombe

#### **REDICK Daniel**

From:	NICHOLS Darren
Sent:	Tuesday, October 25, 2022 10:04 AM
То:	Benton County Talks Trash; 'Sam Imperati'
Subject:	Whitcombe Memo - 10.6.2022
Attachments:	Whitcombe memo - History of Coffin Butte landfill - 10.6.2022.pdf

Sam et al,

Here is a copy of the memo Nancy Whitcombe shared with workgroup members, and with one or more commissioners and select staff at the BCTT workgroup meeting on October 6, 2022.

Darren

Community Development has moved to the Kalapuya Building at <u>4500 SW Research Way, 2nd Floor</u>. Come see the new space; we are officially open for business!



Darren Nichols Community Development Director Phone: 541-766-6394 Email: darren.nichols@co.benton.or.us

www.co.benton.or.us



#### 541-745-5792 MONDAY - SATURDAY E00 AM - 500 PM CLOSED SUNDAY

# offin Rutto Landfil

**REPUBLIC**°

# **Coffin Butte Landfill**

A Regional Landfill Owned and Operated by Republic Services

# Location

- 28971 Coffin Butte Road
- On Hwy 99 about 7 miles north of Corvallis
- Monday-Saturday, 8am-5pm
- Serves Benton, Linn, Polk, and Marion Counties





# History

WWII dump site – Camp

Adair 1944-45

- 40s 70's clay foundation laid
- 80s Regional landfill, subtitle D, RCRA\*

\*The Resource Conservation and Recovery Act (RCRA) is the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste. The law describes the waste management program mandated by Congress that gave EPA authority to develop the RCRA program.

- 2000 Allied Waste Procured landfill
- 2008 Allied Waste Republic Services Merger





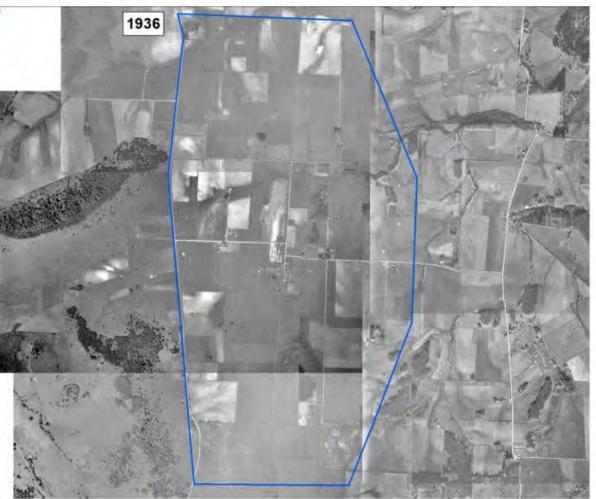
ALLIED WASTE

Creating an Environmental Services Leader

July 2008

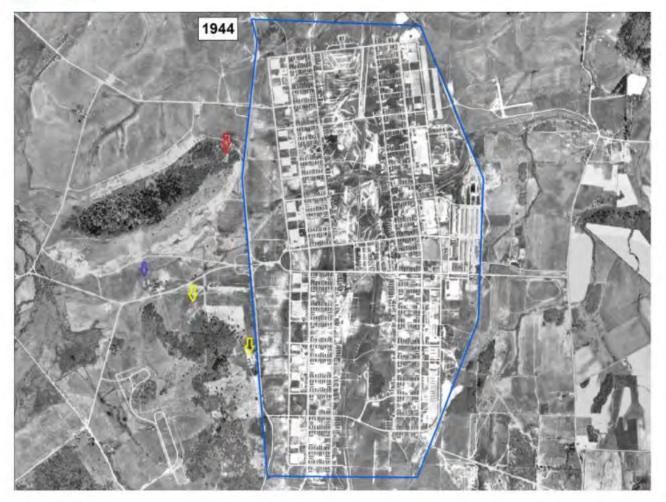






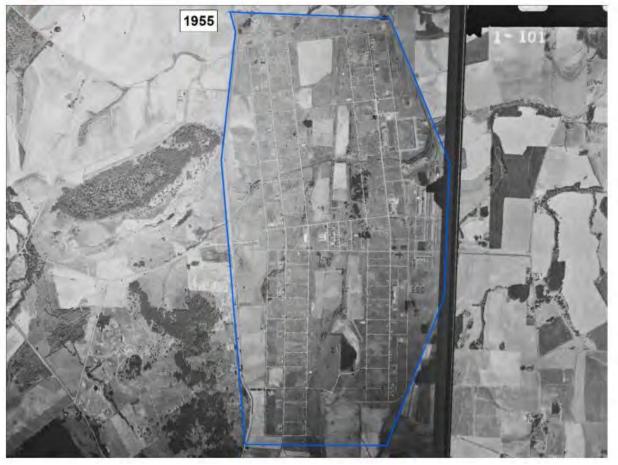


## 



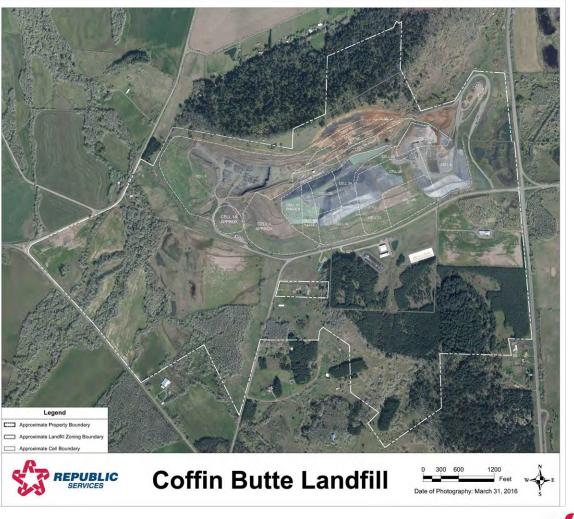


## 





## Current





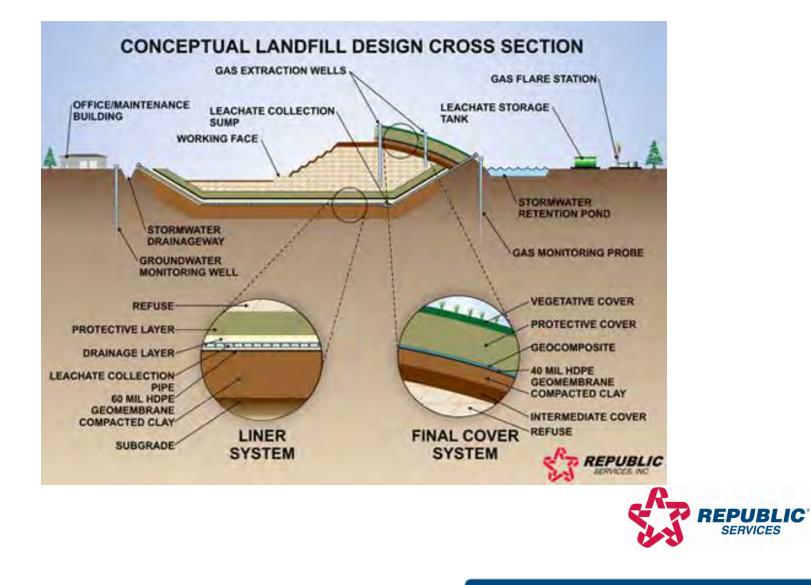
# What is a cell?

- Leachate collection
- Life span
- Cells
- Liner heat welded, pressure/stress test
- ADC





## **Cell Design**



## **Gas Collection System**

- 275 Gas Collecting Wells located on Coffin Butte Landfill
- · Gas goes to PNGC, energy co-operative.
- · Landfill Gas collected powers 5 large generators.
- Enough gas is collected to power 4,000 homes annually.
- Coffin Butte was the second landfill in Oregon to install a gas collection system.
- A flair, located at the PNGC facility removes any excess gas.

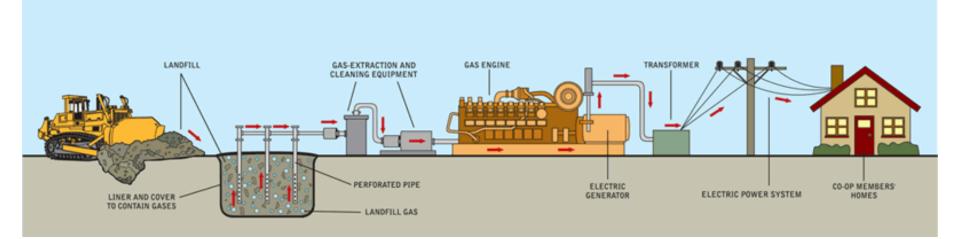








# **Energy Generation**





# Monitoring and Other Requirements

- Ground and surface/storm water
- Air quality
- ADC 12"
- Leachate collection/disposal



State of Oregon Department of Environmental Quality





# By the Numbers

# **Regional Landfill**

- 780 acres in total
- Waste on about 250 acres
- 3 restored wetland areas
- 2 leachate collection ponds, collecting 25-30 Million gallons per year.



- 4,000 tons of waste per day
- 1,000,000 tons/year, including;
  - MSW: (Municipal Solid Waste)
  - C&D: (Construction & Demolition Waste)
  - Special Waste: Asbestos, Industrial Waste, Environmental Clean up, Contaminated Soils and sludge from waste water treatment plants.



# **MSW & Special Waste**

- Municipal Solid Waste
- Special Waste
  - Asbestos
  - Industrial Waste
  - Environmental
     Cleanup Material
  - Contaminated Soil
  - WWTP Waste





# Life Span and Future

Knife River: Currently mining our next cell on the West side of the landfill.

Life Span: \*30 - 50 years \*Reducing, Reusing, and Recycling play a big role in extending the life span of Coffin Butte.







# Recycling

- Commingle
- Glass
- Cardboard
- Tires\*
- Oregon E-Cycles
- Car batteries
- Motor oil
- Appliances\*
- Yard debris\*
- Scrap metal \*for α fee











# **Beyond the Landfill**

- Secure Your Load initiative in partnership with Benton Count, Republic promotes the Secure your Load day, where customers who have properly secure loads receive a free rachet strap. Future Plans in the making.
- Litter Pickup monthly Republic • Services and Benton County employees work together to ensure the road near the landfill is clear of debris

# THE GROWING DANGER OF DEBRIS ON U.S. ROADS

# "Secure Your Load Day" is June 6 Bring a secured load to Coffin Butte Landfill June 6-8 and receive a giveaway!







# **Questions?**



## **RECORD OF DECISION**

For

COFFIN BUTTE LANDFILL Corvallis, Oregon



**Prepared By** 

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY Western Region Office

October, 2005

1.	IN	TRODUCTION	1
	1.1	PURPOSE	1
	1.1	SUMMARY OF THE SELECTED REMEDIAL ACTION	
_			
2.	SI	TE HISTORY AND DESCRIPTION	3
	2.1	SITE LOCATION	3
	2.2	SITE HISTORY	3
	2.3	PHYSICAL SETTING	3
	2.3.1	Climate	
	2.3.2	Hydrogeologic Setting	
	2.3.3	Groundwater Occurrence and Flow	4
3.	R	ESULTS OF INVESTIGATIONS	5
	3.1	CHRONOLOGY OF SITE INVESTIGATIONS	5
	3.2	NATURE AND EXTENT OF CONTAMINATION	
	3.2.1	Cells 1 and 1A	
	3.2.2	Closed Landfill	6
	3.2.3	Surface Water	6
	3.3	LOCALITY OF FACILITY (LOF)	
	3.4	LAND AND BENEFICIAL WATER USE	
	3.4.1	Land Use	
	3.4.2	Beneficial Water Use	
	3.5	RISK ASSESSEMENT	
	3.5.1	Conceptual Site Model	
	3.5.2	Chemicals of Potential Concern (COPCs)	
	3.5.3	Human Health Data Screening Evaluation	
	3.5.4 3.5.5	Ecological Scoping Assessment Hot Spot Determination	
		*	
4.	R	EMEDIAL ACTION OBJECTIVES AND CLEANUP LEVELS	
	4.1	REMEDIAL ACTION OBJECTIVES	
	4.2	REMEDIAL ACTION CONCENTRATION LIMITS (RACLS)	11
5.	D	ESCRIPTION OF REMEDIAL ACTION ALTERNATIVE	13
	5.1	BACKGROUND OF ACTIONS IMPLEMENTED TO DATE	13
	5.2	ELEMENTS OF LANDFILL REMEDY	
	5.2.1	Access Restrictions	
	5.2.2	Containment	
	5.2.3	Leachate Collection	15
	5.2.4	Landfill Gas Control	16
	5.2.5	Water Well Removal	
	5.2.6	Property Purchase	16
6.	E	VALUATION OF REMEDIAL ACTION ALTERNATIVE	16
	6.1	OVERVIEW OF EVALUATION CRITERIA	16
	6.1.1	Protectiveness	17
	6.1.2	Balancing Factors	
	6.2	EVALUATION OF PROTECTIVENESS	
	6.3	EVALUATION OF BALANCING FACTORS	
	6.3.1	Cost Effectiveness/Reasonableness of Cost	
	6.3.2	Permanent Solutions and Alternative Technologies or Resource Recovery Technologies	20

6.	3.3Implementability/Implementation Risk3.4Effectiveness	
6.	3.4 Effectiveness	21
7.	SELECTED REMEDIAL ACTION ALTERNATIVE	
7.1	DESCRIPTION OF THE SELECTED ALTERNATIVE	
7.2	REMEDIAL ACTION CONCENTRATION LIMITS	
7.3	POINTS OF COMPLIANCE	
7.4	PERFORMANCE MONITORING	
8.	PEER REVIEW SUMMARY	23
9.	PUBLIC NOTICE AND COMMENTS	23
10.	DOCUMENTATION OF SIGNIFICANT CHANGES	24
11.	STATUTORY DETERMINATIONS	24
12.	SIGNATURE OF WESTERN REGION ADMINISTRATOR	24
A DDEN	IDIX A	25

Coffin Butte Landfill, located at 28972 Coffin Butte Road, north of Corvallis, Oregon (Figure 1-1), underwent a series of groundwater investigations beginning in 1992 that characterized the site in response to a number of Oregon Department of Environmental Quality (DEQ) solid waste permit requirements. The principal objective of the investigations was to further characterize the hydrogeology and groundwater quality downgradient of inactive and active areas of the landfill where volatile organic compounds had been detected (EMCON, 1994a, 1996a, 1996b; DEQ, 1995). At the conclusion of the investigations, it appeared that the preventative actions taken in response to the discovery of these releases (such as capping, leachate collection, and landfill gas collection) were successful in reducing the amounts of chemicals further released from the landfill cells. Until now, however, DEQ had not formally accepted these preventative actions as the final remedy for the site.

