From:

To: "Sam Imperati"; "Bromann, Bill"; ; "Macnab, Ian"; ; "Macnab, Ian";

<u>Daniel</u>; "Mark Yeager", "Ken Eklund", "Rough, Ginger", "Paul Nietfeld"

Subject: FW: Quick question

Date: Sunday, November 13, 2022 11:22:08 AM

Attachments: <u>image001.png</u>

Landfill Life Subcommittee.msg

Draft Memo 11-12-2022 Coffin Butte Landfill longevity - Service Interruption remedy Transfer Station.docx

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Hi All,

Please find attached draft memo for replacement of an earlier e-mail transmittal for consideration in order to exercise good judgement in recommending regional alternative landfill sites use that complements Coffin Butte synchronization and equilibrium where a probable interruption in disposal service may be needed.

Thank you for everyone's time for readying the draft memo proposal.

Chuck

From: Sam Imperati <samimperati@icmresolutions.com>

Sent: Sunday, November 13, 2022 10:46 AM

To: crgilbert@comcast.net; 'Paul Nietfeld' <pnietfeld@gmail.com>; Brian May

<BMay@co.marion.or.us>; Sanderson, Shane <ssanderson@co.linn.or.us>;

imacnab@republicservices.com; 'Bromann, Bill' <WBromann@republicservices.com>; 'Mark Yeager'

<mayeager@gmail.com>; Ken Eklund <futureeverything@writerguy.com>; 'REDICK Daniel'

<daniel.redick@co.benton.or.us>

Cc: Benton County Talks Trash <BentonCountyTalksTrash@Co.Benton.OR.US>

Subject: RE: Quick question

Happy Sunday!

Here is some recent email traffic to keep you in the loop.

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

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From: crgilbert@comcast.net>

Sent: Saturday, November 12, 2022 3:10 PM

To: Sam Imperati < s: 'Paul Nietfeld' < pnietfeld@gmail.com>

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

Subject: RE: Quick question

Hi Sam,

My apology,

I made a typo with A2 instead of A1.

Again my apology, since again it should be A-1

Yes it should be both in A1 and C1 SMMP, but with a real possibility that the land fill operations may out of capacity in 3 years, it may need to be on the front burner for discussion as a viable alternative for both Coffin Butte and an alternative landfill.

I will a revise the document and resend it to the members along with spreadsheet.

Thanks.

Chuck

From: Sam Imperati < samimperati@icmresolutions.com >

Sent: Saturday, November 12, 2022 9:31 AM

To: Paul Nietfeld <<u>pnietfeld@gmail.com</u>>; <u>crgilbert@comcast.net</u>

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

Subject: RE: Quick question

Gentlemen.

For what it's worth:

- 1. This topic seems better placed initially with the A1 Capacity subcommittee as a "if we did it, how would it impact useful life" question.
- 2. There is also a place for it with the C1 SMMP as the subsequent process should include the role of transfer stations. (FYI: The topic appears in their current draft.)
- 3. In either event, we won't be asking open house folks their preference because it's premature.

We can figure all this out during the Monday/Tuesday subcommittee meetings.

Sam Imperati, JD | Executive Director

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From: Paul Nietfeld <pnietfeld@gmail.com>
Sent: Friday, November 11, 2022 2:37 PM

To: crgilbert@comcast.net

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

<samimperati@icmresolutions.com>

Subject: Quick question

Hi Chuck,

I'm just writing directly to you with a quick question, which may be simply due to my ignorance or misunderstanding:

I see you've posted a doc in preparation for the open house on Nov. 17 in which you expand on the idea of a rail transfer station as a possible "safety valve" <my words> option for dealing with the Quarry Problem (the scheduling conflict of quarry completion and Cell 6 availability vs. expected filling of Cell 5). I appreciate your time and energy in raising and promoting this potential option. My question is that in your doc you refer to Subcommittee A.2 as the entity that should consider the transfer station question; my understanding is that A.2 deals with past land use conditions, and it's C.1 that's charged with directing work on a SMMP. It seems that either A.1 or C.1, or perhaps both, could consider aspects of your proposal, but it doesn't seem to fit A.2 as I understand it. Could you explain?

If this turns out to be a real question/issue (as opposed to me just missing something) either you or I should post a note to BCTT.