DEQ has two primary sets of rules used to remediate contaminated sites. The Environmental Cleanup Rules (OAR 340-122 et seq.) focus on "hazardous" (e.g., solvents, heavy metals) substance remedial action, while the Groundwater Quality Protection Rules (OAR 340-040 et seq.) apply to both "hazardous" and "non-hazardous" (e.g., calcium, iron, nitrate) substances. Historically, remedial action at landfills in Oregon have been addressed using the Groundwater Quality Protection Rules via DEQ's Solid Waste Program, whereas the majority of cleanups conducted in the state are accomplished using the Environmental Cleanup Rules via DEQ's Cleanup Program.

Based on DEQ's strategic efforts to better coordinate between programs, to provide consistent cleanup decisions across program boundaries, and to reduce the amount of duplicative efforts, DEQ is selecting a set of remedial alternatives so they are consistent with both regulations. In addition, we have closely coordinated this Selected Remedial Action with modifications to the existing solid waste disposal permit so that site-wide sampling and analysis is consistent with the recommendations in this document.

Because Valley Landfills, Inc. (VLI; owner of the Coffin Butte Landfill) recognizes that the landfill will be in place for a long period of time and is interested protecting human health and the environment to a greater degree than required by DEQ rules, they proposed to implement supplemental remedial options and to voluntarily adopt groundwater cleanup goals that will meet federal drinking water standards.

# 1.1 PURPOSE

This document presents the selected remedial action for the Coffin Butte Landfill. As discussed above, the remedial action was developed in accordance with Oregon's environmental cleanup law and rules (Oregon Revised Statutes (ORS) 465.200 et seq. and Oregon Administrative Rules (OAR) Chapter 340, Division 122, Sections 010 through 115) and with Oregon's Groundwater

Protection Act and Groundwater Quality Protection Rules (ORS, 468B.150 to 468B.190 and OAR 340-0040-0001 through -0060).

The selected remedial action is based on the administrative record for this site. A copy of the Administrative Record Index is attached as Appendix A. This report summarizes more detailed information contained in the Remedial Investigation (RI) and Additional Hydrogeologic Investigation (AHI) and supplemental reports, and the Focused Risk Assessment and Feasibility Study (RA/FS) completed under the Oregon Department of Environmental Quality (DEQ) Solid Waste Permit No. 306.

# 1.2 SUMMARY OF THE SELECTED REMEDIAL ACTION

The selected remedial action addresses the presence of volatile organic compounds (VOCs) in contaminated groundwater at the Coffin Butte Landfill. The existing remedial actions (e.g., landfill capping, leachate collection) implemented under the site's Solid Waste Disposal Permit are protective of present public health, safety, and welfare and the environment because there were no current unacceptable risks identified by the risk screening for the exposure pathways. However, to maintain a high level of protectiveness and to provide for further improvement in groundwater quality beyond the intent of the Groundwater Quality Protection Rules (GWQPRs), VLI voluntarily has supplemented these existing remedial actions with additional actions. The overall remedy employs the following existing and additional elements:

- Landfill closure and cover with an engineered cap on Cell 1A and parts of Cell 1. The eastern slope of Cell 1 will retain interim plastic cover until it is covered with the base liner of Cell 3D. The Closed Landfill will be maintained with soil.
- Surface controls to prevent surface water run-on and infiltration of surface water through the waste, and to slow down the rate of cap erosion.
- Access restrictions to areas of waste by fencing around the landfill units.
- Leachate collection from Cell 1 and management by various strategies.
- Landfill gas (LFG) collection from Cell 1 and its use for supplemental electricity generation.
- Deed restrictions on property within the "locality of the facility" (LOF) to prevent development of the groundwater resource.
- Decommissioning two water supply wells to prevent their future use.
- Property purchases as buffer around the landfill.

In addition to these actions, the solid waste permit requires groundwater monitoring downgradient of the landfill cells and LFG monitoring around the landfill cells and in structures to assess protectiveness between the landfill and potential receptors.

## 2.1 SITE LOCATION

Coffin Butte Landfill is approximately 10 miles north of Corvallis, just west of State Highway 99W in Benton County (Figure 1-1). The landfill takes its name from Coffin Butte, a hill that rises north of the landfill to an elevation of over 700 feet above mean sea level (msl). Elevations in flat valley areas south of the butte are approximately 250 feet msl. Access is via Coffin Butte Road (oriented roughly east-west), which runs just south of the active landfill cells. The facility is in Section 18, Township 10 South, Range 4 West and Section 13, Township 10 South, Range 5 West, Willamette Meridian and Baseline.

## 2.2 SITE HISTORY

Landfilling first began in the 1940s by the Army as part of waste disposal for Camp Adair, just east of State Highway 99W. Waste was placed in a quarry on the southwest flank of Coffin Butte, where the landfill operated as an open burn dump (referred to as the "Closed Landfill"). Wastes were received in that area until approximately 1975, when VLI purchased the Coffin Butte site. In 1977, the Closed Landfill was officially capped with soil and closed. Subsequent landfill development progressed eastward across the site. Since 1975, VLI has filled in Cells 1A and 1, with most waste being placed in Cell 1 beginning in 1977. Cell 1A (approximately 4 acres) primarily handled waste from Teledyne Wah Chang and was not used for disposal after 1988. Cell 1 (approximately 30 acres) has a clay bottom liner and leachate collection system that conveyed the leachate to an adjacent holding pond. Placement of waste in Cell 1 stopped in early 1993, when cell 2B was constructed. Cell 1A has gone through final closure, and Cell 1 has been closed along the southern, central, and western parts. Interim cover will continue to blanket the eastern part of Cell 1 until it is tied into the western part of Cell 3.

Cells 1, 1A, and the Closed Landfill are collectively referred to as the west-side cells and the subject of this staff report. Active landfilling in Subtitle D-designed cells (Cells 2 and 3), is currently proceeding on the southeast slope of Coffin Butte in the east-side cells and is outside the area requiring remedial action. Figure 2-1 shows the facility layout and monitoring points.

## 2.3 PHYSICAL SETTING

#### 2.3.1 Climate

The area receives approximately 42 inches of precipitation annually. The majority of the precipitation falls between November and March, with monthly totals during those months from 4.5 to over 7 inches, the highest typically occurring in January. The annual average temperature is approximately 52°F.

#### 2.3.2 Hydrogeologic Setting

The landfill is situated along the south flank of Coffin Butte (Figure 2-1). The upper third (approximately) of the butte consists of steep grass-covered slopes, the middle third of exposed bedrock with little vegetation, and the lower third of gentle, soil-covered slopes. Generally, the steeper slopes are underlain by basalt bedrock and the lower, flatter slopes on the flanks of Coffin Butte are underlain by alluvium that generally consists of silty clay to clayey silt with variable amounts of thin, interbedded sands and silty to sandy gravels (commonly referred to as Willamette Silt). The lower slopes transition to relatively flat valleys where alluvium is transected by small drainages or creeks. Solid waste in Cells 1/1A and the Closed Landfill is generally inferred to rest on bedrock, which in places was lined with clay (e.g., in Cell 1).

There are two principal water-bearing units: unconsolidated alluvium and bedrock volcanics. Groundwater occurs in both units, although the alluvial deposits are absent or unsaturated over much of the site where landfill occurs. Where both units are present, they are not separated by a confining layer but are hydraulically interconnected. The two units are monitored separately by groundwater monitoring wells.

#### 2.3.3 Groundwater Occurrence and Flow

Depth to groundwater depends on season and topography. In site wells, the groundwater depths range from over 80 feet below the ground surface midway up the slopes of Coffin Butte (in bedrock) to less than 5 feet in flat lowland areas southwest of the butte (in alluvium near the creek). Seasonal fluctuations vary, depending on the hydrogeologic position of the monitoring point. In 2002, the seasonal changes downgradient of Cells 1/1A averaged approximately 4 feet (consistent with past years), with the lowest groundwater elevations in late summer to fall and the highest in winter and spring.

The direction of groundwater flow is controlled by the topographic setting of Coffin Butte and Poison Oak Hill and the intervening low areas. Groundwater in the bedrock generally flows downslope from the hills until it reaches a groundwater divide near the southeast corner of Cell 1 and the leachate lagoon. At the divide, groundwater flows toward the east and west, generally following the long axes of the valleys. Groundwater flow direction in the saturated portion of the alluvium mimics the underlying bedrock. In areas dissected by surface drainages, groundwater in the upper part of the alluvial aquifer discharges to surface creeks (such as Soap Creek) and during the summer months provides base flow. Near upland areas, groundwater in bedrock also can provide base flow to surface creeks. In Soap Creek, between sampling points S-2 and S-4, weathered basalt bedrock is exposed in the stream bed just below alluvial sediments.

Groundwater contours for the western part of the site are illustrated on Figure 2-2. Horizontal gradients measured downgradient of Cells 1 and 1A in 2002 were between 0.01 and 0.002 foot per foot. This results in estimates of groundwater velocity downgradient of Cell 1 between 40 to 180 feet per year (ft/yr) in the spring and 50 to 240 ft/yr in the fall. Downgradient of the Closed Landfill, groundwater velocity estimates range in the alluvium from less than 10 up to 500 ft/yr, and in bedrock from 400 to over 1,900 ft/yr.

# 3.1 CHRONOLOGY OF SITE INVESTIGATIONS

Coffin Butte Landfill underwent a series of groundwater investigations beginning in 1992 that characterized the site in response to a number of DEQ solid waste permit requirements. The principal objective of the investigations (referred to as RI/AHI) was to further characterize the hydrogeology and groundwater quality downgradient of inactive and active areas of the landfill where VOCs had been detected. After submitting the RI and AHI report (EMCON, 1994a), the DEQ suspended review by the solid waste program until the agency's site assessment section (SAS) could review past reports on Coffin Butte Landfill and determine if the groundwater impacts related to the landfill posed a significant threat to public health, safety, welfare, or the environment. The SAS completed its review in July 1995, at which time it provided findings of its review and recommendations (DEQ, 1995). Subsequent investigations in response to the SAS review and comments on the original RI report included a Preliminary Assessment (EMCON, 1996a) that discussed the source and extent of groundwater impacts downgradient of the closed landfill and a revised addendum to the RI (EMCON, 1996b), which focused on supplementing findings and conclusions for the area downgradient of Cells 1 and 1A, and the leachate lagoon.

# 3.2 NATURE AND EXTENT OF CONTAMINATION

The following discussion, which is based on the 2002 annual report (McKenna Environmental, 2003), focuses on defining the locality of facility (LOF). The data set relevant to the discussion can be found in Appendix A of the RA/FS (Tuppan Consultants, 2003).

#### 3.2.1 Cells 1 and 1A

Groundwater quality along the compliance boundary<sup>1</sup> of Cells 1 and 1A has been relatively stable the past few years. Downgradient of Cell 1A, VOCs that continue to be detected include chloroethane, *cis*-1,2-dichloroethene (*cis*-1,2,-DCE), 1,1-dichloroethane (1,1-DCA), and vinyl chloride. Each of the VOC concentrations has peaked and stabilized or is declining, with some no longer being detected (e.g., chloroethane and vinyl chloride in MW-10D). Downgradient of Cell 1, tetrachloroethene (PCE) had been routinely detected in well MW-12S, and since 1994 had shown an upward trend. In October 2000, the concentration peaked at 25 micrograms per liter ( $\mu$ g/L). Since then, concentrations appear to have stabilized between 17 and 27  $\mu$ g/L. Trichloroethene (TCE) is also still being detected in MW-12S at concentrations up to 3.4  $\mu$ g/L.

<sup>&</sup>lt;sup>1</sup> The term "compliance boundary" is defined in OAR 340-0040 as the "vertical plane along the waste management area boundary". The current solid waste permit uses the following interim compliance wells to monitor the compliance boundary: MW-1D, MW-3D, MW-10S, MW-10D, MW-11S, MW-11D, MW12S, and MW-12D. Groundwater quality in the vicinity of the closed landfill will be monitored for compliance at wells MW-20 and MW-21.

Approximately 300 to 400 feet downgradient of the compliance boundary, groundwater quality shows a distinct improvement in detection wells MW-17 through MW-19. VOCs have not been detected in these wells indicating attenuation between the compliance boundary and the downgradient detection wells.

With respect to inorganic compounds, groundwater in this area is characterized by elevated concentrations of dissolved metals (e.g., calcium and magnesium), chloride, and total dissolved solids (TDS) downgradient of Cell 1A and low concentrations of inorganic compounds downgradient of Cell 1. Trace metals concentrations are low to nondetect in this area, both along the compliance boundary wells and in the detection wells farther downgradient.

#### 3.2.2 Closed Landfill

The Closed Landfill is monitored by two detection wells: one completed in the alluvium (MW-20), and one completed in bedrock (MW-21). Of three historically detected VOCs in MW-21, *cis*-1,2-DCE has not been detected since May 1995, 1,2-dichlorobenzene has been nondetect the last three years, and chlorobenzene declined to nondetect in 2001. No VOCs have been detected in MW-20 since 1995.

For inorganic compounds, the alluvial well typically shows variable water quality associated with seasonal fluctuations of the water table. Water quality for the indicator parameters such as chloride has trended downward the last ten years and is currently stable. The bedrock well does not exhibit seasonal fluctuation. Trace metals in groundwater downgradient of the Closed Landfill have been low to nondetect throughout the history of monitoring, and do not suggest trends related to landfill-related impacts.

#### 3.2.3 Surface Water

Surface water is monitored upstream (S-1) and downstream (S-2) in Soap Creek to test for potential impacts from the west side of the facility. Historically, inorganic parameters (chloride, Ca, Mg, and sodium [Na]) show seasonal changes in concentration as great as 8 mg/L (e.g., for chloride), with low concentrations in April (high stream flow) and higher concentrations in October (low stream flow). There are no statistically significant differences between upstream and downstream points for those parameters, with most concentration differences less than 1 mg/L. Inorganic water quality between the two monitoring stations is virtually identical and suggests that discharge of groundwater (from both the alluvium and bedrock) to Soap Creek does not affect surface water quality.