Thanks for all your effort, Paul Nietfeld

DRAFT

Memo

11/12/2022

Chuck Gilbert – Public Community Member – BCTT Sub-Committee A-1

Updated Memo for replacement of e-mail dated 11/10/2022 to Mr.

Daniel Redick - staff and Mr. Sam Imperati – Facilitator

Synchronization of Landill waste streams in Coffin Butte's regional disposal site and sanitary landfill cells with probable service interruption – longevity – remedy Transfer Station

This memo serves as biased in the sense it does not stand for the consensus of the Sub-Committee A-1 but serves instead as reasonable information on the subject matter under consideration by the sub-committee A-1 for distribution to members for consideration, revisions, additions, or deletions for consensus.

A. Points of Concern

- 1. Kinfe River gave testimonty at Benton County Planning Commission last year that 8 more years will be needed from year 2022 to finish excavation of the quarry for the design airspace needed for Cell 6 in the landfill.
- 2. In Republic's Section A.1 Common Understanding under paragraph f. Assumptions: "Based on our latest estimates, Coffin Butte Landfill is currently on track to run out of capacity in approximently three (3) years. While there is an estimated 12-15 years of capcity available in the the quarry, that location will not be ready for active disposal operations for about four (4) years. Based on the best available data, currently there is roughly 18 years of airspace available at the site"
- 3. Assumption: Assuming the landfill run out is in three (3) years to Year 2025 and Kinfe River quarry operation needs eight (8) more years to Year 2029, then a service interruption is for four (4) years from Years 2025 2029 at Coffin Butte Landfill.

B. Synchronization of Landfill waste streams into Coffin Butte's regional disposal site and sanitary landfill cells with probable service interruption – longevity – remedy Transfer Station

Questions:

- 1. Is it reasonable to consider participation in advancing a regional transfer station for intermodal services by rail, trucks, or both that would be in harmony with Coffin Butte landfill longevity plan?
- 2. Is it reasonable for Republic to advance the topic of a transfer station for consideration, since Republic is a knowledgeable operator to manage and operate the proposed MSD transfer station in synchorinization and equalibrium with Coffin Butte Landfill and other alternative regional landfills for commercial waste streams from Benton County and neighboring counties, and municipalities?
- 3. Is it reasonable for Benton County Talks Trash Sub-Committee A-1 consider a transfer station concept to assist with the need to balance the disposal parameters with Knife River, Coffin Butte, Benton County and neighboring counties and municipalities within Benton County Talks Trash "Bridge" approach?

The main purpose of this memo is providing options for consideration by Benton County Talks Trash Sub-Committee A-1 in order to exercise good judgement in recommending regional alternative landfill sites use that complements Coffin Butte synchronization and equilibrium where a probable interruption in disposal service may be needed.

Intermodal containers using railroad's intermodal railcars provide an economical way to transfer MSW by train from the Mid-Willamette Valley to Oregon Department of Environmental Quality's approved regional landfills east of the Cascades.

Accredited landfill sites are modern Subtitle D landfill that accepts primarily municipal solid waste (MSW or household waste) as well as industrial and special wastes.

As an example, Columbia Ridge operated by Waste Management was opened in 1990 and has a life remaining of 143 years. Its current permitted footprint is 700 acres. The facility's acreage is 12,000 acres. It has a bio-buffer of 10,000 acres.

Union Pacific Railroad can deliver manifest unit trains of MSW directly into the Columbia Ridge Regional Landfill near Arlington, Oregon.

Columbia Ridge Regional Landfill does not stand alone as the only regional landfill that has intermodal train service.

The Roosevelt Regional Landfill in Roosevelt, WA is served by Burlington Northern – Santa Fe Railroad and is operated by Republic Services and Finley Buttes Regional Landfill operated by Waste Connections near Boardman OR is also served by Union Pacific Railroad, although at Finley the railroad does not go directly into the Landfill site and MSW must be road drayed into the landfill from the rail terminal at Boardman.

Rail freight is undoubtedly more environmentally efficient than over-the-road transportation. According to the Association of American Railroads, trains are up to four times more fuel efficient than trucks. Not only do they consume less fuel, but they also reduce the strain of traffic on roadways by using an alternative over-the-rail transportation of goods, and they also have less air pollution emissions, when compared to over-the-road transportation.

As such, a centralized transfer station at Coffin Butte may be the first option for portions of the collected MSW to be transloaded and compressed into rail containers for forwarding and transloading onto railcars at an intermodal transfer facility.

This option provides both Benton County and Coffin Butte an optimum way to balance the current adverse growth impacts at the landfill while still maintaining a curbside pick-up service that is beneficial and economical for the members of the communities.

The transfer station and intermodal service can also be in step with Coffin Butte's short-range objectives for MSD material handling coordination as well as long-range budgeting and planning needs for Benton County's material handling of municipal solid waste disposal in equilibrium with another feasible alternative landfill access route.

Albany-Millersburg Economic Development (AMEDC), a 401(c) 4 benefit corporation, owns the 60-acre site in Millersburg Oregon that received a connect Oregon grant for the development of an intermodal transportation facility. Linn Economic Development Group (LEDG), a 401(c)4 benefit corporation, is an affiliate of AMEDC and its agent for project management of the intermodal facility.

R&a Engineering in Albany designed and implemented construction of the Mid-Willamette Valley Intermodal Facility (MVIC) in Millersburg, OR for LEDG and its contractor operator. The MVIC receives notice of service through Reece & Associates Engineering at 321 1st Ave E. Suite 39, Albany OR 97321.

ITS-Conglobal (ITSC) is the contractor operator for the MVIC.

ITSC employs 4,000 people and handles more than 8.5 million lifts each year at more than 120 facilities across the U.S., Mexico, and Costa Rica. Safety is of the utmost importance, and it is

continually stressed at all levels of the organization. Most customers have been with the company for decades. Our superior and reliable service, our broad and evolving scope of services and our exemplary safety record have helped us position ourselves as leaders in the industry.

ITSC have longstanding relationships with most major North American railroad, including BNSF, CN, CSX, KCS, NS, and UP for intermodal loading and unloading of containers.

Union Pacific Railroad will be the carrier serving the MVIC facility with grand opening in December of this year.

A manifest MSW train generally handles a maximum of 100 double stack railcars.

Each double stack railcar handles 2 each 40- foot rail containers.

Each container handles 28 tons or 5,600 tons of MSW per 100 railcar train.

Annualized at a rate of 1 train per week for 52 weeks would be 291,200 tons of MSW that may be transported to a regional landfill site east of the cascades.

The current annual projected rate of deposal for MSW at Coffin Butte is 1.1 million tons.

Projecting a transfer of 50 per cent of the MSW to regional landfills east of the Cascades to reduce to an optimum tonnage for Coffin Butte operations coinciding with aggregate quarry operations for timely cell development, will transport 550,000 annual tons with 2 trains weekly.

Comparatively, 19,643 trucks would be needed annually to move the same payload of MSW that only takes 104 trains to do.

Although, the initial concept looks at a transfer station being centralized at Coffin Butte, another concept of a more decentralized transfer station nearer to an I-5 facility site in an existing industrial zoned setting may be better suited for improved traffic plans for collection and transferring of MSW from Benton County, neighboring counties, and distant counties with their respective franchise haulers.

In this way, other counties and municipalities can work in conjunction with their own solid waste streams for collection and transfer of their MSW to the decentralized transfer station for handling to rail, thereby lessening the stressed growth impacts at Coffin Butte and on Benton County's roadway infrastructure with the centralized option.

Also, with existing legacy equipment used currently by franchise haulers such as shuffling van floors for handling of MSW from their county venues, the legacy equipment can be readily used at a transfer station equipped with tipping floor, intake chutes, and hydraulic ram compressing systems for transloading MSW into rail or road containers.

With this convention, the maximum payload can be maintained consistently for shipping of the MSD to destination by rail and bill of lading records are electronically processed for the receipt and transfer of goods.

With the above transfer station system, MSW does not stay resident on the tipping floor, but it moves at a rate of 120 tons per hour to feed, load, and transport the containers to the intermodal ramp for loading onto railcars.

In other words, a 5600-ton MSW train would be loaded in 6 days rounded, but another service lane with another hydraulic loading ram would meet the shipments of 2 trains bi-weekly for transporting the required 550,000 tons annually.

This dual approach use of landfills provides a better service life and manageable disposal quantities for Coffin Butte which then best serves the community and curbside rate payers concerns, as well as the primary need for quarry operations to stay ahead of the disposal operations in order to excavate a quality aggerate for community construction projects.