# 3.3 LOCALITY OF FACILITY (LOF)

Delineation of the LOF is based on the extent of impacts and potential migration pathways of site-related chemicals for each affected environmental medium. The LOF for a particular environmental medium includes both the current extent of hazardous substances and the projected future extent if chemicals are expected to migrate. Groundwater is the only medium of

concern at the Coffin Butte Landfill. Surface water in Soap Creek is unaffected by the more mobile and higher concentration inorganic compounds, and therefore was eliminated as a medium of concern. VLI owns all of the property within the proposed LOF.

Downgradient of Cells 1/1A, the LOF in groundwater is defined by the distribution of VOCs. Detection wells MW-17, -18, and -19, where VOCs are not present and inorganic compounds are similar to background, define the downgradient limits of impacts. The static to declining VOC concentrations in compliance wells at the edge of waste indicate that the VOC plume has stabilized and is not expected to migrate farther downgradient with time. Therefore, the LOF is drawn between the set of compliance and detection wells.

Southwest and downgradient of the Closed Landfill, VOCs are present in MW-21, but not in MW-20. However MW-20 has in the distant past had isolated detections of VOCs and is affected by landfill-related inorganic compounds. Both of these wells were therefore included in the LOF. The downgradient extent of the LOF in groundwater terminates just northeast of Soap Creek, which is not included in the LOF because it does not show impacts from the landfill

# 3.4 LAND AND BENEFICIAL WATER USE

### 3.4.1 Land Use

The LOF is zoned Landfill Site (LS) and Exclusive Farm Use (EFU). The LS zone recognizes the existing landfill and quarry operations in the Coffin Butte area, and allows for its continued use pursuant to DEQ permits, Benton County Code Chapter 23, and an approved Site Development Plan. As defined by Benton County, the EFU zone preserves and protects lands for continued and future commercial agricultural production and related uses, and conserves and protects open space, wildlife habitats, and other uses associated with agriculture. On the basis of LS zoning as defined in the comprehensive plan, and the need to maintain adequate buffer consisting of EFU downgradient of the landfill, the future land use of the LOF is not expected to change.

#### 3.4.2 Beneficial Water Use

Groundwater is currently used by two residences in the area, as well as by the landfill office and scale house for water supply. The status of these current water supply wells, as well as former water supply wells as shown in Figures 2-1 and 2-2, are listed as follows:

• A production well (PW-2) supplies the scale house washroom and is located on the east flank of Coffin Butte. The "Berkland" well supplies water to the landfill office. Both wells are owned by VLI and outside of the LOF, and are classified as non-transient community wells, certified and tested under the drinking water program overseen by Benton County Health Department and the state Department of Human Services.

- The "Merril" well, owned by VLI and outside of the LOF, is used for irrigation of the lawns at the office.
- An older production well (PW-1), located at the southwest corner of Cell 1, was decommissioned in May 2004.
- The "Duplex" well is used as an observation well for groundwater levels only.
- A domestic well, referred to as the Helms well, is southwest of Soap Creek (outside the LOF) and will be used on a short-term basis. This well will be decommissioned as a part of the selected remedial action.

The only other domestic well south of the property is the Phillips well, which is used for domestic supply and limited irrigation during the summer months. Hydraulically, the Phillips well is downgradient of Poison Oak Hill and across a groundwater drainage divide that protects the well from groundwater that could potentially migrate from the landfill. The Phillips well is also outside the LOF.

The primary aquifer is basalt bedrock. The alluvium can also provide limited domestic production. In addition to providing beneficial uses via well pumping, the alluvial and bedrock groundwater discharges to Soap Creek and contributes to the beneficial uses (such as habitat of aquatic life, recreational activities, and the aesthetic appeal of the rivers) of that creek and downstream tributaries.

# 3.5 RISK ASSESSEMENT

### 3.5.1 Conceptual Site Model

The impacted medium of concern has been identified as groundwater. Based on the identified medium of concern and reasonably likely future land and water use, the potential receptors were identified as current and future on-site occupational workers, trenchworkers or trespassers by volatilization of VOCs from groundwater to outdoor or indoor air. One building is present within the LOF, a scale house, which consists of a trailer placed above and separated from the ground by an air space.

Use of groundwater for domestic or industrial purposes is not reasonably likely within the LOF or even within the buffer property downgradient of the LOF, which is owned by VLI. Outside the LOF, domestic and limited summer time irrigation groundwater use occurs at the Phillips well; however it is protected from the landfill impacts by a groundwater drainage divide. Groundwater will be used at the Helms wells for a limited duration at which time it is planned for decommissioning, tentatively in September 2006. There are no other nearby receptors outside the LOF that could potentially be exposed to groundwater from the landfill.

#### 3.5.2 Chemicals of Potential Concern (COPCs)

Chemicals of potential concern (COPCs) were identified to evaluate risks for human and ecological exposure scenarios that may be currently complete and to select chemicals that would act as surrogates for tracking improvement in water quality and for setting long-term water quality goals. Groundwater COPCs are listed below. No COPCs were identified for surface water.

- **VOCS.** COPCs were identified on the basis of detections that exceeded the October 2002 EPA Region 9 preliminary remediation goals (PRGs) for tap water: 1,4-dichlorobenzene (1,4-DCB), chloroethane, PCE, TCE, and vinyl chloride.
- **Trace Metals.** Cadmium was identified as a COPC for trace metals on the basis of exceeding the PRG, even though it also occurs naturally up to  $0.69 \mu g/L$ . Arsenic was identified as a COPC because it occurs naturally at the site and is potentially mobilized in landfill conditions.
- **Dissolved Metals.** Iron and manganese exceeded secondary maximum contaminant levels (SMCLs) in groundwater and were identified as COPCs by exceeding those criteria for aesthetics.
- **Inorganic Compounds.** Chloride and TDS were identified as COPCs, also by exceeding criteria for aesthetics.

#### 3.5.3 Human Health Data Screening Evaluation

The only pathways by which human receptors may be exposed to landfill-related chemicals involve migration of VOCs to either outdoor air or indoor air. Human receptors are unlikely to have direct contact with impacted groundwater, and it is unlikely that these exposure conditions will change in the foreseeable future. To evaluate potential risks that occupational workers may experience if they were to inhale VOCs that have migrated to outdoor or indoor air, the maximum concentrations of COPCs in groundwater were screened against generic risk-based concentrations (RBCs) calculated for volatilization to outdoor air and vapor intrusion into buildings in the DEQ's Risk Based Decision Making Guidance (DEQ, 2003). RBCs not shown in that document for chloroethane and 1,4-DCB were calculated using spreadsheets provided in that guidance. No other COPCs identified (neither inorganic nor metals) volatilize and therefore were not considered further in screening the receptor pathway.

The use of maximum concentrations in groundwater represented a highly conservative screen. None of the concentrations exceeded the screening values and therefore concentrations of VOCs in groundwater are within acceptable risk values. No other chemicals or exposure scenarios were identified in the conceptual site model.

Compound	Maximum (µg/L)	Outdoor Air RBC (µg/L)	Indoor Air RBC (µg/L)
1,4-Dichlorobenzene	2.1	15,000	4,300
Chloroethane	7.2	30,000	5,100
Tetrachloroethene (PCE)	27	8,600	1,300
Trichloroethene (TCE)	3.9	650	110
Vinyl chloride	5	6,200	840

**Comparison of COPC Concentrations with RBCs** 

#### 3.5.4 Ecological Scoping Assessment

The ecological scoping assessment (ESA) was completed in accordance with *Oregon Department of Environmental Quality, Guidance For Ecological Risk Assessment, April 1997.* The ESA found that terrestrial wildlife can potentially contact volatile chemicals that migrate from groundwater to either outdoor air or the air of a burrow. In general, the VOCs and inorganic compounds measured at elevated levels in groundwater at the site have little potential to bioaccumulate in ecological food chains. VOCs tend to rapidly dissipate once present on the surface, and tend not to accumulate in plant or animal tissues. Similarly, if impacted groundwater were to enter Soap Creek, it is possible that aquatic and benthic organisms could contact chemicals in surface water or sediment pore water. Available evidence indicates that these potential ecological exposure scenarios are either incomplete or insignificant. As a result, no further ecological evaluations were completed.

#### 3.5.5 Hot Spot Determination

Oregon cleanup rule OAR 340-122-080(7) requires the identification of "hot spots" of contamination. The rules also require that the remedial action selected for a site treat hot spots to the extent feasible (OAR 340-122-090(4)). Based on the results of the environmental investigations and the risk assessment, no hot spots were identified at the site.

# 4. REMEDIAL ACTION OBJECTIVES AND CLEANUP LEVELS

## 4.1 Remedial Action Objectives

Remedial action objectives (RAOs) are media-specific goals for protecting human health and the environment. They provide the framework for developing and evaluating remedial action options. RAOs developed for the landfill are based on those typical for municipal landfill sites and will maintain protectiveness currently present at the site and attend to further improvements in groundwater quality needed to meet proposed remedial action concentration limits (RACLs). For Coffin Butte, RAOs include:

- Preventing direct contact with landfill contents.
- Reducing contaminant leaching to groundwater.
- Preventing exposure to contaminated groundwater.
- Controlling surface water runoff and erosion.
- Collecting and treating leachate.
- Controlling and treating landfill gas.

# 4.2 Remedial Action Concentration Limits (RACLs)

The site does not pose an unacceptable risk on the basis of identified exposure pathways and concentrations of constituents in groundwater, and for that reason would not necessarily require establishing cleanup levels with the existing remedy in place. However, VOCs and inorganic compounds have affected groundwater quality within the LOF and, therefore, DEQ and VLI agreed that RACLs would be established as the mechanism to measure progress in cleanup of the site.

With the existing remedy being protective, the presumption of setting a RACL is based on the hypothetical and unlikely exposure scenario of domestic use within the LOF. Current ownership and anticipated institutional controls limiting the future residential development on VLI-owned property that buffers the landfill will make it extremely unlikely for domestic use to occur. However, in keeping with a restoration goal to protect groundwater beneficial uses of the highest quality, drinking water standards were selected. The selection is premised on a number of factors. Establishing drinking water standards as RACLs is consistent with OAR-340-40-050(2), which states that concentration limits for existing facilities can be established at any level between background water quality and the numerical groundwater quality reference levels or guidance levels listed in Tables 1 through 3 of the GWQPR. Second, Federal solid waste regulations (CFR 258.55[h]), specifically note that corrective actions at landfills should meet a groundwater protection standard, which should be set at the maximum contaminant levels

(MCLs) for those constituents for which MCLs have been promulgated under the Safe Drinking Water Act. Lastly, MCLs provide concentrations that are consistently measurable at achievable reporting limits with reliable analytical methods.

For these reasons, drinking water MCLs and secondary MCLs have been established as RACLs at the site. Parameters are shown in Table 4-1 with the relevant RACL. In addition to the COPCs listed, additional RACLs are designated for metals commonly tested at the landfill and for which primary drinking water MCLs are established. These additional metals are included because the objective of the cleanup strategy is to maintain concentrations of all potential contaminants at the site that may be present in leachate or waste under drinking water standards.

Compound	RACL	Basis	COPC			
Volatile Organic Compounds (µg/L)						
1,4-Dichlorobenzene (1,4-DCB)	75	MCL/RL	Yes			
Chloroethane	—	—	Yes			
Tetrachloroethene (PCE)	5	MCL	Yes			
Trichloroethene (TCE)	5	MCL/RL	Yes			
Vinyl chloride	2	MCL/RL	Yes			
Trace Metals (µg/L)						
Antimony	6	MCL	No			
Arsenic	10	MCL	Yes			
Barium	1,000	RL	No			
Beryllium	4	MCL	No			
Cadmium	5	MCL	Yes			
Chromium	50	RL	No			
Lead	50	RL	No			
Nickel	100	MCL	No			
Selenium	10	RL	No			
Silver	50	RL	No			
Thallium	2	MCL	No			
Dissolved Metals (µg/L)						
Iron	300	SMCL	Yes			
Manganese	50	SMCL	Yes			
Inorganic Compounds (mg/L)						
Chloride	250	SMCL	Yes			
Total Dissolved Solids (TDS)	500	SMCL	Yes			
Basis: The lower of either Federal pri						
or State Reference Level (OAR 340-0	040-0020, Tabl	es 1 through 3)				
SMCL: Secondary MCL.						
COPC: Chemical of Potential Concern						
RACL: Remedial Action Concentration Limit						

**Table 4-1: Remedial Action Concentration Limits** 

# 5. DESCRIPTION OF REMEDIAL ACTION ALTERNATIVE

The remedy for Coffin Butte Landfill's west side is an aggregate of elements already in place and new actions. This section summarizes the extent of actions already implemented at the landfill, and describes the technologies, both existing and proposed, that will comprise the landfill remedy. A full description of technologies is provided in the RA/FS.

As allowed by OAR 340-40-040(4)(a) and consistent with 340-0122-0085(1), development and evaluation of the remedial action option was limited to the substantive elements already implemented at the landfill as supplemented by other readily accepted and reliable measures typically incorporated in landfill remedies under CERCLA (USEPA, 1991).

## 5.1 Background of Actions Implemented to Date

Primary elements of the remedy are the result of site operations since landfilling first began over 50 years ago. As a result of the progression in site development (described in Section 2.2), the following technologies have been employed in site operations as part of permit requirements.

- Landfill closure and cover with engineered cap has been performed on Cell 1A and parts of Cell 1. The eastern slope of Cell 1 will retain interim plastic cover until it is covered with the base liner of Cell 3D. The Closed Landfill was covered with soil in 1977.
- Surface controls to prevent surface water run-on and infiltration of surface water through the waste, and to slow down the rate of cap erosion.
- Access restrictions to areas of waste by fencing around the landfill units.
- Leachate collection from Cell 1 and management by various leachate control strategies.
- Landfill gas collection from Cell 1 and use for supplemental electricity generation.

## 5.2 Elements of Landfill Remedy

This section will describe the specific actions either planned or already taken at the landfill that comprise the different elements of the remedy. A number of these are termed presumptive by the USEPA for landfills since they are associated with containment, which the USEPA presumes is an appropriate response action for landfills. The presumptive remedy for landfills relates primarily to containment of the landfill mass and collection and/or treatment of LFG. In addition, measures to control landfill leachate are commonly employed.

#### 5.2.1 Access Restrictions

Access restrictions at landfills are intended to prevent or reduce exposure to on-site contamination. The two types of access restrictions most used at landfills included deed restrictions and fencing.

**Deed restrictions.** VLI currently owns the property on which landfill is placed as well as property downgradient of the landfill that contains the LOF. Since contamination associated with the landfill is primarily in groundwater, the intent of the deed restriction is to prevent future use of groundwater for domestic consumption or for any other use. The area south of Coffin Butte Road up to wells MW-17, MW-18, MW-19, and P-8 will be restricted with respect to future construction of water supply wells. For this type of restriction, a DEQ-approved "Easement and Equitable Servitude" will be applied.

Other mechanisms to protect the integrity of the cap of the closed cells already are a standard part of permit operating conditions and do not require imposition of further restrictive covenants.

**Fencing.** Fencing is used to physically limit access to the landfill site. It is currently in place along Coffin Butte Road to prevent access to Cells 1/1A and the Closed Landfill, particularly where gas collection is active (Cell 1) and to prevent the public from accessing roads that lead to the rock quarry, uphill of the landfill.

#### 5.2.2 Containment

Containment refers to technologies that isolate the landfill contents and mitigate off-site migration through the use of engineering controls such as surface controls and capping.

**Surface Controls.** Surface controls consist of grading and revegetation. At Coffin Butte, runoff from the site flows down to the perimeter of the landfill. Cell 1 and areas west of Cell 1 drain to the west towards Soap Creek. As part of operations required by the solid waste and stormwater permits, the Coffin Butte Landfill regularly maintains adequate grading to achieve these objectives and to segregate surface water from the active or closed areas of the landfill from surface water that originates at the rock quarry.

Revegetation stabilizes the soil surface of the landfill site, promotes evapotranspiration, decreases erosion of the soil by wind and water, reduces sedimentation in stormwater runoff, and improves the aesthetics of the landfill. Areas that have undergone final closure, Cell 1A and parts of Cell 1, have been planted with shallow rooted grasses. The soil cover on the Closed Landfill has naturally revegetated with grasses and small shrubs.

**Landfill Cover.** Three types of cover are currently employed at the Coffin Butte Landfill. 1) Interim cover will be used along the eastern slope of Cell 1 until that side of the landfill is covered by the base liner of Cell 3. The interim cover is constructed of plastic fabric that is secured in place with ropes and sandbags to provide ballast. 2) Native soil caps are used to prevent erosion, to prevent direct contact with the waste, and to provide a vegetative layer. The soil that covers the Closed Landfill was constructed in 1977 and is currently well vegetated with

native grasses and shrubs. 3) Single barrier landfill caps are the final covers over Cell 1A and the west and south half of Cell 1. These caps, which are designed to reduce surface infiltration, prevent direct contact, limit gas emissions, and control erosion, incorporate a 60-mil geomembrane barrier layer overlain by a 12-inch granular drainage layer and 18 inches of planted vegetative soil. For Cell 1, which is a municipal solid waste cell, a gas-relief layer was also installed below the geomembrane.

### 5.2.3 Leachate Collection

Leachate from landfills is a product of natural biodegradation, infiltration, and groundwater migrating through waste. The function of the leachate collection and removal system is to minimize or eliminate the migration of leachate away from the solid waste unit.

**Leachate Collection.** Leachate collection is usually accomplished with a liner system under the landfill. No lining system exists under the Closed Landfill that was closed in 1977 or under Cell 1A. A limited clay liner and leachate collection system exists under Cell 1, which was constructed in 1977. The Cell 1 collection system collects approximately 1.6 million gallons of leachate per year based on flow meter data reported by site personnel.

**Leachate Treatment.** The current leachate management strategy employed by the landfill uses four methods to manage leachate:

- **Recirculation.** Leachate is spray-irrigated onto the waste mass of active landfill cells in accordance with a DEQ-approved plan. Leachate recirculation has been used in a pilot program for bioreactor landfills consistent with the project objectives of accelerated waste degradation and gas production.
- **Spray Evaporation.** Leachate within the leachate surge ponds can be spray evaporated within the pond during hot summer months in accordance with a DEQ-approved plan.
- **POTW.** Leachate is trucked to the publicly operated treatment works (POTWs) at the cities of Albany and Corvallis throughout the year. The primary limitation to this method is that the cities are not willing to commit to long-term contracts whereby trucking to the POTW is the only treatment option. This option is used continuously throughout the year, but can be restricted by the POTW depending on the time of year and available plant capacity.
- **Treatment at LTF.** The leachate treatment facility (LTF) treats leachate based on the principle of direct and reverse osmosis. The system was installed during the 1997-98 winter, and began treating leachate by June 1998.

#### 5.2.4 Landfill Gas Control

Landfill gas (LFG) is produced naturally when organic material from a landfill decomposes. Some of the byproducts of this decomposition are methane, carbon dioxide, and other trace gases, including VOCs. Therefore, landfill gas migration via the air pathway poses a health and safety concern for Cell 1. Landfill gas control is governed by existing solid waste regulations and operations for its collection and treatment are overseen by the DEQ. At Coffin Butte, LFG is collected from Cell 1 and the east side cells (e.g., Cells 2 and 3) and then delivered to a gas-to-electric (GTE) plant that produces electricity.

#### 5.2.5 Water Well Removal

Decommissioning water wells within the LOF or in areas potentially downgradient of impacts removes potential exposure to contaminants in groundwater. Two wells currently proposed for decommissioning include PW-1, which is within the LOF, but currently unused, and the Helms well, which is outside and downgradient of the LOF. The Helms well will be used (with carbon filter unit) until September 2006 at which time it will be disconnected from use and scheduled for decommissioning.

#### 5.2.6 Property Purchase

Property purchase near the landfill is an effective means of preventing groundwater use and minimizing land uses not compatible with landfill operations. Such purchases can have a secondary benefit of providing additional buffer area around the landfill and long-term access to groundwater monitoring wells. As property adjacent to the landfill property comes on the market, VLI will pursue negotiations with the owners to buy the property. Properties of current interest to the VLI include the Phillips property south of the landfill and the small rectangular piece of property immediately west of the Closed Landfill, east of Wiles Road.

# 6. EVALUATION OF REMEDIAL ACTION ALTERNATIVE

This section reviews basic evaluation criteria from OAR 340-040-0050 and 340-122-090 and then describes how the remedy meets each requirement. Table 6-1 summarizes how remedy elements address evaluation criteria.

## 6.1 OVERVIEW OF EVALUATION CRITERIA

The criteria defined below were used to evaluate the remedy elements described in Section 5. OAR 340-122-090(1) and (2) provide that the remedy should accomplish the following:

• Protect present and future public health, safety, and welfare, and the environment.

Coffin Butte Landfill Record of Decision October 2005 • Is based on balancing of remedy selection factors such as effectiveness, long-term reliability, implementability, implementation risk, reasonableness of cost

OAR 340-40-050(1) provides that the remedy should accomplish the following:

- Protect present and future public health, safety, and welfare, and the environment.
- To the maximum extent practicable, be cost effective, use permanent solutions and alternative technologies or resource recovery technologies, be implementable, and be effective.

#### 6.1.1 Protectiveness

Protectiveness considers the present and future public health, safety, and welfare and the welfare of the environment. Since none of the concentrations exceed screening levels for receptors identified in the conceptual site model, the actions already taken at the site are protective.

However, to advance the objective of improving aquifer water quality consistent with general policies of the groundwater quality protection rules, RACLs were developed as water quality goals for the site. So, even though concentrations of contaminants are above the RACLs, the remedy is still considered protective because residual risk is adequately managed and exposure to contaminants is prevented.

Protectiveness was also considered in the context of implementation risk. Implementation risk is potential adverse impacts to the community, workers, or the environment while the remedy is being implemented (e.g., construction hazards or release of contamination to the environment). This is discussed as it relates to ongoing operations and maintenance (O&M) and for other planned actions such as decommissioning water supply wells.

#### 6.1.2 Balancing Factors

The selected remedy must meet, to the maximum extent practicable, the requirements, criteria, preferences, and factors defined in OAR-340-40-050. These include:

**Cost Effectiveness/Reasonableness of Cost.** Cost was not considered in this evaluation because most of the remedy elements have already been implemented. The remaining remedy elements with ongoing O&M costs are considered in long-term planning or closure budgets that are financed by the landfill.

**Permanent Solutions and Alternative Technologies or Resource Recovery Technologies.** The remedial action was evaluated with respect to its use of permanent solutions or alternative technologies in addition to any added benefits of transport and treatment of contaminated materials off site.

**Implementability.** The ease or difficulty of implementing the remedy was evaluated against the following criteria:

Coffin Butte Landfill Record of Decision October 2005

- Practical, technical, and legal difficulties and unknowns associated with the construction and implementation of a technology, engineering control, or institutional control.
- Expected operational reliability of the technology.
- Need to coordinate with and obtain necessary approvals or permits from other agencies.
- Availability of necessary services, materials, equipment, and specialists.
- Available capacity and location of needed treatment, storage, and disposal services.
- Any other information relevant to implementability.

**Implementation Risk.** As explained above, this factor includes evaluation of the potential risks and the effectiveness and reliability of protective measures related to implementation of the remedial action, including the following receptors: the community, workers involved in implementing the remedial action, and the environment; and the time until the remedial action is complete.

**Effectiveness/Long-Term Reliability.** Effectiveness is the remedy's ability to achieve the RAOs. Effectiveness was evaluated against the following criteria:

- Expected reduction in the toxicity, mobility, and volume of the contaminant substances.
- Length of time until full protection (i.e., achieving RAOs) is achieved.
- Magnitude of residual risks in terms of amounts and concentrations of contaminant substances remaining following implementation of a remedial action.
- Type and degree of long-term management required, including monitoring, and O&M.
- Long-term potential for exposure of human and environmental receptors to remaining contaminants.
- Long-term reliability of engineering and institutional controls, including long-term uncertainties associated with land disposal, treated or untreated waste, and residuals.
- Potential for failure of the remedy or potential need for replacement of the remedy.
- Any other information relevant to effectiveness.

# 6.2 EVALUATION OF PROTECTIVENESS

The remedy is presumed to be protective if it achieves the RBCs specified for exposure scenarios under the conceptual site model. Using this criterion, the existing remedy satisfies the requirement for protectiveness consistent with OAR 340-40-050(5) and OAR 340-122-0040.

Moreover, the measures taken and proposed in the remedy should ultimately result in groundwater concentrations well below the RBCs specified; consequently the remedy can be considered more protective and therefore preferable over one of no action. Overall, a high level of protectiveness is provided by the remedy elements in the following manner:

- Restricting access by fencing and maintaining a cover over the landfill contents prevents personal contact.
- Minimizing generation and infiltration of leachate to groundwater by capping the landfill and collecting/treating leachate reduces groundwater impacts and associated potential for exposure at downgradient locations.
- Limiting the use of groundwater by deed restrictions within the LOF prevents the hypothetical exposure to contaminants through domestic use of groundwater.
- Collecting and treating LFG removes potential migration of contaminants to groundwater and minimizes the potential migration and accumulation of LFG to nearby properties or buildings where it could stress vegetation or create hazardous conditions.
- Decommissioning water supply wells within the LOF or on adjacent property removes potential exposure to groundwater.
- Purchasing nearby property adds a buffer zone, thereby minimizing uses that are incompatible with landfill operations and increasing the safety zone of the landfill.

In addition to these remedy elements, groundwater and LFG monitoring will be conducted according to solid waste permit requirements. Monitoring LFG in site structures provides an additional degree of protectiveness to the remedy. Monitoring the groundwater provides both early warning of potential off-site contaminant migration as well as documents aquifer restoration and performance of the remedy in meeting RACLs.

# 6.3 EVALUATION OF BALANCING FACTORS

#### 6.3.1 Cost Effectiveness/Reasonableness of Cost

As stated in section 6.1.2, cost was not considered in the evaluation. The only additional cost to the proposed remedy is for decommissioning water supply wells, instituting deed restrictions to prevent future water wells, and property purchase. Costs associated with other elements of the remedy having to do with O&M are considered in long-term planning and closure budgets that are financed by operations of the active landfill.

# 6.3.2 Permanent Solutions and Alternative Technologies or Resource Recovery Technologies

To the extent practicable, the remedy employs permanent solutions or alternative technologies. Capping landfill Cells 1/1A with a final cover provides a permanent solution given routine inspection and maintenance of the cover. Continual removal of leachate and LFG are reliable technologies but only permanent as long as they operate. Performance monitoring of the systems will help achieve this goal. Leachate treatment strategies involve alternative technologies such as landfill recirculation and direct/reverse osmosis, and transport and treatment of contaminated material off site which help expedite cleanup. Conversion of LFG to electricity can be considered recovery of a resource.

#### 6.3.3 Implementability/Implementation Risk

The remedy is considered easy to implement. Because the majority of the engineering controls are in place, the implementation risk is low.

**Practical, technical, and legal difficulties.** Difficulties and unknowns are few. Each of the technologies already in place or proposed to be implemented have been used before with success. Property purchase depends on the willingness of the seller to negotiate; however, over the long-term the landfill will continue to purchase buffer property. Institutional controls are easy to implement since VLI owns the property where the controls are proposed.

**Expected operational reliability of the technology.** Landfill cover, leachate removal and treatment, and LFG collection and treatment are all reliable with routine inspection and maintenance of the equipment. The degree of reliability of institutional controls is high since they will be enacted on property owned by the landfill.

**Need to coordinate with other agencies.** There are no perceived difficulties to implement with agencies given past implementation success both with the DEQ and Benton County.

Availability of necessary services, materials, equipment, and specialists. Services, materials, equipment and specialists are all readily available.

Available capacity and location of needed treatment, storage, and disposal services. Ongoing transport of leachate to off-site treatment facilities is occasionally limited by available capacity at the POTW. POTWs are located nearby and roads can easily handle the truck traffic.

Short-term risks associated with implementing the remedial action, including potential impacts to the community, workers, and the environment. There would be low risk to the community or environment associated with implementing the remedy since the primary construction activities are completed. Any risks during O&M of the remedy are managed by worker health and safety practices aimed at reducing exposure to contaminants. Decommissioning wells is done with proven technology and safeguards that protect the workers and environment.

#### 6.3.4 Effectiveness

The remedy is considered effective in that is already provides a high degree of protectiveness and is restoring the aquifer as demonstrated by reductions in the concentrations of VOCs downgradient of the landfill.

**Expected reduction in the toxicity, mobility, and volume of the contaminant substances.** Capping the landfills reduces the mobility of contaminants. Removal of leachate and landfill gas reduces the volume of contaminants in Cell 1. While not part of the remedy, natural attenuation has reduced the volume of contaminants in groundwater.

**Length of time until full protection (i.e., achieving RAOs) is achieved.** The remedy meets the RAOs and therefore has achieved full protection for current conditions. Supplemental actions, such as water supply well decommissioning, will be effective in protecting against future exposure pathways.