A proposed transfer station will need to be permitted thru Oregon DEQ application process. Within these parameters, Republic is a knowledge operator to manage and operate the proposed MSD transfer station in equilibrium with commercial waste stream from neighboring counties and municipalities.

Since Republic Services is the current franchise hauler for Benton and Linn Counties as well as the Cities of Albany and Millersburg, this then votes confidence with a more in-depth approach with Coffin Butte current landfill cell life projections being balanced in equilibrium with an alternative access route via rail for MSW disposal at regional landfills east of the Cascades.

In retrospect, it would require 4 trains weekly to rail transfer the current MSW tonnage of 1.1 million.

Likewise, it would require 39,286 trucks to dray the same quantity.

Also, the below listed spreadsheet represents assumption for a ballpark estimate for unit costs of transportation for MSW to regional landfill east of the Cascades.

The ballpark estimates are pre-covid and may need additional fuel excess charges and other inflation rate adjustments for any additional forward-looking projections.

In closing, kindly appreciate for BCTT sub-committee A-1 for consensus of consideration for a proposed regional transfer station being nucleus for the BCTT "bridge" plan process.

Not only does the proposed regional transfer station facilitate municipal solid waste (MSW) transfers, but is also front and center to recyclable waste to energy conversion transfers unfolding in the sustainable materials market both locally and nationally.

Thanks.

Represents Assumption needing further clarification

		Rail Cars	100	Containers	2	Tons Per Containers 34	ı		Total Tons Per Train	6800			Annual Tons	353600
		Coffin Butte Republic Commercial Rate Rate Tons		te	Cost					Disposal Cost Per Container				
	Commercial Rate Environmental Fee Per Vehicle	\$ \$	70.00 18.00		1		s	70.00 0.53	_		s s	2,380.00 18.00	_	
							S	70.53			S	2,398.00		
		Columbia Ridge V Rate	Waste N	Tanagement Tons	Con	imercial Rate	Cost				Dispo Cost I Conta	Per		
	Commercial Rate Environmental Fee Per Vehicle	s s	ьв.оо -		1		s	68.00 - 68.00			s s	2,312.00		
Metro South to Columbia Ridge							_	55.50			3	2,112,00		
Wetto Journ to Columbia Mage	Walsh Trucking Miles	Tons Per Containe				fee Rate Per Container			Contai Per Mile				Contair Per Tor	
	153.6		34		≤	S 670.00			s	4.36			S	19.71
MVIC to Columbia Ridge	Train Miles													
	203		34		4	885.48			S	4.36				
	UPPR Est 2 contain	t. Freight Rate ers percar Double			2	\$ 558.40							S	15.72
MVIC Operator Lift Rate	Load Load	d/Empty Return			ś	160.00							ŝ	4.71
MVIC Transfer Station Terminal	Tip Rate			Annual	Д	nnual Expenses								
Operating Expenses	Per Ton S 1.80) <u> </u>		353,600) 5	636,480.00							ŝ	1.80
	Quantity	Each				Construction								
Capitalization Cost 20 yr Note @ 8% Transfer Station	gos.iii,	22			2	3,000,000,00								0.85
Capitalization Cost 10 yr Note 8% Containers	500		500.00		-	\$ 4,500,000.00								1.85
Containers		,,	300.00		_	4,300,000		ted Per 1	fon Cost - T	ranspo	nation	,	s	25.93
								ted Per 1 ibia Ridge	fon Cost - E	risposa	ı		ŝ	68.00
					c	ombined Transpo							ŝ	93.93
							Colum	ibia Ridge	Coffin Butt e - Per Ton	Dispos	al			23.40
					Average Curbside additional Rate Per Can 100 cwt					1.17				
					(6 (6	f wastestream div esiding at Coffin B	imizing only 50% assets tream fuverted with remainder ding at Coffin Butte & River Bend thereby using curbside rate proportionally with the eir rate.					S	0.58	
SSI Compact Systems Wilsonville OR 800 537-4733														

Containers Per Train 200

800 537-4733

Model 2500 SPH Compactor 950,000.00 Model 4500 SPH Compactor 1,250,000.00

Catapillar 980M Front End Loader John Deere Front End Loader