Magnitude of residual risks in terms of amounts and concentrations of contaminant substances remaining following implementation of a remedial action. Residual contaminants are those present in the waste mass that could potentially migrate in groundwater from the landfill. Risks associated with exposure to residual contamination are considered low since the landfill contents are covered with soil or engineered cap. There are no exposure pathways to groundwater because the property is controlled by VLI.

**Type and degree of long-term management required, including monitoring, and O&M.** Long-term management is required by the solid waste permit and funded through tipping fees and other financial mechanisms. The O&M for the contaminant recovery technologies (e.g., leachate and LFG collection) and monitoring (LFG and water quality) are currently being done and documented annually.

Long-term potential for exposure of human and environmental receptors to remaining contaminants. This potential is low given the effectiveness of the remedial technologies in limiting exposure to contaminants and long-term management required by the solid waste permit.

Long-term reliability of engineering and institutional controls, including long-term uncertainties associated with land disposal, treated or untreated waste, and residuals. The engineering controls in place are reliable in the long term as long as they are inspected and maintained. For instance the cap over Cell 1, parts of which have been closed for nearly a decade, has displayed excellent durability, with no erosion problems and few maintenance needs. Institutional controls would provide a reliable control of residual risk.

**Potential for failure of the remedy or potential need for replacement of the remedy.** There is low potential for failure of the remedy as long as it is maintained as required by the solid waste permit.

The DEQ selected the following remedial action alternative for the Coffin Butte site on the basis of the detailed evaluation of the alternatives in Sections 5 and 6.

# 7.1 DESCRIPTION OF THE SELECTED ALTERNATIVE

The remedial actions have already met the protectiveness standard since there were no unacceptable risks identified by the risk screening for the exposure pathways. However, to maintain this level of protectiveness and to provide for further improvement in groundwater quality consistent with the intent of groundwater quality protection rules, maintenance of the remedy as supplemented by additional actions was recommended. The remedy employs the following elements:

- Landfill closure and cover with engineered cap on Cell 1A and parts of Cell 1. The eastern slope of Cell 1 will retain interim plastic cover until it is covered with the base liner of Cell 3D. The Closed Landfill was covered with soil in 1977.
- Surface controls to prevent surface water run-on and infiltration of surface water through the waste, and to slow down the rate of cap erosion.
- Access restrictions to areas of waste by fencing around the landfill units.
- Leachate collection from Cell 1 and management by various strategies.
- Landfill gas collection from Cell 1 and use for supplemental electricity generation.
- Deed restrictions on property within the LOF to prevent development of groundwater resource.
- Decommissioning two water supply wells to prevent their future use.
- Property purchases as buffer around the landfill.

In addition to these actions, the solid waste permit requires groundwater monitoring downgradient of the landfill cells and LFG monitoring around the landfill cells and in structures to assess protectiveness between the landfill and potential receptors.

# 7.2 REMEDIAL ACTION CONCENTRATION LIMITS

The site is currently protective of human health and the environment with the remedial actions in place and DEQ does not foresee changes either in land use or property ownership that would alter hypothetical routes of exposure to impacted groundwater within the LOF. With the existing remedy being protective, the presumption of setting a RACL is based on the hypothetical and unlikely exposure scenario of domestic use within the LOF. Current ownership and anticipated

institutional controls limiting the future residential development on VLI-owned property that buffers the landfill will make it extremely unlikely for domestic use to occur. However, in keeping with a restoration goal to protect groundwater beneficial uses of the highest quality, drinking water standards were selected. For these reasons, remedial action concentration limits have been established at drinking water MCLs and secondary MCLs. These are listed in Table 4-1.

# 7.3 POINTS OF COMPLIANCE

Points of compliance are currently designated by the solid waste permit as wells along the compliance boundary downgradient of Cells 1 and 1A. These include wells: MW-1S/1D, MW-3S/3D, MW-10S/10D, MW-11S/11D, and MW-12S/12D. Permit Addendum No. 1 designates wells MW-20 and MW-21 as the compliance points for the area downgradient of the Closed Landfill.

# 7.4 PERFORMANCE MONITORING

Environmental monitoring and reporting are part of solid waste permit requirements. The existing monitoring program as described in the environmental monitoring plan tracks the limits of contamination and allows evaluation of the effectiveness of the remedy. The sampling program is assessed once a year in the annual monitoring report. The monitoring program will be reviewed in the context of the remedy described in this document and modified as needed in an update to the environmental monitoring plan.

## 8. PEER REVIEW SUMMARY

Technical documents produced during the investigation of the Coffin Butte site were reviewed by a technical team at DEQ. The team consisted of the project manager, a hydrogeologist, and a toxicologist. The team unanimously supports the selected remedial action. Refer to the administrative record for more detailed information.

# 9. PUBLIC NOTICE AND COMMENTS

A public comment period was held from September 1 through October 4, 2004 to provide the public an opportunity to comment on DEQ's proposed remedy. A notice of the proposed remedial action was published on September 1, 2004 in the Oregon Secretary of State's Bulletin and was published in the Corvallis Gazette Times on September 3, 2004. Copies of the Remedial Action Recommendation Staff Report and other documents that make up the

Administrative Record for the site were made available for public review via DEQ's web site and at DEQ's Western Region Office in Eugene. No comments were received.

### **10. DOCUMENTATION OF SIGNIFICANT CHANGES**

No significant changes were made to the recommended remedial action as described in the August 2004 Remedial Action Recommendation Staff Report as a result of public comments.

#### 11. STATUTORY DETERMINATIONS

The selected remedial action for the Coffin Butte Landfill site is protective and is based on balancing of remedy selection factors. The selected remedial action, therefore, satisfies the requirements of Oregon's environmental cleanup law and rules (Oregon Revised Statutes (ORS) 465.200 et seq. and Oregon Administrative Rules (OAR) Chapter 340, Division 122, Sections 010 through 115) and with Oregon's Groundwater Protection Act and Groundwater Quality Protection Rules (ORS, 468B.150 to 468B.190 and OAR 340-0040-0001 through -0060).

#### 12. SIGNATURE OF WESTERN REGION ADMINISTRATOR

Kerri L. Nelson

Western Region Administrator Department of Environmental Quality

11-2-05

Date

#### ADMINISTRATIVE RECORD INDEX Coffin Butte Landfill Corvallis, Oregon

The Administrative Record consists of the documents on which the selected remedial action for the site is based. The primary documents used in evaluating remedial action alternatives for the Coffin Butte site are listed below. Additional background and supporting information can be found in the Coffin Butte project file located at DEQ Western Region Office, 1102 Lincoln Street, Suite 210, Eugene, Oregon.

#### SITE-SPECIFIC DOCUMENTS

- DEQ. 1995. Strategy Recommendation. Coffin Butte Landfill, CERCLIS number ORD990751950, ECSI number 832. July 25.
- DEQ. Solid Waste Disposal Site Permit No. 306. Issued March 9, 1999.
- EMCON. 1994a. Remedial Investigation and Additional Hydrogeologic Investigation Report, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc., by EMCON Northwest, Inc., Portland, Oregon. February 4.
- EMCON. 1994b. Preliminary Assessment Workplan, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc., by EMCON Northwest, Inc., Portland, Oregon. June 16.
- EMCON. 1994c. Addendum to Remedial Investigation and Additional Hydrogeologic Investigation Report, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc., by EMCON Northwest, Inc., Portland, Oregon. June 16.
- EMCON. 1996a. Preliminary Assessment, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc., by EMCON, Portland, Oregon. February 28.
- EMCON. 1996b. Remedial Investigation Addendum, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc., by EMCON, Portland, Oregon. February 28.
- EMCON. 1997. Environmental Monitoring Plan, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc., by EMCON, Portland, Oregon. February 25 and April 28.
- EMCON. 1999. Site Characterization, Cell 3, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc., by EMCON, Portland, Oregon. June 11, 1999, revised May 15, 2000.

- McKenna Environmental. 2003. 2002 Annual Monitoring Report, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc., by McKenna Environmental, LLC, Portland, Oregon. March 18.
- Thiel. 1997. Special Waste Report, Leachate Concentration Solidification, Coffin Butte Landfill. Prepared by Thiel Engineering for Valley Landfills, Inc. December 16.
- Tuppan Consultants. 2003. Focused Risk Assessment and Feasibility Study, Coffin Butte Landfill, Benton County, Oregon. Prepare for Valley Landfills, Inc. Corvallis, by Tuppan Consultants LLC, Lake Oswego, Oregon. September 23.
- VLI. 1998a. Plans and Specifications Leachate Treatment System, Coffin Butte Landfill. Report submitted to the Oregon Department of Environmental Quality, Water Quality Division. January.
- VLI. 1998b. Operations and Maintenance Manual, Leachate Treatment System, Coffin Butte Landfill. Report submitted to the Oregon Department of Environmental Quality, Water Quality Division. August 11.

#### STATE OF OREGON

Oregon's Environmental Cleanup Laws, Oregon Revised Statutes 465.200-.900, as amended by the Oregon Legislature in 1995.

Oregon's Hazardous Substance Remedial Action Rules, Oregon Administrative Rules, Chapter 340, Division 122, adopted by the Environmental Quality Commission in 1997

Oregon Groundwater Quality Protection Rules, Chapter 340, Division 40

Oregon's Groundwater Protection Act, Oregon Revised Statutes, Chapter 468B.150 to 468B.190.

#### **GUIDANCE AND TECHNICAL INFORMATION**

- DEQ. Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites. September 2003.
- DEQ. Cleanup Program Quality Assurance Policy. September 1990, updated April 2001.
- DEQ. Consideration of Land Use in Environmental Remedial Actions. July 1998.
- DEQ. Guidance for Conducting Beneficial Water Use Determinations at Environmental Cleanup Sites. July 1998.
- DEQ. Guidance for Conducting Feasibility Studies. July 1998.
- DEQ. Guidance for Ecological Risk Assessment: Levels I, II, III, IV. April 1998 (updated 12/01).

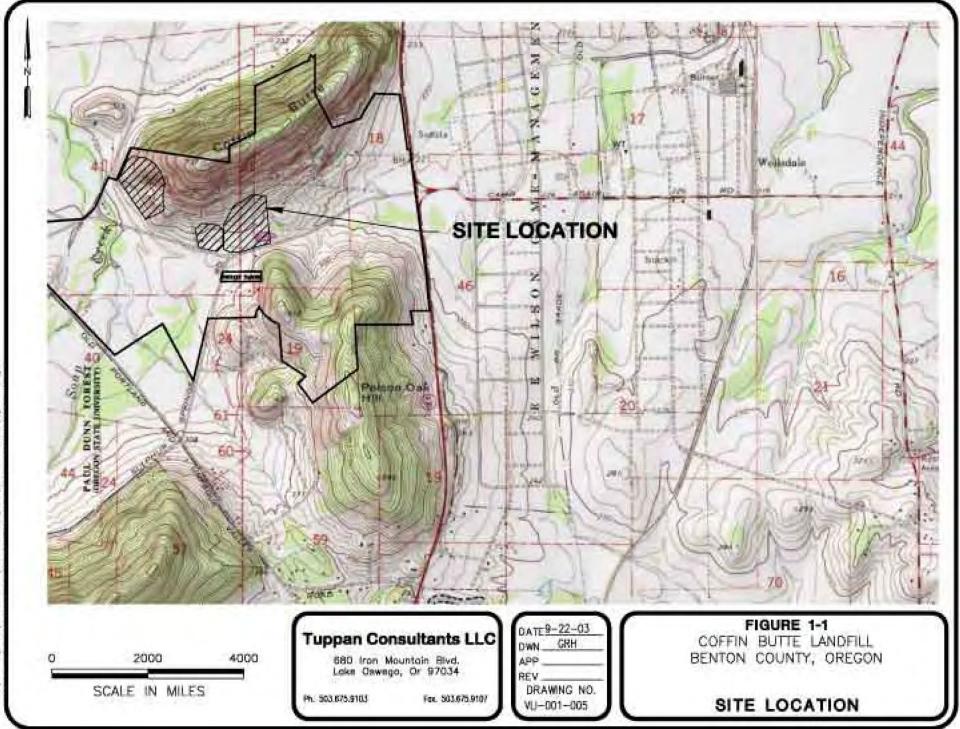
- DEQ. Guidance for Use of Institutional Controls. April 1998.
- USEPA. 1991. Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Site. United States Environmental Protection Agency (USEPA), Office of Emergency Remedial Response, EPA/540/P-91/001. February.
- USEPA. 1993. Wildlife Exposure Factors Handbook. United States Environmental Protection Agency (USEPA), Office of Research and Development, EPA/600/R-93/187a, December.
- USEPA. 2002. Preliminary Remediation Goals. U.S. Environmental Protection Agency (USEPA), Region 9, October, (<u>http://www.epa.gov/region09/</u>).
- Verschueren, Karel. Handbook of Environmental Data on Organic Chemicals. Van Nostrand Reinhold, New York. 1983.

## Table 6-1Evaluation of Remedial TechnologiesCoffin Butte Landfill

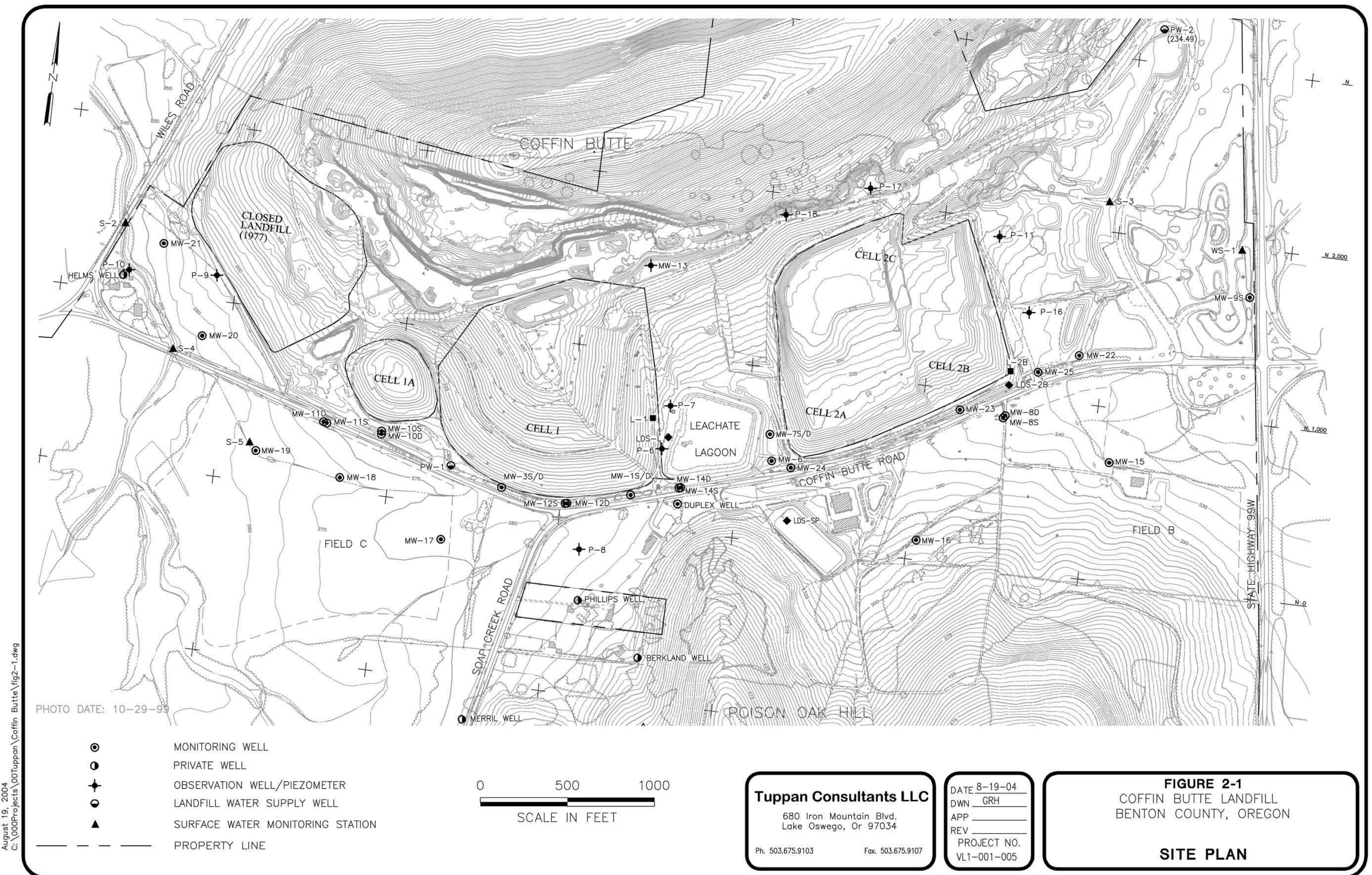
Technology	Applicable Area	Cost Effectiveness and Reasonableness of Cost	Permanence	Implementability and Implementation Risk	Effectiveness
Access Restrictions				1	
Deed Restrictions	Cells 1/1A; Closed Landfill	Low cost.	Restrictions stav in place over long term	Easy to implement because property owned by landfill.	High effectiveness because property owned by landfill and can be reviewed on routine basis.
Fencing	Cells 1/1A; Closed Landfill	Low cost.	•	Easy to implement, equipment readily available.	Relies on limiting access to manage residual risk from direct contact. Fencing limits access but trespassing is possible.
Containment				•	
Grading/Revegetation	Cells 1/1A; Closed Landfill	Low cost.	Continued maintenance required to achieve long-term reliability.	Easy to implement.	Minimal reduction of residual risk; may reduce leachate formation by controlling run-on; increases permanence of cap.
Interim Cover	Cell 1	Low cost.		Easy to implement, equipment and materials readily available.	Reduction of risk from direct contact; minimizes future leachate generation, however must be maintained periodically.
Soil Cover	Closed Landfill	Low to moderate.		Easy to implement depending on availability of soil.	Reduction of risk from direct contact. Less effective in reducing leachate generation because it is relatively permeable to infiltration.
Composite Barrier Cap	Cells 1/1A	Medium to high cost; part of closure requirement; cost covered by in-place funding mechanism.	Will last for life of landfill if properly designed and maintained.	natural soil requirements may be	Reduction of risk from direct contact; minimizes future leachate formation and groundwater impacts by eliminating infiltration; high reliability because of redundancy of barriers.
Leachate					
Leachate Collection		No additional cost as leachate collection system is already in place for Cell 1.	Leachate collection layer may clog, but otherwise should maintain long-term effectiveness; collection piping external to landfill needs periodic maintenance.	Easy, leachate collection system already in place.	Effectiveness to control leachate releases depends on thickness of clay liner and original construction specifications.

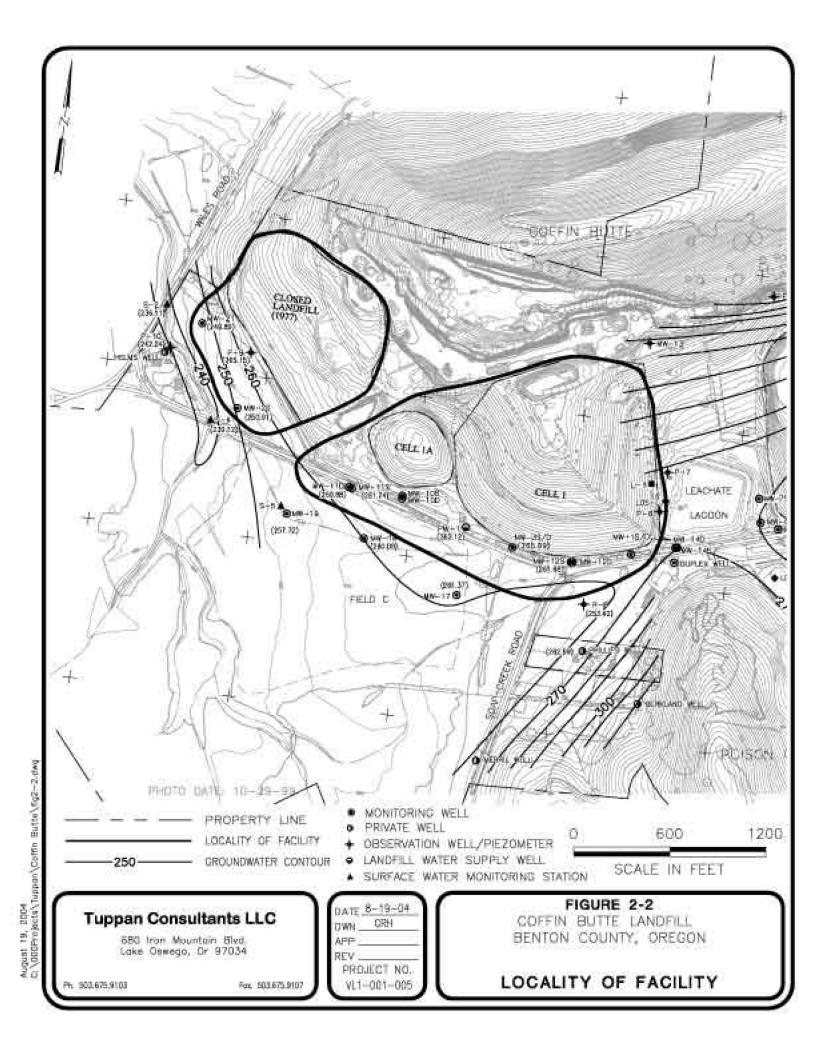
## Table 6-1Evaluation of Remedial TechnologiesCoffin Butte Landfill

Technology	Applicable Area	Cost Effectiveness and Reasonableness of Cost	Permanence	Implementability and Implementation Risk	Effectiveness
Leachate Treatment					
Leachate Treatment Facility (LTF)		High cost associated with treating leachate at LTF.	Treatment permanently removes contaminants which are then stabilized and added to the active landfill.	Easy to implement because treatment system is already constructed.	Proven and reliable as long as O&M is continued; effluent is clean water.
Recirculation	NA	Low cost associated with recirculating leachate to active cells.	Ability to recirculate leachate in active landfill cell is limited by capacity of waste and results of monitoring effects with respect to performance criteria.	Easy, already being implemented on pilot scale.	Does not treat leachate, and therefore not effective in removing contaminants.
Evaporation	NA	Low cost associated with sprinklers used to spray on pond; low maintenance cost.	Reduces the amount of liquid, but liquid remaining in pond still needs to be managed by other technologies.	Easy, already being implemented during summer months.	Does not treat leachate, and therefore not effective in removing contaminants.
Publicly Owned Treatment Works (POTW)	NA	Low to moderate cost; primarily from trucking and POTW fees.	POTW may not be available for future acceptance of leachate depending on capacity, changes in minimum quality requirements of leachate, and politics.	Easy to implement although can be restricted by receiving POTW depending on time of year and available capacity.	May not be as reliable as on-site treatment since POTWs do not remove all hazardous constituents.
Landfill Gas (LFG)					
LFG Collection	Cell 1	Low cost because collection wells have already been installed.	Is effective for long-term collection of gas, although volumes decline with age.	Easy, LFG collection wells are already in place.	Removes most risk associated with migration of LFG; can be limited by internal lithology and quantity of liquids within landfill.
LFG Treatment	NA	Low cost, gas is sold to electrical generation company.	Reduces toxicity of gas and treatment by burning is irreversible; volume is reduced.	Easy, contracts with PNGC are already in place and gas is being burned to produce electricity.	Effective technology burns LFG.
Water Well Removal	Cell 1; Closed Landfill	Low to moderate cost for drilling contractor.	Fully removes exposure point to groundwater and provides permanence.	Easy to implement with existing contractors and equipment.	Very effective by removing means to come in contact with groundwater.
Property Purchase	Cell 1/1A; Closed Landfill	Moderate.	Permanent buffer zone for landfill prevents potential for incompatible use near landfill.	Moderate to difficult depending on willingness of property owner to sell land.	Effective in minimizing development and access to areas of concern near the landfill.



Sept 22, 2003 C:\D00Projects\D00AcKenna\Caffin Butts\Workpion Fail 2003\fig1r14.deg





From:	Sam Imperati <samimperati@icmresolutions.com></samimperati@icmresolutions.com>
Sent:	Saturday, October 15, 2022 11:33 AM
То:	ewpitera25
Cc:	REDICK Daniel; Benton County Talks Trash
Subject:	FW: Pitera - Suggested Addition to Common Understandings Document
Attachments:	coffin_butte_landfillRepublic Services Preso.pdf; CoffinButteROD(10-05).pdf

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ed,

Daniel will upload the attachments and also post email in memo format for context.

Then, all three will be put into a Subcommittee folder for vetting.

Thanks, Sam





11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: Edward Pitera

Sent: Saturday, October 15, 2022 11:19 AM

**To:** Sam Imperati <samimperati@icmresolutions.com>; bentoncountytalkstrash@co.benton.or.us **Subject:** Pitera - Suggested Addition to Common Understandings Document

In reviewing records of Coffin Butte available on the internet I ran across a 2008 RSI presentation that provides information on CB operations and a DEQ regulatory action that has impacted the development and operations at the site. Brief overviews of two documents are below. The documents filled in some blanks in my understanding of the situation at CB. Please consider including these classes of information as citations with a brief synopsis in the Common Understandings Document.

Key information highlights for me include: **RSI Presentation (July 2008)** 

- CB has received more than just Municipal Solid Wastes. Receipts reportedly include "Special Wastes" (a
  regulatory category which includes Asbestos, Industrial Waste, Environmental Cleanup Material, Contaminated
  Soil, Wastewater Treatment Plant (WWTP) Waste.
- CB collected 25 to 30 million gallons of leachate per year.
- Site appears to be regulated under the Resource Conservation and Recovery Act (a stringent Federal Law)

#### DEQ Record of Decision (ROD) (October 2005)

• In 2005, DEQ required the company to perform environmental remediation. Some aspects of the required remedies are:

• Landfill closure and cover with an engineered cap on Cell 1A and parts of Cell 1. The eastern slope of Cell 1 will retain interim plastic cover until it is covered with the base liner of Cell 3D. The Closed Landfill will be maintained with soil.

• Surface controls to prevent surface water run-on and infiltration of surface water through the waste, and to slow down the rate of cap erosion.

- Access restrictions to areas of waste by fencing around the landfill units.
- Leachate collection from Cell 1 and management by various strategies.
- Landfill gas (LFG) collection from Cell 1 and its use for supplemental electricity generation.

• Deed restrictions on property within the "locality of the facility" (LOF) to prevent development of the groundwater resource.

- Decommissioning two water supply wells to prevent their future use.
- Property purchases as buffer around the landfill.

Examples of why this background information could be useful in a final report based on "Common Understandings" include:

- Puts some perspective on potential exposure to / burden on the public for leachate management. 25 to 30 million gallons per year equates to 50 to 100 tanker trucks per week on roads in the area. Updated information on leachate generation (examples: quantity, composition, seasonality) could put this situation in proper perspective.
- Receipt of "Special Wastes" raises questions to be answered about: what material is brought into the county; are the health risks / burdens the same as for receiving only MSW; is the funding for landfill post closure care adequate.
- The issue of CB land acquisitions impacting the availability of affordable housing in the county was raised on the 1 Oct 2020 Neighborhood Tour. The ROD seems to encourage property acquisitions by CB but closer reading of the ROD is needed to be sure.

There may be additional useful company presentations and DEQ records. A simple list of DEQ records with online access (much like what was done for County records) would be helpful.

Hope this helps, Ed Pitera

From:	Marge
Sent:	Wednesday, October 5, 2022 12:49 PM
То:	NICHOLS Darren
Cc:	RAY Linda; Benton County Talks Trash; Sam Imperati
Subject:	Re: Copies of Benton County's 2040 Thriving Communities Initiative's Core Values

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

That would be fine. But I am sincere in my preference that you be the face of the County Values Initiative.

On Wed, Oct 5, 2022 at 12:43 PM NICHOLS Darren <<u>darren.nichols@co.benton.or.us</u>> wrote:

Hi Marge,

I will not attempt to speak for you or for the Board.

We will provide 20 copies of the attachment ready to you before tomorrow's BCTT meeting.

Darren

From: Marge Sent: Wednesday, October 5, 2022 12:14 PM
To: NICHOLS Darren <<u>darren.nichols@Co.Benton.OR.US</u>>
Cc: RAY Linda <<u>Linda.Ray@Co.Benton.OR.US</u>>; Benton County Talks Trash
<<u>bentoncountytalkstrash@Co.Benton.OR.US</u>>; Sam Imperati <<u>samimperati@icmresolutions.com</u>>
Subject: Re: Copies of Benton County's 2040 Thriving Communities Initiative's Core Values

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks, Darren. It would be far better coming from you. I was reminded by Xan's reference to the importance of values in the BOC meeting yesterday.

I thought you might have forgotten our previous discussion amid the tumult. I was not trying in any way to usurp your role or act covertly. I was actually just trying to help.

I am really happy that you remembered and that you will bring this aspect of our county residents' concerns to the workgroup process.

On Wed, Oct 5, 2022 at 12:03 PM NICHOLS Darren <<u>darren.nichols@co.benton.or.us</u>> wrote:

Hi Marge,

I will make sure there are 20 copies of the attached statement available tomorrow.

I am also including the workgroup email and the facilitator as a heads up and to be sure we are following the process protocols.

Thank you,

Darren

From: Marge Sent: Wednesday, October 5, 2022 10:22 AM To: RAY Linda <<u>Linda.Ray@Co.Benton.OR.US</u>> Subject: Copies of Benton County's 2040 Thriving Communities Initiative's Core Values

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Linda,

Would it be possible for you to make 20 copies of this statement for me? If there is any issue with the cost of color printing, or bleed-through, printing just the second page with more detail would work just fine.

Making these copies is a challenge for my home printer.

I would appreciate your help but also understand that you are likely very busy right now.

I could pick them up before the Thursday afternoon Solid Waste Process Workgroup meeting. If it would be easier for you, you could leave them at the lobby desk for me.

Thanks for anything you can manage,

Marge Popp

From:	Sam Imperati <samimperati@icmresolutions.com></samimperati@icmresolutions.com>
Sent:	Thursday, October 6, 2022 9:39 AM
To:	Marge
Cc:	
	Paul Nietfeld; Catherine Biscoe; WYSE Nancy; MALONE Patrick; AUGEROT
	Xanthippe; KERBY Joseph; NICHOLS Darren; CRONEY Vance M; VERRET Greg J; WILLIAMS Inga;
	REDICK Daniel; GROGAN Cory; Amelia Webb
Subject:	RE: 10/6/22 Workgroup Meeting Agenda and Materials
Attachments:	Discussion notes BOC Oct 4 2022.docx

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Marge,

Here are the Chair's personal discussion notes.

Thanks, Sam

# resolutions (

CM Sam Imperati, JD | Executive Director

11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: Marge <marge@jyo.com> Sent: Thursday, October 6, 2022 9:03 AM To: Sam Imperati <samimperati@icmresolutions.com> Subject: Re: 10/6/22 Workgroup Meeting Agenda and Materials

Sam, could you please point me to the document that Commissioner Wyse was referencing during the Commissioners Meeting yesterday? It seems like both your questions and her answers are essential to this process.

Thanks,

Marge

On Wed, Oct 5, 2022 at 9:15 PM Sam Imperati <<u>samimperati@icmresolutions.com</u>> wrote:

Greetings:

Here are some new/updated documents, which will be framed up during tomorrow's meeting. It is <u>not</u> expected that you read them (<u>skimming is more than sufficient if and only if you have the time.</u>) The major points will be explained and are being used to tee-up the subcommittees. They will vet the drafts further and report out at a subsequent WG meeting for formal Voting Member polling.

- 1. Updated Agenda: Corrects date and makes some tweaks in green.
- 2. Neighborhood Tour Questions,
- 3. Comments,

(www.co.benton.or.us/sites/default/files/fileattachments/community\_development/page/8208/com ments1.pdf; www.co.benton.or.us/sites/default/files/fileattachments/community\_development/page/8208/com ments2.pdf; and

www.co.benton.or.us/sites/default/files/fileattachments/community\_development/page/8208/com ments3.pdf.)

- 4. Charge B; and
- 5. Staff memo on Charge B. (Pages 1 through 9 contain the crux of the staff memo. The rest of the document contains the relevant Code provisions and Planning Commission findings from the last CUP process.)
- 6. Updated M2 Minutes with some Member-suggested corrections
- 7. Updated M2 Evaluation that added a missing name (comments were already included)
- 8. Amended Neighborhood Tour Draft Minutes with some Member-suggested corrections

These documents will be uploaded to the website before the meeting.

There has been robust activity in-between meetings. However, 1,030 pages of comments is impossible for me to manage and for you to digest. Staff did the best they could to roll them up and make them available to you. Nonetheless, the important topics are coming to you late, and are diluted by ministerial matters. While things will improve upon Daniel's return on Monday, the remaining process question is, "Does the Workgroup want <u>substantive</u> emails to be copied directly to them, as well as to the process email/me, or wait to get them the day before the meeting?" The result will be receiving the important stuff in real time, but more work for you between meetings.

Chair Wyse will be at tomorrow's meeting to give a presentation on the Board's direction and will take questions. The link to yesterday's Board BCTT discussion can be found here: <u>https://www.facebook.com/BentonCoGov/videos/2292714984239540</u>. The public comment period is between 7:08 through 19:13. The BTCC discussion is between 33:25 through 1:50:00.

Happy to discuss on my below-listed cell phone from Noon to 2:00 PM tomorrow.

#### Thanks, Sam

### ICM Sam Imperati, JD | Executive Director



11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From:	Marge
Sent:	Friday, October 14, 2022 5:54 PM
To:	FULLER Brian * DEQ
Cc:	Adam Meyer; Amelia Webb; BMay@co.marion.or.us; Benton County Talks Trash; NICHOLS Darren;
	YSE Nancy; MALONE Patrick; ryanm; AUGEROT Xanthippe
Subject:	Re: Alternatives to landfills and even composting: Efforts in California and South Korea

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I just want to say how much I appreciate this sort of engaged and informative dialogue in our workgroup. It makes me feel connected to the group and that ours is a cohesive effort to bring about an effective solution for our residents.

On Fri, Oct 14, 2022 at 4:45 PM FULLER Brian \* DEQ <<u>Brian.FULLER@deq.oregon.gov</u>> wrote:

Hi Nancy – Yes home composting and commercial composting result in less methane production compared to landfilling food waste and result in soil benefits.

DEQ commissioned a Life Cycle Analysis that looked at the following methods of managing food waste:

- 1. Landfill
- 2. Sink disposal to sewer treatment
- 3. Aerobic Composting
- 4. Anaerobic Digestion.

https://www.oregon.gov/deq/mm/food/Pages/Food-Waste.aspx

The study looked at climate, energy and soils impacts from the various management methods for food waste. Depending on the lens (climate, soil..) you look through some areas are better than others.

Based on the most recent waste composition study, approximately 15% of what we send to the landfill is food. This does not include food that is composted or otherwise not put in the garbage can (i.e. food waste isn't 15% of the overall waste stream).

https://www.oregon.gov/deq/FilterDocs/A01-StatewideWCS16.xlsx

https://www.oregon.gov/deq/mm/Pages/Waste-Composition-Study.aspx

DEQ uses two terms, wasted food and food waste. Wasted food is the @ 40% of food grown that is never ultimately eaten. Food waste is egg shells, apple cores, orange peels, etc.

Have a great weekend.

From: N Whitcombe Sent: Thursday, October 13, 2022 9:03 AM To: FULLER Brian \* DEQ <<u>Brian.FULLER@deq.oregon.gov</u>>

Cc:

wyse <<u>nancy.wyse@co.benton.or.us</u>>; pat malone <<u>Pat.Malone@co.benton.or.us</u>>; xanthippe augerot <<u>Xanthippe.Augerot@co.benton.or.us</u>>; KERBY Joseph <<u>Joseph.Kerby@co.benton.or.us</u>>; Darren Nichols <<u>darren.nichols@co.benton.or.us</u>>; Inga Williams <<u>Inga.Williams@co.benton.or.us</u>>; KWIATKOWSKI Maura <<u>maura.kwiatkowski@co.benton.or.us</u>>; MAKEPEACE Amanda <<u>amanda.makepeace@co.benton.or.us</u>>; MILO Erika <<u>Erika.Milo@co.benton.or.us</u>>; GROGAN Cory <<u>cory.grogan@co.benton.or.us</u>>; Linda Ray <<u>Linda.Ray@co.benton.or.us</u>>;

nancy

Subject: Re: Alternatives to landfills and even composting: Efforts in California and South Korea

It's also important to note that home composting results in much less methane production than does the anaerobic breakdown of organic waste that occurs in "dry tomb" landfills like Coffin Butte. I have read that landfills can be comprised of up to 25% food waste. And of course the resulting compost, when added as a soil amendment, promotes CO2 uptake by vegetation.

Brian, if you could confirm? I am not an environmental scientist, just a person who knows how to Google.

On Thu, Oct 13, 2022 at 8:58 AM FULLER Brian \* DEQ <<u>Brian.FULLER@deq.oregon.gov</u>> wrote:

Great information Joel.

Here is	some additional Oregon specific information on food
waste:	https://www.oregon.gov/deq/mm/food/Pages/default.aspx

And information from Project Drawdown: <u>https://drawdown.org/solutions/reduced-food-waste</u>

Thanks

#### **Brian Fuller**

Manager – Hazardous Waste and Materials Management Programs

Oregon DEQ - Western Region - Eugene

541-501-3349 - Mobile

http://www.oregon.gov/DEQ/

He/Him/His

We are in the process of modernizing and upgrading the way we accept, share and process information at DEQ with *Your DEQ Online*: a new centralized hub for communities, businesses and individuals. <u>Learn more</u>.

From: Joel Geier Sent: Thursday, October 13, 2022 7:46 AM To: BentonCountyTalksTrash <<u>BentonCountyTalksTrash@Co.Benton.OR.US</u>>; Sam Imperati <<u>samimperati@icmresolutions.com</u>>

; nancy

wyse <<u>nancy.wyse@Co.Benton.OR.US</u>>; pat malone <<u>Pat.Malone@Co.Benton.OR.US</u>>; xanthippe augerot <<u>Xanthippe.Augerot@Co.Benton.OR.US</u>>; KERBY Joseph <<u>Joseph.Kerby@Co.Benton.OR.US</u>>; Darren Nichols <<u>darren.nichols@Co.Benton.OR.US</u>>; Inga Williams <<u>Inga.Williams@Co.Benton.OR.US</u>>; KWIATKOWSKI Maura <<u>maura.kwiatkowski@Co.Benton.OR.US</u>>; MAKEPEACE Amanda <<u>amanda.makepeace@Co.Benton.OR.US</u>>; MILO Erika <<u>Erika.Milo@Co.Benton.OR.US</u>>; GROGAN Cory <cory.grogan@Co.Benton.OR.US>; Linda Ray <<u>Linda.Ray@Co.Benton.OR.US</u>>;

Subject: Alternatives to landfills and even composting: Efforts in California and South Korea

Good morning Trash Talkers,

Here's a very interesting article that might be interesting as background for our group's goal to scope the elements of a Sustainable Materials Management Plan. It article addresses efforts to divert "perfectly good food" both from landfills and composting operations, not just to reduce methane emissions but also reduce hunger and promote food security for people of limited means.

Hopefully this link will work for everyone without having to go through a paywall (my subscription comes with an option to share up to 10 articles per month, but not sure if they meter the "clicks").

https://www.nytimes.com/2022/10/13/climate/global-food-waste-

solutions.html?unlocked\_article\_code=X9KClqsRa1D5Yq2prqob5rQMFZF6R80j5kjC8qhNuFw1jn4QprMZ1M7JzVnux1A Hu0MXU5VK0pcRMAYMIVkYW9\_lo5UgT3oucA5gkSEeoCXHMy-6ErNqlhU4BUj9Pi0rwl7ghfssvKCHvKySfm9rcRTv4fb6EfBScWjNUxwmUHZYvcP4-MFH2FJ\_MksfdbakMlTAhSuvo-RZZPc1\_wdvAnUAntQyUAnNORnUjmGvk55MVzNn047AGuHipHTD07DYmX1lvcqnFcpS8iqgoskGtn8LF9M63ulexuwqA8 g2sJB\_0NHfbInOGiqVIT-JjxR\_dJGFusA2EZ3tcq8yyL52b0VCmN0o&smid=share-url

If you have problems accessing it, please let me know.

Of particular interest for our group might be California's recent legislation that mandates donations of still-edible produce, fresh groceries and shelf-stable foods from grocery stores and wholesalers (starting this year), and also, starting in 2024, from "Tier 2 businesses" that produce prepared foods that require more careful handling to meet food safety requirements. Here's a link to CalRecycle:

https://calrecycle.ca.gov/organics/slcp/foodrecovery/donors/

What might be the possibilities for Benton County, perhaps working together with other Oregon counties that currently send wasted food to the PRC composting facility and/or the Coffin Butte landfill?

It might also be interesting to compare our local facilities with the California featured in the photos. These are the Hay Road Landfill near Vacaville: https://www.recology.com/recology-vacaville-solano/hay-road-landfill/

and the Blossom Valley Organics facility near Vernalis: <u>https://www.recology.com/blossom-valley-organics-north/</u>

Happy reading,

Joel

---

Joel Geier

SWAC representative and landfill neighbor

---

N J Whitcombe

From:	REDICK Daniel
Sent:	Friday, October 21, 2022 1:22 PM
То:	Benton County Talks Trash
Cc:	Sam Imperati
Subject:	FW: Benton County Solid Waste Process Workgroup

Including the bentoncountytalkstrash@Co.Benton.OR.US email on this communication.

Best,

Daniel

From: REDICK Daniel	
Sent: Friday, October 21, 2022 9:31 AM	
To: 'Tisdell, Christina'	kathleen.boutin-pasterz
'Ashley Watkins	'chadc
'Paul Seitz'	'Tom.Chaimov
'angie.marzano	
Subject: Benton County Solid Waste Process Workgroup	1

**ubject:** Benton County Solid Waste Process Workgroup

Greetings,

Benton County is hosting a "Benton County Talks Trash" Solid Waste Process Workgroup meeting (virtual & in-person) on Thursday, October 27, 2022 from 3:00 - 7:00 p.m. More information, meeting location, and Zoom link can be found here.

We are asking neighboring jurisdictions to attend and provide feedback on the following charges of the Work Group Charter:

- "C. Scope the necessary tasks to start a Long-Term Sustainable Materials Management Plan process.
  - Consider topics like contracting out, subjects to be covered, who needs to be at the table beyond those in the County, and a workplan outline with a timeline for completion. Look to recent similar planning efforts across the state to assess what topics were included and what "lessons learned" should be brought forward in this process..."
- "E. Consider creating a public-facing document and community education campaign on these topics."

More information about the work group can be found on the work group webpage. Please reach out via phone at (541) 766-6014 or email to let me know if you will be able to attend, or if you have any questions. Feel free to forward this email to others who may be interested in attending!

Thank you!



Daniel Redick he/him Solid Waste & Water Quality Program Coordinator Community Development

Phone: 541-766-6819 Email: <u>daniel.redick@co.benton.or.us</u> www.co.benton.or.us

Community Development has moved to the Kalapuya Building at <u>4500 SW Research Way, 2nd Floor</u>. Come see the new space; we are officially open for business!

From: Benton County <<u>pioinfo@co.benton.or.us</u>> Sent: Thursday, October 20, 2022 4:05 PM To: REDICK Daniel <<u>daniel.redick@Co.Benton.OR.US</u>> Subject: Benton County Solid Waste Process Workgroup

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

× "Benton County Talks Trash" solid × waste process workgroup information Oct. 20, 2022 Please join us for the next Solid Waste Process Workgroup Meeting #4. For more information please visit our website. When: Thursday, October 27, 2022 from 3:00 - 7:00 p.m. Where:

<ul> <li>Online - <u>Zoom meeting link</u></li> <li>Meeting ID: 815 434</li> <li>Phone: (253) 215-83</li> </ul>	
Meeting materials:	
<ul> <li><u>10/6/22 BCTT meeting draft</u></li> </ul>	<u>t minutes</u>
Next meeting:	
Thursday, November 3, 202	22
CONTACT INFORMATION Cory Grogan	
Cory Grogan	
Cory Grogan Public Information	
Cory Grogan Public Information Benton County	
Cory Grogan Public Information Benton County 541-745-4468	

Benton County | 4500 SW Research Way, P.O. Box 3020, Corvallis, OR 97339

Unsubscribe daniel.redick@co.benton.or.us Update Profile | Constant Contact Data Notice Sent by pioinfo@co.benton.or.us powered by



From:	N Whitcombe
Sent:	Wednesday, October 5, 2022 9:04 AM
То:	Sam Imperati
Cc:	Benton County Talks Trash; WYSE Nancy; MALONE Patrick; AUGEROT Xanthippe; KERBY Joseph; NICHOLS Darren
Subject:	Re: I would ask you to review your emails to me

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

My apologies, I sent that by mistake.

------Forwarded message ------From: Sam Imperati <<u>samimperati@icmresolutions.com</u>> Date: Wed, Oct 5, 2022 at 8:47 AM Subject: RE: I would ask you to review your emails to me To: N Whitcombe Cc: Benton County Talks Trash <<u>BentonCountyTalksTrash@co.benton.or.us</u>>, WYSE Nancy <<u>nancy.wyse@co.benton.or.us</u>>, MALONE Patrick <<u>pat.malone@co.benton.or.us</u>>, AUGEROT Xanthippe <<u>Xanthippe.Augerot@co.benton.or.us</u>>, KERBY Joseph <<u>Joseph.Kerby@co.benton.or.us</u>>, NICHOLS Darren <<u>darren.nichols@co.benton.or.us</u>>

Nancy,

What points do you want me, and others, to take away from the article you attached below?

Thanks, Sam

#### Sam Imperati, JD | Executive Director

resolutions 1

11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: N Sent: Tuesday, October 4, 2022 9:38 PM To: Sam Imperati <<u>samimperati@icmresolutions.com</u>> **Cc:** Benton County Talks Trash <<u>BentonCountyTalksTrash@co.benton.or.us</u>>; WYSE Nancy <<u>nancy.wyse@co.benton.or.us</u>>; MALONE Patrick <<u>pat.malone@co.benton.or.us</u>>; AUGEROT Xanthippe <<u>Xanthippe.Augerot@co.benton.or.us</u>>; KERBY Joseph <<u>Joseph.Kerby@co.benton.or.us</u>>; NICHOLS Darren <<u>darren.nichols@co.benton.or.us</u>>;

Subject: Re: I would ask you to review your emails to me

https://pamplinmedia.com/wlt/95-news/435502-345702-west-linn-spends-big-on-council-facilitator

On Tuesday, October 4, 2022, Sam Imperati <<u>samimperati@icmresolutions.com</u>> wrote:

Nancy,

As you can see, I have forwarded your email so others can hear your concerns. I look forward to receiving their guidance.

Thanks, Sam



#### M Sam Imperati, JD | Executive Director

11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: N Whitcombe Sent: Monday, October 3, 2022 8:00 AM To: Sam Imperati <<u>samimperati@icmresolutions.com</u>> Subject: I would ask you to review your emails to me

As I have told the Commissioners, I am absolutely committed to the success of this workgroup, but I have felt that behind the scenes, many of your efforts have been destructive, not constructive.

I have felt that the style and content of communications I have received from you has been both unprofessional and inconsiderate as well as borderline (or over-the-borderline) abusive.

I would like you to review the emails you have sent me as to content and tone and consider whether an apology at best or an acknowledgment at worst (to be clear, from you, to me) is in order.

A professional woman dedicating tens of hours to the betterment of her community does not deserve to be treated as disrespectfully as you have treated me,

Thank you,

Nancy Whitcombe

--N J Whitcombe

--N J Whitcombe

--N J Whitcombe

From:	N Whitcombe
Sent:	Thursday, October 6, 2022 9:29 AM
То:	Sam Imperati; Benton County Talks Trash
Cc:	NICHOLS Darren
Subject:	CUP conditions of approval/zoning order compliance subcimmittee

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

It looks like Chris Bentley might be able to serve on this subcommittee, if we don't start work until after Nov 4. I think she would be an incredibly valuable asset if this subcommittee is going to produce substantive work product. Ken Kenaston is also considering serving. Those two would be fabulous assets to the work group.

---

N J Whitcombe

From:	Sam Imperati <samimperati@icmresolutions.com></samimperati@icmresolutions.com>
Sent:	Friday, October 21, 2022 3:51 PM
То:	Benton County Talks Trash
Cc:	n whitcombe
Subject:	FW: Thank you for resolving the survey issue

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

#### FYI





11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: N Whitcombe
Sent: Friday, October 21, 2022 3:46 PM
To: Sam Imperati <samimperati@icmresolutions.com>
Subject: Re: Thank you for resolving the survey issue

I prepared my draft history document in response to what I thought was being looked for.

On Friday, October 21, 2022, Sam Imperati <<u>samimperati@icmresolutions.com</u>> wrote:

Nancy,

You indicated your received information from the Board on the history element. All I asked for was the specifics so the full Workgroup can be on the same page. I am not going to bother the Commissioners by asking them questions you know the answers to and can easily provide.

For what it's worth, they have given me wide berth to attend to details like what a history should look like. I have always intended to facilitate toward a fair and factual accurate history document without opinion and editorial slant. I don't feel the need to ask them to confirm that approach.

Thanks, Sam

#### CM Sam Imperati, JD | Executive Director



11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: N Whitcombe Sent: Friday, October 21, 2022 2:06 PM To: Sam Imperati <<u>samimperati@icmresolutions.com</u>> Subject: Re: Thank you for resolving the survey issue

Why don't you ask them?

On Fri, Oct 21, 2022 at 1:56 PM Sam Imperati <<u>samimperati@icmresolutions.com</u>> wrote:

Nancy,

Two Questions:

- 1. When you say, "...the Board are particularly hoping for a comprehensive history," are you referring to all three members?
- 2.Please share with the Workgroup what you understand to be meant by a "comprehensive" history, so we're all on the same page surrounding Board expectations.

Thanks, Sam



Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: N Whitcombe Sent: Thursday, October 20, 2022 7:24 PM To: Sam Imperati <a href="mailto:samimperati@icmresolutions.com">samimperati@icmresolutions.com</a> Subject: Re: Thank you for resolving the survey issue

My understanding, from private communication, is that the Board are particularly hoping for a comprehensive history

On Thursday, October 20, 2022, Sam Imperati <<u>samimperati@icmresolutions.com</u>> wrote:

Nancy,

I been making updates so we can send out a final workplan with the calendar invites later today. This includes fleshing out Charge E (Community Education) to include a history piece regardless of where it lands in the final report. I've added your name to that group. Charge E, along with Charge D (Additional assessment Issues) will be taken up after 11/17.

Thanks, Sam



ICM Sam Imperati, JD | Executive Director

11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: N Whitcombe

Sent: Thursday, October 20, 2022 8:56 AM

To: Sam Imperati <<u>samimperati@icmresolutions.com</u>>

Cc: BentonCountyTalksTrash < <u>bentoncountytalkstrash@co.benton.or.us</u>>; Joel Geier

NICHOLS Darren <<u>darren.nichols@co.benton.or.us</u>>; Marge Popp

**Subject:** Thank you for resolving the survey issueYou mentioned a history of the landfill subcommittee, but I do not see that listed. I would like to be on that subcommittee if it ever comes into existence.

---

N J Whitcombe

N J Whitcombe

--

#### N J Whitcombe

--

N J Whitcombe

From:	N Whitcombe
Sent:	Friday, October 21, 2022 7:46 PM
То:	Sam Imperati; Benton County Talks Trash
Subject:	Fwd: Extension of the ICM contract

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

FYI

------Forwarded message -------From: **N Whitcombe** Date: Fri, Oct 21, 2022 at 3:02 PM Subject: Extension of the ICM contract To: AUGEROT Xanthippe <<u>xanthippe.augerot@co.benton.or.us</u>>, MALONE Patrick <<u>Pat.Malone@co.benton.or.us</u>>, WYSE Nancy <<u>nancy.wyse@co.benton.or.us</u>> Cc: NICHOLS Darren <<u>darren.nichols@co.benton.or.us</u>>

I am opposed to extension of the ICM contract. Yes, the workgroup had an aggressive timeline, but also, very little has been done so far. Mr. Imperati likes to cast blame for this on the workgroup itself and "process resistance" (whatever that means). But in point of fact, the process has been chaotic and disorganized.

Mr. Imperati has acted unprofessionally and abusively to workgroup members (myself among them) and to the public. Many of the communications correctly characterized as "conflictual" and "time consuming" originated on Mr. Imperati's end.

I think we should get what we can get done done within the constraints of the original timeline.

I am available for a phone call. 541-745-2056,

Thank you,

Nancy Whitcombe

N J Whitcombe

From:	N Whitcombe
Sent:	Monday, October 24, 2022 1:28 PM
То:	Sam Imperati
Cc:	WYSE Nancy; MALONE Patrick; AUGEROT Xanthippe; Benton County Talks Trash; NICHOLS Darren; KERBY Joseph
Subject:	Re: 10/6/22 Workgroup Meeting Agenda and Materials

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Commissioners,

Instruction that comes three days after a 1000+ page document dump to ignore documents is an excellent example of disorganized chaos that I refer to. Call that "process resistance" if you like. I think it actually proves my point.

Thank you,

Nancy Whitcombe

------Forwarded message -------From: Sam Imperati <<u>samimperati@icmresolutions.com</u>> Date: Mon, Oct 24, 2022 at 12:47 PM Subject: RE: 10/6/22 Workgroup Meeting Agenda and Materials To: WYSE Nancy <<u>nancy.wyse@co.benton.or.us</u>>, MALONE Patrick <<u>Pat.Malone@co.benton.or.us</u>>, AUGEROT Xanthippe <<u>Xanthippe.Augerot@co.benton.or.us</u>> Cc: Benton County Talks Trash <<u>BentonCountyTalksTrash@co.benton.or.us</u>>, NICHOLS Darren <<u>darren.nichols@co.benton.or.us</u>>, KERBY Joseph <<u>Joseph.Kerby@co.benton.or.us</u>>, n whitcombe

Commissioners:

- 1. Nancy Whitcombe sent you the below email but did not copy the project email. I forwarded her email to it with a copy to her. It appears she then sent her email to me.
- 2. She said, in part, "Please look at the documents that are typical of the "document dump" Mr. Imperati sends to the workgroup to review, with no explanation of what the documents are for, how they are to be reviewed, what they pertain to, etc..." She neglects to tell you my 10/5/22 cover email to the Workgroup said:

Here are some new/updated documents, which will be framed up during tomorrow's meeting. It is <u>not</u> expected that you read them (<u>skimming is more than sufficient if and only if</u>

you have the time.) The major points will be explained and are being used to tee-up the subcommittees. They will vet the drafts further and report out at a subsequent WG meeting for formal Voting Member polling.

•••

There has been robust activity in-between meetings. However, 1,030 pages of comments is impossible for me to manage and for you to digest. Staff did the best they could to roll them up and make them available to you. Nonetheless, the important topics are coming to you late, and are diluted by ministerial matters. While things will improve upon Daniel's return on Monday, the remaining process question is, "Does the Workgroup want substantive emails to be copied directly to them, as well as to the process email/me, or wait to get them the day before the meeting?" The result will be receiving the important stuff in real time, but more work for you between meetings.

•••

- 3. Ms. Whitcombe handed out a document to the Workgroup during the last meeting but has not been willing to sent it to me for inclusion in the Meeting Minutes. In another email chain, she noted, "My understanding, from private communication, is that the Board are particularly hoping for a comprehensive history." Both those chains are attached.
- 4. These are some examples of what I describe as "process resistance."

Thanks, Sam



CM Sam Imperati, JD | Executive Director 11524 SW Vacuna Ct. | Portland, OR 97219-8901 (P) 503.244.1174 | (C) 503.314.1156 | (F) 503.244.1038 SamImperati@ICMresolutions.com ICMresolutions.com

From: NICHOLS Darren <darren.nichols@Co.Benton.OR.US> Sent: Monday, October 24, 2022 11:50 AM To: Sam Imperati <samimperati@icmresolutions.com> Subject: FW: 10/6/22 Workgroup Meeting Agenda and Materials FYI. It looks like Nancy did not copy you on this message.

 From: N Whitcombe

 Sent: Monday, October 24, 2022 11:38 AM

 To: AUGEROT Xanthippe < Xanthippe.Augerot@Co.Benton.OR.US</td>

 MALONE Patrick < Pat.Malone@Co.Benton.OR.US</td>

 Cc: NICHOLS Darren < darren.nichols@Co.Benton.OR.US</td>

 Subject: Fwd: 10/6/22 Workgroup Meeting Agenda and Materials

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please look at the documents that are typical of the "document dump" Mr. Imperati sends to the workgroup to review, with no explanation of what the documents are for, how they are to be reviewed, what they pertain to, etc. I urge you to open each document and try to figure out what you are supposed to do with it. These documents were all released to workgroup members who had less than 4 days to review them before the meeting.

The process so far has been disorganized and chaotic; "process resistance" might be another term for poor process, but if so, the buck should stop with the paid facilitator who sets the process up, not citizen volunteers that are trying in vain to understand what in God's name they are supposed to be doing.

Thank you for your consideration of this email.

Nancy Whitcombe

--N J Whitcombe